Inventor Survey on Innovation (US-Japan Comparative Tables, by technology class)
イノベーションに関する発明者調査(日米比較表、技術分野別)

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Explanation:
The following tables provide detailed technology by technology comparisons of the results of the inventor survey in Japan and the US. The survey in Japan was conducted by RIETI (Research Institute of Economy, Trade and Industry) between January and May in 2007. It collected information on 3,658 triadic patents, with priority years from 1995 to 2001. The survey in the US was conducted by the Georgina Institute of Technology between June and November 2007, in collaboration with RIETI, and collected information on 1,919 patents, with 2000-2003 priority years. Interested persons are invited to refer to RIETI discussion papers for the analysis of the innovation process based on the survey results. For details on the survey methodology, please refer to Appendix 1 of the discussion papers, "The R&D process in the US and Japan: Major findings from the RIETI-Georgia Tech inventor survey" or "Commercialization and other use of patents in Japan and the US: Major findings from the RIETI-Georgia Tech inventor survey".

Contents:
There are 6 sections: A: DEMOGRAPHY, B: EDUCATION, C: EMPLOYMENT AND MOBILITY, D: PURPOSE & PROCESS OF THE INVENTION, E: INVENTORS' MOTIVATIONS and F: USE OF THE INVENTION AND PATENTING REASONS.

Contributors
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Notes on the tables:

1.The Japanese data is on the left-hand side and the US data is on the right-hand side for most equivalent questions. The corresponding question number in the Japanese questionaire or in the US questionaire is indicated in each page.

2. Technology classes are categorized using the NBER technology classes (2-digit). For details on the NBER patent classification, see (http://www.nber.org/patents/). Because of the small number of cases, the NBER classes, amusement devices (62) and Other (99), were collapsed into Miscellaneous-Others (69). In addition, because of the interest in software patenting, computer hardware and software (22) was split into computer hardware (22) and computer software (77). Computer software contains US patent classes 700-720, 725 and 726. Thus, there are 36 technology classifications in the tables.

3. We report two summary averages for comparison, the overall (simple) average ("All") and a US-JP weighted average ("[NBER] Weighted"). For the Japanese responses, we also include a "JP weighted" average which is the overall average weighted by the selection probability of respondents (i.e., taking into account the sampling strategy). The "US-JP weighted" average is calculated by weighting each response by the relative frequency of that technology class in the respondent's country, relative to the overall common frequency across the two countries (using the NBER class of the full sample as the index number).

More specifically, in order to reduce the impact of the difference of distributions of patents across technology classes of the two countries, as well as differences in response rates by technology sector by country, we construct a set of common technology sector weights for each country. The weights are constructed by averaging the two population distributions (giving equal weight to each country). This becomes the "standardized technology distribution" against which we will adjust each country's sample by the inverse of the relative frequency of that technology class in that country. To do this, we create a set of common technology-class weights, using the following formula:

$$Wij=Pi./pij$$

Where:

Wij is the weight for class i for country j
Pi. is the average (across US and Japan) proportion of triadic patents in class i [i.e. "standard technology distribution"]
pij is the proportion of the response population in country j from technology class i

For estimating NBER weighted country means for comparison, we use the formula:

$$XBarj=(1/Nj)\Sigma_{i,k}Wij/(\Sigma_{i}Wij)*Xijk$$

Where

XBarj is the (nber weighted) mean for country j
Nj is number of respondents in country j
Wij is the weight for class i in country j
Xijk is the value of X for respondent k in class i in country j

This is the US-JP Weighted mean for each country.
Comparing the simple average and weighted average allows comparisons of the effect of technology composition differences in explaining the country difference.

4. In general, we report cell counts for all the answer categories for each question, including missing/no-response, don't know, and skipped (for questions with skip logic). We also report percent distributions across answer categories. These percentages are calculated on valid responses, excluding missing/no-response, don't know, and skipped from the denominator.

5. In addition to cell counts, for interval variables, we report means (unweighted and weighted), standard deviations (s.d.), median (the middle value), p90 (the 90th percentile value, i.e., the value for which 90% of respondents have a lower score), and the inter-quartile range (the difference between the value of the 75th percentile and the 25th percentile).

6. In order to protect respondent confidentiality, we report only aggregated figures. For some questions, the number of valid responses in the US was so few (less than four) that disclosing the answers would violate this confidentiality. This is especially likely when dividing the answers by technology class and when there are skip logics. Therefore, in cases where there were fewer than four answers in any row of a table, we masked all the answers with "XX". Because the rows sum to the All totals, we always masked at least two rows. If only one row had insufficient responses, we chose Miscellaneous-Others as the second row to mask. Fortunately, for the Japanese data, due to the larger sample size, there were no cases of rows with less than 4 respondents.

TABLE OF CONTENTS

SECTION A: DEMOGRAPHY

Question 1-1 Age at patent application(出願時の年齢)

sectionABC 2,4 JP (日本)

section ABC 3,5 US (米国)

Reference: Country of Birth only in the US survey (参考:誕生国、米国の質問票のみ)

section ABC 7 US(米国) (Home v.s. Foreign Birth 年齢、誕生国が自国対外国)

Question 1-3 Gender(性別)

sectionABC 8 JP (日本)

sectionABC 9 US (米国)

Reference: Children only in the US survey (参考:子供、米国の質問票のみ)

sectionABC 11 US (米国)

SECTION B: EDUCATION

Question 2-1 Highest degree at the time of the research (当該発明につながる研究実施当時の最終学歴)

sectionABC 12 JP (日本)

sectionABC 13 US (米国)

Reference: In which year this degree was earned? (参考:学位の取得年)

sectionABC 14 JP (日本)

sectionABC 15 US (米国)

SECTION C: EMPLOYMENT AND MOBILITY

Question 3-1 Employment at the time of invention (当該発明当時の雇用・勤務形態)

sectionABC 16 JP (日本)

Question 3-2 Type of the organization (その組織の類型)

sectionABC 18, 20 JP (日本)

sectionABC 21 US (米国)

Question 3-3 Is the organization one of the applicants? (その組織は、当該特許の出願人でしたか)

sectionABC 22 JP (日本)

sectionABC 23 US (米国)

Question 3-4 How many years passed till your invention since you joined this organization or started your business if self-employed?(その組織に採用された年、もしくは自営業の創業年から発明時点までの経過年)

sectionABC 24 JP (日本)

sectionABC 25 (米国)

Question 3-4(2) Years of your first patent application?(最初の特許出願年)

sectionABC 27 (米国)

Question 3-4(3) At the time of the focal patent application, how many years had you worked in the technical field of the patent?(特許の技術領域での経験の長さ)

sectionABC 29 US (米国)

Question 3-4(4) What is the approximate number of invention disclosures that you made to your firm in the last three years? (過去3年におおよそ何件の発明の開示をしましたか)

sectionABC 31 US (米国)

Question 3-5 Type of unit at the time of the invention (勤務していた部署の主要機能)

sectionABC 32 JP (日本)

sectionABC 33 US (米国)

Question 3-6 Within 5 prior years, did you work for another employer? (当該発明前、5年以内の他企業等での常勤経験)

sectionABC 34 JP (日本)

sectionABC 35 US (米国)

Question 3-6(2) Is the organization at the time of invention less than 5 years old?(発明時の組織は5歳より若かったかどうか)

sectionABC 37 US (米国)

Question 3-7 If "Yes" above, did the experience in any of the above organizations play an important role in your invention? (その経験は当該発明にとって重要な役割を果たしましたか)

sectionABC 38 JP (日本)

Question 3-7(2) If "Yes", how did your experience in the most relevant other organization contribute to your invention? You can check all relevant boxes.(「はい」の場合の理由、重複回答あり)

sectionABC 40 JP (日本)

Question 3-8 For how long did you work in the above previous organization which contributed importantly to your invention?(雇用あるいは派遣・出向期間)

sectionABC 42 JP (日本)

Question 3-9 Previous organization if moved(前組織の類型)

sectionABC 44 JP (日本)

sectionABC 45 US (米国)

SECTION D: PURPOSE & PROCESS OF THE INVENTION

Question 4-1 What would best describe the business objective of your research leading to this invention? (当該発明につながる研究の事業上の目的)

sectionD 2 JP (日本)

sectionD 3 US (米国)

Question 4-1 (2) What would best describe the type of the innovation your research was expected to realize? (それは、どの類型の技術革新であったか)

sectionD 4 JP (日本)

sectionD 5 US (米国)

Question 4-2 What is the scope of your research leading to the invention? You can check all relevant boxes. (当該発明につながった研究の範囲(重複回答あり))

sectionD 6 JP (日本)

Question 4-2(2) At the time of the research leading to the focal patent, approximately what percentage of your R&D effort was for each stage of research? (当該特許を生み出す研究開発を行っていた時期に、研究開発努力のおおよそ何%を各研究開発の段階に向けていたか)

sectionD 9,11 US (米国)

Question 4-3 What was the main motivation of your research leading to the invention? You can check all relevant boxes.(当該発明につながる研究の主たる動機(重複回答あり))

sectionD 12 JP (日本)

Question 4-4 How many months of the research led up to this patent application? (研究開始から特許出願までに経過した時間)

sectionD 14,16 JP (日本)

sectionD 15,17 US (米国)

Question 4-5 Which of the following scenarios best describes the creative process that led to your invention? (当該発明の創造プロセス)

sectionD 18 JP (日本)

sectionD 19 US (米国)

Question 4-6 What would best describe the type of the invention? (当該発明は「もの」「方法」どちらの発明であったか)

sectionD 20 JP (日本)

sectionD 21 US (米国)

Question 4-7 Did the invention build in a substantial way on any prior patent that you were aware of? (当該発明は、先行特許を基礎として生み出されたものか)

sectionD 22 JP (日本)

Question 4-8 Has this invention led to any improvement inventions afterwards? (当該発明は、その後の改良発明につながったか)

sectionD 24 JP (日本)

Question 4-9 Please indicate whether the co-inventor exists, according to the type of the following organizations. You can check all relevant boxes. (当該発明の共同発明者の類型(複回答あり))

sectionD 26 JP (日本)

sectionD 27 US (米国)

Question 4-9 (2) # of inventors, sole-invention, any external co-invention and multiple-assignee(発明者数、単独発明、外部共同発明、共同出願)

sectionD 28,30 JP (日本)

sectionD 29,31 US (米国)

Question 4-10 Was there any (formal or informal) collaboration between your employer and other partners (excluding co-inventors)? You can check all relevant boxes. (当該発明につながる研究の外部組織との協力がある場合(但し共同発明者を除く)、協力相手の類型、重複回答あり)

sectionD 32,34 JP (日本)

sectionD 33 US (米国)

Question 4-11 Were the interactions (discussions, meetings, sources of ideas, etc.) with the following types of people (apart from co-inventors) important during the research that led to the patented invention? (1 = not important, 5 = very important)(交流先重要性の評価)

sectionD 36,38 JP (日本)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important) (研究の着想に有用であった知識源の重要度)

sectionD 40,42,44,46,48,50,52,54 JP (日本)

sectionD 41,43,45,47,49,51,55 US (米国)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

sectionD 56,58,60,62,64,66,68,70 JP (日本)

sectionD 57,59,61,63,65,67,71 US (米国)

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)(外国の知識源は国内のものと比較してどの程度重要であったか)

sectionD 72,74,76,78,80,82,84 JP (日本)

Question 4-15 Including this patent, how many domestic patent grants do you expect your research would generate directly for your firm, including those with joint ownership? (当該研究は何件の国内特許登録をもたらしますか？)

sectionD 86 JP (日本)

Question 4-16 How many man-months did the research leading to the patent require, including those of co-inventors? (当該発明の研究の開始から特許出願までの研究期間)

sectionD 88,90 JP (日本)

sectionD 89,91 US (米国)

Question 4-16(2) At the time of the invention, about how many hours did you work in a typical week?(発明時における週当たり労働時間数)

sectionD 93 US (米国)

Question 4-16(3) Please tell us the share of overall working time that you spent on "inventing" or on R&D actives at the time of the invention.(労働時間中、発明に要した時間の割合)

sectionD 95 US (米国)

Question 4-17 Funding sources. (Incidence and % in shares) You can check all relevant boxes. (当該研究のための費用の資金源(重複回答あり))

sectionD 96,98 JP (日本)
sectionD 97,99 US (米国)

Question 4-18 Did the availability of funds constrain the research leading to the invention? You can check all relevant boxes. (リスク資金の利用可能性が制約となったか(重複回答あり))

sectionD 100 JP (日本)

SECTION E: INVENTORS' MOTIVATIONS

Question 5-1 How important were the following motivations for your invention? (1 = not important, 5 = very important) (当該特許につながる発明への動機の重要度)

sectionEF 2,4,6,8,14 JP (日本)
sectionEF 3,5,7,9,11,13,15 US (米国)

SECTION F: USE OF THE INVENTION AND PATENTING REASONS

Question 6-1 Economic value of the patent(当該発明の経済的価値の同時期の技術開発成果全体における地位)

sectioEF 16 JP (日本)
sectionEF 17 US (米国)

Question 6-1(2) Technical significance (当該発明の技術的な価値)

sectionEF 19 US (米国)

Question6-2 How important were the following reasons for patenting this invention? (1 = not important, 5 = very important)?(特許化の理由としての重要度)

sectionEF 20,22,24,26,28,30 JP (日本)
sectionEF 21,23,25,27,31 US (米国)

Question 6-3 Internal commercialization. Has the applicant/owner ever used this patent for its product or for its production?(当該発明は出願者によって製品などに利用されたか)

sectionEF 32 JP (日本)
sectionEF 33 US (米国)

Question 6-3(2)
Pure in house or not (発明は自社内のみで使用しているかどうか)

sectionEF 34 JP (日本)
sectionEF 35 US (米国)

Refefence:While many innovations involve a combination of products, processes, and services, would you characterize the commercial application of the focal patent as primarily involving a new product, process, or service? (参考:当該特許の応用先は新製品、新生産過程あるいはサービスの中のどれか)

sectionEF 37 US (米国)

Question 6-4. How long did it take from the application to the use of the invention? (出願から利用開始までの時間)

sectionEF 38 JP (日本)

Question 6-5 How many domestic patents (including the other firms' patents) are jointly used in the commercial application of the invention? (当該特許の商業的利用において約何件の特許が利用されたか)

sectionEF 40 JP (日本)
sectionEF 41,43 US (米国)

Question 6-6 Has this patent been licensed by (one of) the patent-holder(s) ? (当該特許は、特許保有者によってライセンスされたか)

sectionEF 44 JP (日本)
sectionEF 45 US (米国)

Question 6-6(2) If Yes, does it include cross-license? (それはクロスライセンスを含むか)

sectionEF 46 JP (日本)
sectionEF 47 US (米国)

Question 6-6(3) How many licensees have got the license? (また、それは複数の企業にライセンスされたか)

sectionEF 48 JP (日本)
sectionEF 49 US (米国)

Reference: Did the licensing contracts include exclusivity clauses? (参考:ライセンス契約に排他条項があるか)

sectionEF 51 US (米国)

Question 6-7 Has this patent been exploited commercially by yourself or any of your co-inventors for starting a new company? (発明者は新会社設立によって当該特許を利用したか)

sectionEF 52 JP (日本)
sectionEF 53 US (米国)

Question 6-3,6,7 summary (1)
Any commercialization either through internal (or in-house) use, license or startup (発明は商用化、ライセンス、新会社の設立などで利用されたか)

sectionEF 54 JP (日本)
sectionEF 55 US (米国)

Question 6-3,6,7 summary (2)
From the commercial launch of your product/process/service, approximately how long was it until another firm introduced a competing alternative? (当該特許が商業化されてから、別の企業が競争的な代替手段(製品、生産過程あるいはサービス)を導入するのに要した時間)

sectionEF 57 US (米国)

Question 6-8 If this patent is used neither internally within the applicant firm, licensing nor for starting a new company, what are the important reasons for that? You can check all relevant boxes. (自社内、ライセンス等によって利用されていない理由(重複回答あり))

sectionEF 58 JP (日本)
sectionEF 59 US (米国)

Question 6-9 Did you publish a scientific/technical paper describing this invention?
(当該発明の内容を科学技術論文として公表したか)

sectionEF 60 JP (日本)

Reference: In the three years prior to the focal patent, how many articles did you publish in scientific journals? (参考:当該特許の前の三年間に何本の論文を公表したか)

sectionEF 61 US (米国)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important) (当該発明の商業的成功のための企業戦略としての重要度)

sectionEF 62,64,66,68,70 JP (日本)
sectionEF 63,65,67,69 US (米国)

Question 6-10 Summary

sectionEF 72 JP (日本)

sectionEF 73 US（米国）

Japan

Question 1-1 Age at patent application(出願時の年齢)

	All	20-24 years old	25-29 years old	30-34 years old	35-39 years old	40-44 years old	45-49 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70-74 years old	75-79 years old	No response
All	3658	20	429	787	780	602	478	271	128	59	25	13	5	61
Agriculture, Food, Textiles	60	1	12	12	9	7	9	6	3	1	0	0	0	0
Coating	80	0	16	14	17	10	9	7	2	0	1	0	1	3
Gas	45	0	4	9	4	6	10	6	3	1	0	0	0	2
Organic Compounds	120	0	14	32	22	16	20	8	5	1	0	0	0	2
Resins	125	0	14	43	18	17	15	7	6	5	0	0	0	0
Miscellaneous-chemical	208	0	22	51	39	33	25	19	13	3	2	1	0	0
Communications	160	2	22	42	45	26	12	5	3	0	1	0	0	2
Computer Hardware	59	1	6	14	16	10	6	1	2	0	1	1	0	1
Computer Software	123	1	14	27	30	27	11	5	2	1	0	1	0	4
Computer Peripherals	76	1	6	27	15	14	6	3	1	0	0	0	0	3
Information Storage	120	1	12	27	31	31	11	3	2	0	0	0	0	2
Drugs	127	1	15	21	19	25	18	12	13	3	0	0	0	0
Surgery & Medical Instruments	85	1	15	11	11	11	14	9	5	4	0	1	1	2
Biotechnology	87	1	8	12	17	16	15	8	4	4	2	0	0	0
Miscellaneous-Drug&Med	45	0	6	6	9	9	6	5	3	1	0	0	0	0
Electrical Devices	91	1	14	22	21	15	12	5	1	0	0	0	0	0
Electrical Lighting	96	0	13	17	27	19	11	8	0	0	0	0	0	1
Measuring & Testing	111	0	7	25	27	21	11	6	5	3	2	0	0	4
Nuclears & X-rays	72	0	5	18	11	15	11	6	3	0	0	0	0	3
Power Systems	172	0	16	50	39	22	23	13	5	1	1	0	0	2
Semiconductor Devices	129	0	15	24	42	18	15	3	4	3	0	1	0	4
Miscellaneous-Elec.	120	1	12	23	39	23	9	6	3	0	1	1	0	2
Materials Processing & Handling	103	1	11	20	24	17	13	10	3	2	0	0	0	2
Metal Working	137	2	10	23	29	21	24	16	6	3	1	0	0	2
Motors, Engines & Parts	145	2	20	33	28	30	21	5	3	1	0	1	0	1
Optics	100	0	11	21	33	14	11	4	1	1	1	0	0	3
Transportation	73	0	8	21	9	11	12	5	0	2	1	1	0	3
Miscellaneous Mechanical	124	1	11	30	25	21	16	7	6	2	2	2	0	1
Agriculture, Husbandry, Food	87	0	7	10	17	14	11	12	2	6	3	2	0	3
Apparel & Textile	77	0	8	9	12	11	13	14	3	3	3	0	1	0
Earth Working & Wells	20	0	1	1	1	3	9	2	2	0	0	1	0	0
Furniture, House Fixtures	51	0	8	9	13	7	5	3	3	1	1	0	1	0
Heating	84	1	15	15	16	13	8	8	4	0	1	0	1	2
Pipes & Joints	66	1	8	9	8	12	17	5	1	2	0	0	0	3
Receptacles	55	0	7	9	6	6	12	9	3	1	1	0	0	1
Miscellaneous-Others	225	0	36	50	51	31	27	20	3	4	0	0	0	3

%	N	20-24 years old	25-29 years old	30-34 years old	35-39 years old	40-44 years old	45-49 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70-74 years old	75-79 years old	Total
All	3597	0.56	11.93	21.88	21.68	16.74	13.29	7.53	3.56	1.64	0.7	0.36	0.14	100
Agriculture, Food, Textiles	60	1.67	20	20	15	11.67	15	10	5	1.67	0	0	0	100
Coating	77	0	20.78	18.18	22.08	12.99	11.69	9.09	2.6	0	1.3	0	1.3	100
Gas	43	0	9.3	20.93	9.3	13.95	23.26	13.95	6.98	2.33	0	0	0	100
Organic Compounds	118	0	11.86	27.12	18.64	13.56	16.95	6.78	4.24	0.85	0	0	0	100
Resins	125	0	11.2	34.4	14.4	13.6	12	5.6	4.8	4	0	0	0	100
Miscellaneous-chemical	208	0	10.58	24.52	18.75	15.87	12.02	9.13	6.25	1.44	0.96	0.48	0	100
Communications	158	1.27	13.92	26.58	28.48	16.46	7.59	3.16	1.9	0	0.63	0	0	100
Computer Hardware	58	1.72	10.34	24.14	27.59	17.24	10.34	1.72	3.45	0	1.72	1.72	0	100
Computer Software	119	0.84	11.76	22.69	25.21	22.69	9.24	4.2	1.68	0.84	0	0.84	0	100
Computer Peripherals	73	1.37	8.22	36.99	20.55	19.18	8.22	4.11	1.37	0	0	0	0	100
Information Storage	118	0.85	10.17	22.88	26.27	26.27	9.32	2.54	1.69	0	0	0	0	100
Drugs	127	0.79	11.81	16.54	14.96	19.69	14.17	9.45	10.24	2.36	0	0	0	100
Surgery & Medical Instruments	83	1.2	18.07	13.25	13.25	13.25	16.87	10.84	6.02	4.82	0	1.2	1.2	100
Biotechnology	87	1.15	9.2	13.79	19.54	18.39	17.24	9.2	4.6	4.6	2.3	0	0	100
Miscellaneous-Drug&Med	45	0	13.33	13.33	20	20	13.33	11.11	6.67	2.22	0	0	0	100
Electrical Devices	91	1.1	15.38	24.18	23.08	16.48	13.19	5.49	1.1	0	0	0	0	100
Electrical Lighting	95	0	13.68	17.89	28.42	20	11.58	8.42	0	0	0	0	0	100
Measuring & Testing	107	0	6.54	23.36	25.23	19.63	10.28	5.61	4.67	2.8	1.87	0	0	100
Nuclears & X-rays	69	0	7.25	26.09	15.94	21.74	15.94	8.7	4.35	0	0	0	0	100
Power Systems	170	0	9.41	29.41	22.94	12.94	13.53	7.65	2.94	0.59	0.59	0	0	100
Semiconductor Devices	125	0	12	19.2	33.6	14.4	12	2.4	3.2	2.4	0	0.8	0	100
Miscellaneous-Elec.	118	0.85	10.17	19.49	33.05	19.49	7.63	5.08	2.54	0	0.85	0.85	0	100
Materials Processing & Handling	101	0.99	10.89	19.8	23.76	16.83	12.87	9.9	2.97	1.98	0	0	0	100
Metal Working	135	1.48	7.41	17.04	21.48	15.56	17.78	11.85	4.44	2.22	0.74	0	0	100
Motors, Engines & Parts	144	1.39	13.89	22.92	19.44	20.83	14.58	3.47	2.08	0.69	0	0.69	0	100
Optics	97	0	11.34	21.65	34.02	14.43	11.34	4.12	1.03	1.03	1.03	0	0	100
Transportation	70	0	11.43	30	12.86	15.71	17.14	7.14	0	2.86	1.43	1.43	0	100
Miscellaneous Mechanical	123	0.81	8.94	24.39	20.33	17.07	13.01	5.69	4.88	1.63	1.63	1.63	0	100
Agriculture, Husbandry, Food	84	0	8.33	11.9	20.24	16.67	13.1	14.29	2.38	7.14	3.57	2.38	0	100
Apparel & Textile	77	0	10.39	11.69	15.58	14.29	16.88	18.18	3.9	3.9	3.9	0	1.3	100
Earth Working & Wells	20	0	5	5	5	15	45	10	10	0	0	5	0	100
Furniture, House Fixtures	51	0	15.69	17.65	25.49	13.73	9.8	5.88	5.88	1.96	1.96	0	1.96	100
Heating	82	1.22	18.29	18.29	19.51	15.85	9.76	9.76	4.88	0	1.22	0	1.22	100
Pipes & Joints	63	1.59	12.7	14.29	12.7	19.05	26.98	7.94	1.59	3.17	0	0	0	100
Receptacles	54	0	12.96	16.67	11.11	11.11	22.22	16.67	5.56	1.85	1.85	0	0	100
Miscellaneous-Others	222	0	16.22	22.52	22.97	13.96	12.16	9.01	1.35	1.8	0	0	0	100
US-JP weighted		0.57	12	23	22.23	16.86	12.45	6.89	3.55	1.49	0.53	0.33	0.09	100
JP weighted		0.62	11.98	23.21	22.7	16.97	12.27	6.92	3.13	1.28	0.52	0.33	0.07	100

US (1/3)

Question 1-1 Age at patent application(出願時の年齢)

D12 age	All	20-24 years old	25-29 years old	30-34 years old	35-39 years old	40-44 years old	45-49 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70-74 years old	75-79 years old	80 years older	missing
NBER All	1,919	3	35	131	232	385	357	250	211	132	59	20	11	3	90
11 Agriculture, Food, Textiles	8	0	0	1	2	0	3	0	2	0	0	0	0	0	0
12 Coating	34	0	0	1	4	6	10	3	1	5	2	1	0	0	1
13 Gas	11	0	0	2	2	4	0	1	0	1	0	1	0	0	0
14 Organic Compounds	61	0	1	1	9	10	19	5	10	3	1	0	2	0	0
15 Resins	84	0	2	4	9	18	11	12	13	6	4	1	1	0	3
19 Miscellaneous-chemical	233	2	4	13	30	43	44	45	23	15	6	4	0	0	4
21 Communications	149	0	2	10	25	34	25	14	12	9	5	0	1	1	11
22 Computer Hardware	42	0	1	3	5	3	5	10	2	4	2	1	0	0	6
23 Computer Software	93	0	1	8	13	20	19	16	7	5	2	0	0	0	2
77 Computer Peripherals	33	0	0	4	5	9	7	3	3	0	0	0	0	0	2
24 Information Storage	42	0	0	2	8	10	9	7	3	1	1	0	0	0	1
31 Drugs	101	0	0	6	11	26	25	13	5	7	1	1	1	0	5
32 Surgery & Medical Instruments	123	0	3	8	20	21	26	10	15	11	1	1	0	0	7
33 Biotechnology	41	0	0	2	7	10	8	5	4	2	0	0	1	0	2
39 Miscellaneous-Drug&Med	29	0	1	2	3	7	2	3	3	3	1	1	0	0	3
41 Electrical Devices	45	0	2	1	5	13	7	4	7	3	1	1	1	0	0
42 Electrical Lighting	33	0	0	1	2	6	8	4	4	6	0	0	1	0	1
43 Measuring & Testing	62	0	3	4	3	24	8	6	4	4	3	1	0	0	2
44 Nuclears & X-rays	39	0	0	4	3	9	6	5	7	5	0	0	0	0	0
45 Power Systems	89	0	1	8	12	10	18	13	15	5	2	0	0	0	5
46 Semiconductor Devices	55	0	1	7	7	13	8	3	5	4	1	1	0	0	5
49 Miscellaneous-Elec.	32	0	2	2	2	6	4	6	3	2	3	0	1	0	1
51 Materials Processing & Handling	56	0	1	6	4	9	9	9	4	1	7	1	0	1	4
52 Metal Working	49	0	1	3	5	8	8	5	7	5	4	1	0	0	2
53 Motors, Engines & Parts	56	0	3	2	8	7	12	9	4	2	2	1	1	0	5
54 Optics	43	1	1	4	6	7	3	10	7	3	0	0	0	0	1
55 Transportation	33	0	2	0	2	7	5	3	3	8	1	0	0	0	2
59 Miscellaneous Mechanical	42	0	1	5	2	8	9	4	5	2	0	1	0	0	5
61 Agriculture, Husbandry, Food	14	0	0	0	0	3	3	4	1	1	1	0	0	0	1
63 Apparel & Textile	9	0	0	1	1	0	2	0	1	2	1	0	0	0	1
64 Earth Working & Wells	5	0	0	1	1	0	0	1	0	0	1	0	0	0	1
65 Furniture, House Fixtures	9	0	0	0	2	3	1	2	1	0	0	0	0	0	0
66 Heating	8	0	0	0	1	3	1	1	1	0	0	1	0	0	0
67 Pipes & Joints	13	0	0	1	2	3	2	2	2	1	0	0	0	0	0
68 Receptacles	20	0	1	0	2	4	4	0	4	1	2	0	1	0	1
69 Miscellaneous-Others	123	0	1	14	9	21	26	12	23	5	4	1	0	1	6

%	N	20-24 years old	25-29 years old	30-34 years old	35-39 years old	40-44 years old	45-49 years old	50-54 years old	55-59 years old	60-64 years old	65-69 years old	70-74 years old	75-79 years old	80 years older	Total
NBER All	1,829	0.16	1.91	7.16	12.68	21.05	19.52	13.67	11.54	7.22	3.23	1.09	0.60	0.16	100
11 Agriculture, Food, Textiles	8	0.00	0.00	12.50	25.00	0.00	37.50	0.00	25.00	0.00	0.00	0.00	0.00	0.00	100
12 Coating	33	0.00	0.00	3.03	12.12	18.18	30.30	9.09	3.03	15.15	6.06	3.03	0.00	0.00	100
13 Gas	11	0.00	0.00	18.18	18.18	36.36	0.00	9.09	0.00	9.09	0.00	9.09	0.00	0.00	100
14 Organic Compounds	61	0.00	1.64	1.64	14.75	16.39	31.15	8.20	16.39	4.92	1.64	0.00	3.28	0.00	100
15 Resins	81	0.00	2.47	4.94	11.11	22.22	13.58	14.81	16.05	7.41	4.94	1.23	1.23	0.00	100
19 Miscellaneous-chemical	229	0.87	1.75	5.68	13.10	18.78	19.21	19.65	10.04	6.55	2.62	1.75	0.00	0.00	100
21 Communications	138	0.00	1.45	7.25	18.12	24.64	18.12	10.14	8.70	6.52	3.62	0.00	0.72	0.72	100
22 Computer Hardware	36	0.00	2.78	8.33	13.89	8.33	13.89	27.78	5.56	11.11	5.56	2.78	0.00	0.00	100
77 Computer Software	91	0.00	1.10	8.79	14.29	21.98	20.88	17.58	7.69	5.49	2.20	0.00	0.00	0.00	100
23 Computer Peripherals	31	0.00	0.00	12.90	16.13	29.03	22.58	9.68	9.68	0.00	0.00	0.00	0.00	0.00	100
24 Information Storage	41	0.00	0.00	4.88	19.51	24.39	21.95	17.07	7.32	2.44	2.44	0.00	0.00	0.00	100
31 Drugs	96	0.00	0.00	6.25	11.46	27.08	26.04	13.54	5.21	7.29	1.04	1.04	1.04	0.00	100
32 Surgery & Medical Instruments	116	0.00	2.59	6.90	17.24	18.10	22.41	8.62	12.93	9.48	0.86	0.86	0.00	0.00	100
33 Biotechnology	39	0.00	0.00	5.13	17.95	25.64	20.51	12.82	10.26	5.13	0.00	0.00	2.56	0.00	100
39 Miscellaneous-Drug&Med	26	0.00	3.85	7.69	11.54	26.92	7.69	11.54	11.54	11.54	3.85	3.85	0.00	0.00	100
41 Electrical Devices	45	0.00	4.44	2.22	11.11	28.89	15.56	8.89	15.56	6.67	2.22	2.22	2.22	0.00	100
42 Electrical Lighting	32	0.00	0.00	3.13	6.25	18.75	25.00	12.50	12.50	18.75	0.00	0.00	3.13	0.00	100
43 Measuring & Testing	60	0.00	5.00	6.67	5.00	40.00	13.33	10.00	6.67	6.67	5.00	1.67	0.00	0.00	100
44 Nuclears & X-rays	39	0.00	0.00	10.26	7.69	23.08	15.38	12.82	17.95	12.82	0.00	0.00	0.00	0.00	100
45 Power Systems	84	0.00	1.19	9.52	14.29	11.90	21.43	15.48	17.86	5.95	2.38	0.00	0.00	0.00	100
46 Semiconductor Devices	50	0.00	2.00	14.00	14.00	26.00	16.00	6.00	10.00	8.00	2.00	2.00	0.00	0.00	100
49 Miscellaneous-Elec.	31	0.00	6.45	6.45	6.45	19.35	12.90	19.35	9.68	6.45	9.68	0.00	3.23	0.00	100
51 Materials Processing & Handling	52	0.00	1.92	11.54	7.69	17.31	17.31	17.31	7.69	1.92	13.46	1.92	0.00	1.92	100
52 Metal Working	47	0.00	2.13	6.38	10.64	17.02	17.02	10.64	14.89	10.64	8.51	2.13	0.00	0.00	100
53 Motors, Engines & Parts	51	0.00	5.88	3.92	15.69	13.73	23.53	17.65	7.84	3.92	3.92	1.96	1.96	0.00	100
54 Optics	42	2.38	2.38	9.52	14.29	16.67	7.14	23.81	16.67	7.14	0.00	0.00	0.00	0.00	100
55 Transportation	31	0.00	6.45	0.00	6.45	22.58	16.13	9.68	9.68	25.81	3.23	0.00	0.00	0.00	100
59 Miscellaneous Mechanical	37	0.00	2.70	13.51	5.41	21.62	24.32	10.81	13.51	5.41	0.00	2.70	0.00	0.00	100
61 Agriculture, Husbandry, Food	13	0.00	0.00	0.00	0.00	23.08	23.08	30.77	7.69	7.69	7.69	0.00	0.00	0.00	100
63 Apparel & Textile	8	0.00	0.00	12.50	12.50	0.00	25.00	0.00	12.50	25.00	12.50	0.00	0.00	0.00	100
64 Earth Working & Wells	4	0.00	0.00	25.00	25.00	0.00	0.00	25.00	0.00	0.00	25.00	0.00	0.00	0.00	100
65 Furniture, House Fixtures	9	0.00	0.00	0.00	22.22	33.33	11.11	22.22	11.11	0.00	0.00	0.00	0.00	0.00	100
66 Heating	8	0.00	0.00	0.00	12.50	37.50	12.50	12.50	12.50	0.00	0.00	12.50	0.00	0.00	100
67 Pipes & Joints	13	0.00	0.00	7.69	15.38	23.08	15.38	15.38	15.38	7.69	0.00	0.00	0.00	0.00	100
68 Receptacles	19	0.00	5.26	0.00	10.53	21.05	21.05	0.00	21.05	5.26	10.53	0.00	5.26	0.00	100
69 Miscellaneous-Others	117	0.00	0.85	11.97	7.69	17.95	22.22	10.26	19.66	4.27	3.42	0.85	0.00	0.85	100
US-JP weighted		**0.15**	**1.92**	**7.12**	**12.63**	**21.55**	**19.45**	**13.73**	**10.99**	**7.27**	**3.39**	**1.04**	**0.58**	**0.18**	100

Japan

Question 1-1 Age at patent application(出願時の年齢)

	Mean	S.D	N	Median	P90	Interquartile Range	No response
All	39.45	9.09	3597	38	52	13	61
Agriculture, Food, Textiles	39.03	9.61	60	36.5	53	16	0
Coating	38.7	10.1	77	37	53	14	3
Gas	42.21	9.5	43	43	54	16	2
Organic Compounds	38.96	8.59	118	38	51	14	2
Resins	38.97	9.35	125	36	53	14	0
Miscellaneous-chemical	40.15	9.45	208	38	54	14.5	0
Communications	36.69	7.37	158	36	46	10	2
Computer Hardware	38.38	9.35	58	37	47	11	1
Computer Software	38.08	7.97	119	37	48	10	4
Computer Peripherals	36.77	6.65	73	35	46	9	3
Information Storage	37.62	6.4	118	37	46	9	2
Drugs	41.31	9.85	127	41	56	17	0
Surgery & Medical Instruments	41.54	11.72	83	42	58	17	2
Biotechnology	41.84	9.98	87	41	57	14	0
Miscellaneous-Drug&Med	40.89	9.12	45	41	53	12	0
Electrical Devices	37.35	7.43	91	36	49	10	0
Electrical Lighting	37.99	7.26	95	37	49	11	1
Measuring & Testing	40.1	9.14	107	39	54	12	4
Nuclears & X-rays	39.71	7.73	69	40	51	12	3
Power Systems	38.6	8.2	170	36	50	13	2
Semiconductor Devices	38.74	8.56	125	37	49	10	4
Miscellaneous-Elec.	38.57	8.47	118	37	49	10	2
Materials Processing & Handling	39.57	8.87	101	38	52	13	2
Metal Working	41.27	9	135	40	53	14	2
Motors, Engines & Parts	38.24	8.49	144	37.5	49	12	1
Optics	37.98	7.62	97	37	48	10	3
Transportation	39.2	9.75	70	38	50	13	3
Miscellaneous Mechanical	40.32	10.03	123	39	53	12	1
Agriculture, Husbandry, Food	44.07	11.11	84	42.5	62	13.5	3
Apparel & Textile	43.78	10.78	77	43	56	14	0
Earth Working & Wells	46.65	8.7	20	47.5	55.5	6.5	0
Furniture, House Fixtures	39.96	10.88	51	38	55	14	0
Heating	39.4	10.24	82	38	51	13	2
Pipes & Joints	41.05	8.97	63	42	50	15	3
Receptacles	42.39	10.12	54	43.5	54	18	1
Miscellaneous-Others	38.26	8.46	222	36	51	12	3
US-JP weighted	39.08						
JP weighted	38.92						

US (2/3)

Question 1-1 Age at patent application(出願時の年齢)

	D12 Year of birth	mean(age)	S.D	N	median	p90	Interquartile Range	missing
NBER	All	47.22	9.98	1829	46	61	14	90
11	Agriculture, Food, Textiles	45.75	9.51	8	47.5	58	19	0
12	Coating	48.91	10.73	33	47	64	17.5	1
13	Gas	44.27	12.90	11	41	60	11	0
14	Organic Compounds	48.28	9.42	61	47	58	12	0
15	Resins	48.72	10.14	81	47	62	14	3
19	Miscellaneous-chemical	47.25	9.51	229	47	61	15	4
21	Communications	45.99	9.86	138	44	60	15.5	11
22	Computer Hardware	48.89	10.75	36	50	64	19	6
77	Computer Software	45.89	8.82	91	46	58	17	2
23	Computer Peripherals	43.10	7.18	31	43	50	10	2
24	Information Storage	45.63	7.69	41	45	55	13	1
31	Drugs	46.69	8.80	96	45	60	12	5
32	Surgery & Medical Instruments	46.40	9.68	116	45.5	60	15	7
33	Biotechnology	45.85	9.04	39	45	56	12	2
39	Miscellaneous-Drug&Med	48.19	11.43	26	45.5	61	20	3
41	Electrical Devices	47.96	10.98	45	45	63	18	0
42	Electrical Lighting	50.50	9.87	32	49	62	14	1
43	Measuring & Testing	46.00	10.12	60	44	61.5	16	2
44	Nuclears & X-rays	47.56	9.21	39	47	60	16	0
45	Power Systems	47.15	9.37	84	47	58	17	5
46	Semiconductor Devices	45.16	10.47	50	42.5	63	14	5
49	Miscellaneous-Elec.	49.19	12.47	31	47	66	16	1
51	Materials Processing & Handling	49.04	12.35	52	48.5	68	17	4
52	Metal Working	49.70	10.98	47	49	65	20	2
53	Motors, Engines & Parts	46.86	10.81	51	47	60	15	5
54	Optics	46.48	10.03	42	49	57	16.5	1
55	Transportation	49.84	10.53	31	48	63	21	2
59	Miscellaneous Mechanical	46.14	10.12	37	46	59	17	5
61	Agriculture, Husbandry, Food	51.00	8.07	13	50	64	12	1
63	Apparel & Textile	50.88	13.79	8	52.5	68	14	1
64	Earth Working & Wells	47.75	14.68	4	45	67	8	1
65	Furniture, House Fixtures	45.22	6.94	9	44	57	13	0
66	Heating	48.88	11.24	8	45.5	71	19	0
67	Pipes & Joints	46.23	8.92	13	48	57	21	0
68	Receptacles	50.16	12.33	19	49	66	16	1
69	Miscellaneous-Others	47.62	10.28	117	47	59	17.5	6
	US-JP weighted	**47.20**	**9.94**					

US (3/3)

Reference: Country of Birth (参考:生誕国)

	D13 Country of Birth	All	US	Foreign	missing
NBER	All	1,919	1,325	520	74
11	Agriculture, Food, Textiles	8	6	2	0
12	Coating	34	22	11	1
13	Gas	11	8	3	0
14	Organic Compounds	61	42	19	0
15	Resins	84	48	33	3
19	Miscellaneous-chemical	233	171	61	1
21	Communications	149	102	38	9
22	Computer Hardware	42	18	19	5
77	Computer Software	93	69	22	2
23	Computer Peripherals	33	24	7	2
24	Information Storage	42	23	17	2
31	Drugs	101	59	37	5
32	Surgery & Medical Instruments	123	88	27	8
33	Biotechnology	41	28	11	2
39	Miscellaneous-Drug&Med	29	17	9	3
41	Electrical Devices	45	29	16	0
42	Electrical Lighting	33	23	8	2
43	Measuring & Testing	62	44	17	1
44	Nuclears & X-rays	39	29	10	0
45	Power Systems	89	60	28	1
46	Semiconductor Devices	55	29	22	4
49	Miscellaneous-Elec.	32	26	5	1
51	Materials Processing & Handling	56	44	10	2
52	Metal Working	49	37	11	1
53	Motors, Engines & Parts	56	42	10	4
54	Optics	43	33	9	1
55	Transportation	33	27	6	0
59	Miscellaneous Mechanical	42	29	9	4
61	Agriculture, Husbandry, Food	14	10	3	1
63	Apparel & Textile	9	6	1	2
64	Earth Working & Wells	5	4	0	1
65	Furniture, House Fixtures	9	7	2	0
66	Heating	8	6	2	0
67	Pipes & Joints	13	10	3	0
68	Receptacles	20	13	6	1
69	Miscellaneous-Others	123	92	26	5

	%	N	US(%)	Foreign(%)	Total
NBER	All	1845	71.82	28.18	100
11	Agriculture, Food, Textiles	8	75.00	25.00	100
12	Coating	33	66.67	33.33	100
13	Gas	11	72.73	27.27	100
14	Organic Compounds	61	68.85	31.15	100
15	Resins	81	59.26	40.74	100
19	Miscellaneous-chemical	232	73.71	26.29	100
21	Communications	140	72.86	27.14	100
22	Computer Hardware	37	48.65	51.35	100
77	Computer Software	91	75.82	24.18	100
23	Computer Peripherals	31	77.42	22.58	100
24	Information Storage	40	57.50	42.50	100
31	Drugs	96	61.46	38.54	100
32	Surgery & Medical Instruments	115	76.52	23.48	100
33	Biotechnology	39	71.79	28.21	100
39	Miscellaneous-Drug&Med	26	65.38	34.62	100
41	Electrical Devices	45	64.44	35.56	100
42	Electrical Lighting	31	74.19	25.81	100
43	Measuring & Testing	61	72.13	27.87	100
44	Nuclears & X-rays	39	74.36	25.64	100
45	Power Systems	88	68.18	31.82	100
46	Semiconductor Devices	51	56.86	43.14	100
49	Miscellaneous-Elec.	31	83.87	16.13	100
51	Materials Processing & Handling	54	81.48	18.52	100
52	Metal Working	48	77.08	22.92	100
53	Motors, Engines & Parts	52	80.77	19.23	100
54	Optics	42	78.57	21.43	100
55	Transportation	33	81.82	18.18	100
59	Miscellaneous Mechanical	38	76.32	23.68	100
61	Agriculture, Husbandry, Food	13	76.92	23.08	100
63	Apparel & Textile	7	85.71	14.29	100
64	Earth Working & Wells	4	100.00	0.00	100
65	Furniture, House Fixtures	9	77.78	22.22	100
66	Heating	8	75.00	25.00	100
67	Pipes & Joints	13	76.92	23.08	100
68	Receptacles	19	68.42	31.58	100
69	Miscellaneous-Others	118	77.97	22.03	100
	US-JP weighted		71.80	28.20	100

Japan

Question 1-3 Gender(性別)

	All	男性	女性	無回答
	All	**Male**	**Female**	**No response**
All	3658	3593	54	11
Agriculture, Food, Textiles	60	58	2	0
Coating	80	78	2	0
Gas	45	44	0	1
Organic Compounds	120	118	1	1
Resins	125	121	4	0
Miscellaneous-chemical	208	201	7	0
Communications	160	159	1	0
Computer Hardware	59	58	1	0
Computer Software	123	119	4	0
Computer Peripherals	76	75	1	0
Information Storage	120	120	0	0
Drugs	127	123	4	0
Surgery & Medical Instruments	85	79	5	1
Biotechnology	87	82	5	0
Miscellaneous-Drug&Med	45	44	1	0
Electrical Devices	91	91	0	0
Electrical Lighting	96	96	0	0
Measuring & Testing	111	111	0	0
Nuclears & X-rays	72	70	1	1
Power Systems	172	170	2	0
Semiconductor Devices	129	125	3	1
Miscellaneous-Elec.	120	120	0	0
Materials Processing & Handling	103	101	1	1
Metal Working	137	135	0	2
Motors, Engines & Parts	145	144	1	0
Optics	100	100	0	0
Transportation	73	72	0	1
Miscellaneous Mechanical	124	121	2	1
Agriculture, Husbandry, Food	87	85	2	0
Apparel & Textile	77	77	0	0
Earth Working & Wells	20	20	0	0
Furniture, House Fixtures	51	50	1	0
Heating	84	84	0	0
Pipes & Joints	66	66	0	0
Receptacles	55	55	0	0
Miscellaneous-Others	225	221	3	1

%	N	Male	Female	Total
All	3647	98.52	1.48	100
Agriculture, Food, Textiles	60	96.67	3.33	100
Coating	80	97.5	2.5	100
Gas	44	100	0	100
Organic Compounds	119	99.16	0.84	100
Resins	125	96.8	3.2	100
Miscellaneous-chemical	208	96.63	3.37	100
Communications	160	99.38	0.63	100
Computer Hardware	59	98.31	1.69	100
Computer Software	123	96.75	3.25	100
Computer Peripherals	76	98.68	1.32	100
Information Storage	120	100	0	100
Drugs	127	96.85	3.15	100
Surgery & Medical Instruments	84	94.05	5.95	100
Biotechnology	87	94.25	5.75	100
Miscellaneous-Drug&Med	45	97.78	2.22	100
Electrical Devices	91	100	0	100
Electrical Lighting	96	100	0	100
Measuring & Testing	111	100	0	100
Nuclears & X-rays	71	98.59	1.41	100
Power Systems	172	98.84	1.16	100
Semiconductor Devices	128	97.66	2.34	100
Miscellaneous-Elec.	120	100	0	100
Materials Processing & Handling	102	99.02	0.98	100
Metal Working	135	100	0	100
Motors, Engines & Parts	145	99.31	0.69	100
Optics	100	100	0	100
Transportation	72	100	0	100
Miscellaneous Mechanical	123	98.37	1.63	100
Agriculture, Husbandry, Food	87	97.7	2.3	100
Apparel & Textile	77	100	0	100
Earth Working & Wells	20	100	0	100
Furniture, House Fixtures	51	98.04	1.96	100
Heating	84	100	0	100
Pipes & Joints	66	100	0	100
Receptacles	55	100	0	100
Miscellaneous-Others	224	98.66	1.34	100
US-JP weighted		98.27	1.73	100
JP weighted		98.58	1.42	100

US (1/2)

Question 1-3 Gender(性別)

D14 Gender	All	Male	Female	missing
NBER All	1,919	1754	100	65
11 Agriculture, Food, Textiles	8	6	2	0
12 Coating	34	28	5	1
13 Gas	11	10	0	1
14 Organic Compounds	61	59	2	0
15 Resins	84	72	10	2
19 Miscellaneous-chemical	233	212	21	0
21 Communications	149	140	1	8
22 Computer Hardware	42	35	2	5
77 Computer Software	93	90	1	2
23 Computer Peripherals	33	28	2	3
24 Information Storage	42	39	2	1
31 Drugs	101	84	12	5
32 Surgery & Medical Instruments	123	111	8	4
33 Biotechnology	41	32	7	2
39 Miscellaneous-Drug&Med	29	25	1	3
41 Electrical Devices	45	45	0	0
42 Electrical Lighting	33	32	0	1
43 Measuring & Testing	62	58	4	0
44 Nuclears & X-rays	39	37	2	0
45 Power Systems	89	84	5	0
46 Semiconductor Devices	55	48	3	4
49 Miscellaneous-Elec.	32	31	0	1
51 Materials Processing & Handling	56	51	2	3
52 Metal Working	49	47	1	1
53 Motors, Engines & Parts	56	52	0	4
54 Optics	43	43	0	0
55 Transportation	33	33	0	0
59 Miscellaneous Mechanical	42	36	1	5
61 Agriculture, Husbandry, Food	14	12	1	1
63 Apparel & Textile	9	8	0	1
64 Earth Working & Wells	5	4	0	1
65 Furniture, House Fixtures	9	9	0	0
66 Heating	8	8	0	0
67 Pipes & Joints	13	13	0	0
68 Receptacles	20	19	0	1
69 Miscellaneous-Others	123	113	5	5

%	N	Male(%)	Female(%)	Total
NBER All	1,854	94.61	5.39	100
11 Agriculture, Food, Textiles	8	75	25	100
12 Coating	33	84.85	15.15	100
13 Gas	10	100	0	100
14 Organic Compounds	61	96.72	3.28	100
15 Resins	82	87.8	12.2	100
19 Miscellaneous-chemical	233	90.99	9.01	100
21 Communications	141	99.29	0.71	100
22 Computer Hardware	37	94.59	5.41	100
77 Computer Software	91	98.9	1.1	100
23 Computer Peripherals	30	93.33	6.67	100
24 Information Storage	41	95.12	4.88	100
31 Drugs	96	87.5	12.5	100
32 Surgery & Medical Instruments	119	93.28	6.72	100
33 Biotechnology	39	82.05	17.95	100
39 Miscellaneous-Drug&Med	26	96.15	3.85	100
41 Electrical Devices	45	100	0	100
42 Electrical Lighting	32	100	0	100
43 Measuring & Testing	62	93.55	6.45	100
44 Nuclears & X-rays	39	94.87	5.13	100
45 Power Systems	89	94.38	5.62	100
46 Semiconductor Devices	51	94.12	5.88	100
49 Miscellaneous-Elec.	31	100	0	100
51 Materials Processing & Handling	53	96.23	3.77	100
52 Metal Working	48	97.92	2.08	100
53 Motors, Engines & Parts	52	100	0	100
54 Optics	43	100	0	100
55 Transportation	33	100	0	100
59 Miscellaneous Mechanical	37	97.3	2.7	100
61 Agriculture, Husbandry, Food	13	92.31	7.69	100
63 Apparel & Textile	8	100	0	100
64 Earth Working & Wells	4	100	0	100
65 Furniture, House Fixtures	9	100	0	100
66 Heating	8	100	0	100
67 Pipes & Joints	13	100	0	100
68 Receptacles	19	100	0	100
69 Miscellaneous-Others	118	95.76	4.24	100
US-JP weighted		**94.82**	**5.18**	100

US (2/2)

Reference: Children (参考:子供、米国の質問票のみ)

	D15 Did you have children at the time of the patent?	All	Yes	No	missing
NBER	All	1,919	1492	357	70
11	Agriculture, Food, Textiles	8	7	1	0
12	Coating	34	27	6	1
13	Gas	11	9	1	1
14	Organic Compounds	61	51	10	0
15	Resins	84	69	12	3
19	Miscellaneous-chemical	233	186	46	1
21	Communications	149	112	28	9
22	Computer Hardware	42	29	8	5
77	Computer Software	93	71	20	2
23	Computer Peripherals	33	24	7	2
24	Information Storage	42	33	8	1
31	Drugs	101	77	19	5
32	Surgery & Medical Instruments	123	91	27	5
33	Biotechnology	41	29	10	2
39	Miscellaneous-Drug&Med	29	20	6	3
41	Electrical Devices	45	35	10	0
42	Electrical Lighting	33	28	4	1
43	Measuring & Testing	62	52	10	0
44	Nuclears & X-rays	39	34	4	1
45	Power Systems	89	69	18	2
46	Semiconductor Devices	55	33	18	4
49	Miscellaneous-Elec.	32	28	3	1
51	Materials Processing & Handling	56	46	7	3
52	Metal Working	49	44	4	1
53	Motors, Engines & Parts	56	42	10	4
54	Optics	43	36	7	0
55	Transportation	33	23	10	0
59	Miscellaneous Mechanical	42	29	9	4
61	Agriculture, Husbandry, Food	14	12	1	1
63	Apparel & Textile	9	7	1	1
64	Earth Working & Wells	5	2	2	1
65	Furniture, House Fixtures	9	8	1	0
66	Heating	8	7	1	0
67	Pipes & Joints	13	10	3	0
68	Receptacles	20	17	2	1
69	Miscellaneous-Others	123	95	23	5

	%	N	Yes(%)	No(%)	Total
NBER	All	1,849	80.69	19.31	100
11	Agriculture, Food, Textiles	8	87.5	12.5	100
12	Coating	33	81.82	18.18	100
13	Gas	10	90	10	100
14	Organic Compounds	61	83.61	16.39	100
15	Resins	81	85.19	14.81	100
19	Miscellaneous-chemical	232	80.17	19.83	100
21	Communications	140	80	20	100
22	Computer Hardware	37	78.38	21.62	100
77	Computer Software	91	78.02	21.98	100
23	Computer Peripherals	31	77.42	22.58	100
24	Information Storage	41	80.49	19.51	100
31	Drugs	96	80.21	19.79	100
32	Surgery & Medical Instruments	118	77.12	22.88	100
33	Biotechnology	39	74.36	25.64	100
39	Miscellaneous-Drug&Med	26	76.92	23.08	100
41	Electrical Devices	45	77.78	22.22	100
42	Electrical Lighting	32	87.5	12.5	100
43	Measuring & Testing	62	83.87	16.13	100
44	Nuclears & X-rays	38	89.47	10.53	100
45	Power Systems	87	79.31	20.69	100
46	Semiconductor Devices	51	64.71	35.29	100
49	Miscellaneous-Elec.	31	90.32	9.68	100
51	Materials Processing & Handling	53	86.79	13.21	100
52	Metal Working	48	97.67	8.33	106
53	Motors, Engines & Parts	52	80.77	19.23	100
54	Optics	43	83.72	16.28	100
55	Transportation	33	69.7	30.3	100
59	Miscellaneous Mechanical	38	76.32	23.68	100
61	Agriculture, Husbandry, Food	13	92.31	7.69	100
63	Apparel & Textile	8	87.5	12.5	100
64	Earth Working & Wells	4	50	50	100
65	Furniture, House Fixtures	9	88.89	11.11	100
66	Heating	8	87.5	12.5	100
67	Pipes & Joints	13	76.92	23.08	100
68	Receptacles	19	89.47	10.53	100
69	Miscellaneous-Others	118	80.51	19.49	100
	US-JP weighted		**80.84**	**19.16**	100

Japan (1/2)

Question 2-1 Highest degree at the time of research (当該発明につながる研究実施当時の最終学歴)

	All	高校	高専・短大	学士	修士	博士	無回答
	All	**High school or lower**	**Tech college or junior college**	**University**	**Master**	**Ph.D.**	**No response**
All	3658	305	204	1554	1115	450	30
Agriculture, Food, Textiles	60	2	3	19	29	6	1
Coating	80	3	3	37	30	7	0
Gas	45	7	1	18	11	7	1
Organic Compounds	120	13	4	11	55	36	1
Resins	125	15	4	28	57	20	1
Miscellaneous-chemical	208	16	8	74	81	28	1
Communications	160	4	4	74	59	19	0
Computer Hardware	59	1	6	25	21	5	1
Computer Software	123	6	6	60	40	11	0
Computer Peripherals	76	5	4	39	22	5	1
Information Storage	120	4	7	70	30	8	1
Drugs	127	6	3	18	46	51	3
Surgery & Medical Instruments	85	3	8	38	23	11	2
Biotechnology	87	1	3	16	22	45	0
Miscellaneous-Drug&Med	45	5	2	19	8	9	2
Electrical Devices	91	10	10	53	14	4	0
Electrical Lighting	96	8	0	43	39	6	0
Measuring & Testing	111	9	7	49	29	16	1
Nuclears & X-rays	72	2	3	32	21	13	1
Power Systems	172	16	5	71	63	16	1
Semiconductor Devices	129	8	2	42	57	19	1
Miscellaneous-Elec.	120	12	8	57	34	8	1
Materials Processing & Handling	103	18	5	51	21	7	1
Metal Working	137	7	11	54	46	18	1
Motors, Engines & Parts	145	8	5	82	39	10	1
Optics	100	6	3	48	29	13	1
Transportation	73	9	7	41	14	1	1
Miscellaneous Mechanical	124	12	10	68	26	6	2
Agriculture, Husbandry, Food	87	11	4	38	21	13	0
Apparel & Textile	77	21	8	42	6	0	0
Earth Working & Wells	20	5	1	10	3	1	0
Furniture, House Fixtures	51	8	7	26	8	1	1
Heating	84	11	11	31	20	11	0
Pipes & Joints	66	5	12	31	12	4	2
Receptacles	55	8	10	27	8	2	0
Miscellaneous-Others	225	20	9	112	71	13	0

%	N	High school or lower	Tech college or junior college	University	Master	Ph.D.	Total
All	3628	8.41	5.62	42.83	30.73	12.4	100
Agriculture, Food, Textiles	59	3.39	5.08	32.2	49.15	10.17	100
Coating	80	3.75	3.75	46.25	37.5	8.75	100
Gas	44	15.91	2.27	40.91	25	15.91	100
Organic Compounds	119	10.92	3.36	9.24	46.22	30.25	100
Resins	124	12.1	3.23	22.58	45.97	16.13	100
Miscellaneous-chemical	207	7.73	3.86	35.75	39.13	13.53	100
Communications	160	2.5	2.5	46.25	36.88	11.88	100
Computer Hardware	58	1.72	10.34	43.1	36.21	8.62	100
Computer Software	123	4.88	4.88	48.78	32.52	8.94	100
Computer Peripherals	75	6.67	5.33	52	29.33	6.67	100
Information Storage	119	3.36	5.88	58.82	25.21	6.72	100
Drugs	124	4.84	2.42	14.52	37.1	41.13	100
Surgery & Medical Instruments	83	3.61	9.64	45.78	27.71	13.25	100
Biotechnology	87	1.15	3.45	18.39	25.29	51.72	100
Miscellaneous-Drug&Med	43	11.63	4.65	44.19	18.6	20.93	100
Electrical Devices	91	10.99	10.99	58.24	15.38	4.4	100
Electrical Lighting	96	8.33	0	44.79	40.63	6.25	100
Measuring & Testing	110	8.18	6.36	44.55	26.36	14.55	100
Nuclears & X-rays	71	2.82	4.23	45.07	29.58	18.31	100
Power Systems	171	9.36	2.92	41.52	36.84	9.36	100
Semiconductor Devices	128	6.25	1.56	32.81	44.53	14.84	100
Miscellaneous-Elec.	119	10.08	6.72	47.9	28.57	6.72	100
Materials Processing & Handling	102	17.65	4.9	50	20.59	6.86	100
Metal Working	136	5.15	8.09	39.71	33.82	13.24	100
Motors, Engines & Parts	144	5.56	3.47	56.94	27.08	6.94	100
Optics	99	6.06	3.03	48.48	29.29	13.13	100
Transportation	72	12.5	9.72	56.94	19.44	1.39	100
Miscellaneous Mechanical	122	9.84	8.2	55.74	21.31	4.92	100
Agriculture, Husbandry, Food	87	12.64	4.6	43.68	24.14	14.94	100
Apparel & Textile	77	27.27	10.39	54.55	7.79	0	100
Earth Working & Wells	20	25	5	50	15	5	100
Furniture, House Fixtures	50	16	14	52	16	2	100
Heating	84	13.1	13.1	36.9	23.81	13.1	100
Pipes & Joints	64	7.81	18.75	48.44	18.75	6.25	100
Receptacles	55	14.55	18.18	49.09	14.55	3.64	100
Miscellaneous-Others	225	8.89	4	49.78	31.56	5.78	100
US-JP weighted		7.51	4.9	42.4	32.29	12.9	100
JP weighted		7.7	5.04	43.81	32.04	11.4	100

US (1/2)

Question 2-1 Highest degree at the time of the research (当該発明につながる研究実施当時の最終学歴)

	D1A Education	All	High school or lower	Technical college or Junior college	University or college Bachelor's	University Master's	J.D	Ph.D, M.D. or equivalent	other	Missing
NBER	All	1,919	39	78	420	451	4	817	1	109
11	Agriculture, Food, Textiles	8	0	0	2	1	0	5	0	0
12	Coating	34	0	4	7	6	0	16	0	1
13	Gas	11	0	0	5	3	0	3	0	0
14	Organic Compounds	61	0	1	5	6	0	46	0	3
15	Resins	84	1	0	9	11	0	59	0	4
19	Miscellaneous-chemical	233	4	9	60	36	0	113	0	11
21	Communications	149	1	2	30	45	0	58	0	13
22	Computer Hardware	42	1	0	2	11	0	26	0	2
77	Computer Software	93	1	2	19	34	0	34	0	3
23	Computer Peripherals	33	0	0	10	7	0	13	0	3
24	Information Storage	42	0	0	8	13	0	19	0	2
31	Drugs	101	0	1	2	8	0	83	0	7
32	Surgery & Medical Instruments	123	3	8	32	37	1	35	0	7
33	Biotechnology	41	0	1	4	5	0	29	0	2
39	Miscellaneous-Drug&Med	29	2	1	3	10	0	9	0	4
41	Electrical Devices	45	3	6	11	9	0	13	0	3
42	Electrical Lighting	33	2	0	1	6	0	22	0	2
43	Measuring & Testing	62	1	1	16	18	0	22	0	4
44	Nuclears & X-rays	39	1	2	9	8	0	18	0	1
45	Power Systems	89	0	4	20	38	0	26	0	1
46	Semiconductor Devices	55	0	1	10	6	0	32	0	6
49	Miscellaneous-Elec.	32	3	3	8	12	0	4	0	2
51	Materials Processing & Handlin	56	4	5	22	8	0	13	0	4
52	Metal Working	49	0	4	12	14	0	16	0	3
53	Motors, Engines & Parts	56	2	1	23	12	0	14	0	4
54	Optics	43	0	3	11	7	0	21	0	1
55	Transportation	33	0	3	13	11	0	3	0	3
59	Miscellaneous Mechanical	42	0	3	10	16	0	9	0	4
61	Agriculture, Husbandry, Food	14	2	1	2	6	0	3	0	0
63	Apparel & Textile	9	1	1	4	2	0	1	0	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	0	1	1	5	0	2	0	0
66	Heating	8	0	0	1	3	0	4	0	0
67	Pipes & Joints	13	2	1	3	5	0	2	0	0
68	Receptacles	20	1	3	10	1	1	3	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	High school or lower	Technical college or Junior college	University or college Bachelor's	University Master's	J.D	Ph.D, M.D. or equivalent	other	total
NBER	All	1810	2.15	4.31	23.2	24.92	0.22	45.14	0.06	100
11	Agriculture, Food, Textiles	8	0	0	25	12.5	0.00	62.50	0.00	100
12	Coating	33	0	12.12	21.21	18.18	0.00	48.48	0.00	100
13	Gas	11	0	0	45.45	27.27	0.00	27.27	0.00	100
14	Organic Compounds	58	0	1.72	8.62	10.34	0.00	79.31	0.00	100
15	Resins	80	1.25	0	11.25	13.75	0.00	73.75	0.00	100
19	Miscellaneous-chemical	222	1.8	4.05	27.03	16.22	0.00	50.90	0.00	100
21	Communications	136	0.74	1.47	22.06	33.09	0.00	42.65	0.00	100
22	Computer Hardware	40	2.5	0	5	27.5	0.00	65.00	0.00	100
77	Computer Software	90	1.11	2.22	21.11	37.78	0.00	37.78	0.00	100
23	Computer Peripherals	30	0	0	33.33	23.33	0.00	43.33	0.00	100
24	Information Storage	40	0	0	20	32.5	0.00	47.50	0.00	100
31	Drugs	94	0	1.06	2.13	8.51	0.00	88.30	0.00	100
32	Surgery & Medical Instruments	116	2.59	6.9	27.59	31.9	0.86	30.17	0.00	100
33	Biotechnology	39	0	2.56	10.26	12.82	0.00	74.36	0.00	100
39	Miscellaneous-Drug&Med	25	8	4	12	40	0.00	36.00	0.00	100
41	Electrical Devices	42	7.14	14.29	26.19	21.43	0.00	30.95	0.00	100
42	Electrical Lighting	31	6.45	0	3.23	19.35	0.00	70.97	0.00	100
43	Measuring & Testing	58	1.72	1.72	27.59	31.03	0.00	37.93	0.00	100
44	Nuclears & X-rays	38	2.63	5.26	23.68	21.05	0.00	47.37	0.00	100
45	Power Systems	88	0	4.55	22.73	43.18	0.00	29.55	0.00	100
46	Semiconductor Devices	49	0	2.04	20.41	12.24	0.00	65.31	0.00	100
49	Miscellaneous-Elec.	30	10	10	26.67	40	0.00	13.33	0.00	100
51	Materials Processing & Handlin	52	7.69	9.62	42.31	15.38	0.00	25.00	0.00	100
52	Metal Working	46	0	8.7	26.09	30.43	0.00	34.78	0.00	100
53	Motors, Engines & Parts	52	3.85	1.92	44.23	23.08	0.00	26.92	0.00	100
54	Optics	42	0	7.14	26.19	16.67	0.00	50.00	0.00	100
55	Transportation	30	0	10	43.33	36.67	0.00	10.00	0.00	100
59	Miscellaneous Mechanical	38	0	7.89	26.32	42.11	0.00	23.68	0.00	100
61	Agriculture, Husbandry, Food	14	14.29	7.14	14.29	42.86	0.00	21.43	0.00	100
63	Apparel & Textile	9	11.11	11.11	44.44	22.22	0.00	11.11	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	0	11.11	11.11	55.56	0.00	22.22	0.00	100
66	Heating	8	0	0	12.5	37.5	0.00	50.00	0.00	100
67	Pipes & Joints	13	15.38	7.69	23.08	38.46	0.00	15.38	0.00	100
68	Receptacles	19	5.26	15.79	52.63	5.26	5.26	15.79	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**2.19**	**4.13**	**23.06**	**25.17**	**0.17**	**45.24**	**0.04**	100

Japan (2/2)

Reference: In which year this degree was earned? (参考:学位の取得年)

	mean(year)	S.D	N	Median	p90	Interquartile Range	No response
All	1984.96	8.67	3047	1986	1995	11	611
Agriculture,Food,Textiles	1985.11	8.28	53	1987	1995	13	7
Coating	1984.74	10.58	73	1987	1995	12	7
Gas	1984.06	10.04	34	1984.5	1996	17	11
Organic Compounds	1987.36	7.99	98	1989.5	1996	11	22
Resins	1986.26	8.84	103	1989	1995	10	22
Miscellaneous chemical	1984.97	9.12	179	1987	1995	12	29
Communications	1986.91	7.74	152	1987	1997	11	8
Computer Hardware	1983.96	9.86	51	1985	1994	11	8
Computer Software	1984.58	7.86	109	1985	1994	11	14
Computer Peripherals	1985.39	6.27	66	1986	1992	7	10
Information Storage	1985.36	6.12	105	1985	1994	10	15
Drugs	1986.41	8.52	113	1987	1996	11	14
Surgery & Med Inst.	1983.32	10.15	69	1983	1996	16	16
Biotechnology	1984.98	10.05	81	1985	1997	12	6
Miscellaneous-Drug&Med	1984.12	7.61	34	1984.5	1994	13	11
Electrical Devices	1985.1	7.2	69	1986	1994	9	22
Electrical Lighting	1985.49	7.26	83	1985	1996	10	13
Measuring & Testing	1984.65	9.37	91	1985	1995	12	20
Nuclears & X-rays	1984.62	8.07	65	1987	1994	11	7
Power Systems	1985.9	8.65	148	1986.5	1995	11.5	24
Semiconductor Devices	1986.13	7.58	116	1987	1995	10	13
Miscellaneous-Elec.	1984.86	7.6	97	1985	1995	10	23
Materials Processing & Handling	1984.39	9.12	76	1986	1994	11.5	27
Metal Working	1983.06	10.05	115	1984	1995	15	22
Motors, Engines & Parts	1985.38	7.81	128	1986	1996	11	17
Optics	1985.85	6.94	87	1985	1996	9	13
Transportation	1984.58	8	53	1986	1994	14	20
Miscellaneous Mechanical	1983.23	8.04	99	1983	1993	10	25
Agriculture, Husbandry, Food	1981.68	11.45	72	1983	1994	17	15
Apparel & Textile	1981.81	8.76	48	1982.5	1992	10.5	29
Earth Working & Wells	1976.71	10.91	14	1975	1992	6	6
Furniture, House Fixtures	1986.53	8.14	32	1986	1995	10	19
Heating	1985.68	9.54	62	1986	1999	14	22
Pipes & Joints	1983.39	9.19	44	1983.5	1997	14	22
Receptacles	1978.89	10.12	37	1979	1995	14	18
Miscellaneous-Others	1985.63	8.68	191	1986	1996	11	34
US-JP weighted	1984.99						
JP weighted	1985.16						

Note: We dropped records if year of degree < birth year + 21

US (2/2)

Reference: In which year this degree was earned? (参考:学位の取得年)

	D1B The year in which this degree was earned?	All	mean(year)	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	1,919	1982.1	10.56	1,741	1983.0	1996.0	15.0	178
11	Agriculture, Food, Textiles	8	1981.3	11.08	8	1980.5	1999.0	19.0	0
12	Coating	34	1980.9	11.53	32	1980.0	1997.0	17.5	2
13	Gas	11	1987.3	12.80	11	1989.0	1999.0	11.0	0
14	Organic Compounds	61	1980.7	9.55	56	1982.0	1993.0	12.0	5
15	Resins	84	1980.2	9.93	79	1981.0	1992.0	14.0	5
19	Miscellaneous-chemical	233	1981.2	9.72	214	1980.0	1995.0	15.0	19
21	Communications	149	1983.6	10.06	132	1985.0	1996.0	14.5	17
22	Computer Hardware	42	1981.6	11.13	39	1984.0	1996.0	19.0	3
77	Computer Software	93	1982.6	10.12	90	1983.0	1995.5	17.0	3
23	Computer Peripherals	33	1987.2	7.72	30	1988.0	1997.5	10.0	3
24	Information Storage	42	1985.2	8.28	39	1986.0	1997.0	13.0	3
31	Drugs	101	1983.9	8.76	91	1985.0	1994.0	12.0	10
32	Surgery & Medical Instruments	123	1982.5	10.09	107	1982.0	1995.0	15.0	16
33	Biotechnology	41	1983.8	10.36	39	1985.0	1997.0	12.0	2
39	Miscellaneous-Drug&Med	29	1984.3	11.39	22	1986.5	1998.0	20.0	7
41	Electrical Devices	45	1980.7	13.20	39	1981.0	1998.0	18.0	6
42	Electrical Lighting	33	1979.8	11.30	29	1980.0	1997.0	14.0	4
43	Measuring & Testing	62	1981.9	10.55	57	1983.0	1995.0	16.0	5
44	Nuclears & X-rays	39	1981.5	9.95	37	1983.0	1995.0	16.0	2
45	Power Systems	89	1981.5	10.05	86	1980.0	1995.0	17.0	3
46	Semiconductor Devices	55	1984.1	9.60	47	1984.0	1996.0	14.0	8
49	Miscellaneous-Elec.	32	1978.9	13.05	29	1980.0	1997.0	16.0	3
51	Materials Processing & Handlin	56	1979.4	12.53	49	1980.0	1996.0	17.0	7
52	Metal Working	49	1980.5	12.64	45	1982.0	1998.0	20.0	4
53	Motors, Engines & Parts	56	1981.7	10.95	50	1982.0	1996.0	15.0	6
54	Optics	43	1983.4	10.07	40	1982.0	1996.5	16.5	3
55	Transportation	33	1981.0	12.28	30	1980.5	1998.5	21.0	3
59	Miscellaneous Mechanical	42	1983.2	10.69	35	1982.0	1996.0	17.0	7
61	Agriculture, Husbandry, Food	14	1976.5	11.52	13	1978.0	1988.0	12.0	1
63	Apparel & Textile	9	1982.0	11.40	8	1978.0	2000.0	14.0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1986.3	10.83	9	1984.0	2004.0	13.0	0
66	Heating	8	1980.4	12.59	8	1981.0	2000.0	19.0	0
67	Pipes & Joints	13	1986.0	10.99	12	1986.0	2000.0	21.0	1
68	Receptacles	20	1975.4	13.01	18	1978.5	1989.0	16.0	2
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**1982.2**	**10.51**					

Japan

Question 3-1 Employment at the time of invention（当該発明当時の雇用・勤務形態）

	All	組織(企業など)に雇われており、その組織の部署に勤務していた	自営業者であった	学生であった	企業から大学への研究派遣など、1ー3以外の場合	無回答
	All	**Employed by a firm**	**Self-employed**	**Student**	**Other cases, such as the secondment from a firm to a university**	**No response**
All	3658	3541	70	4	19	24
Agriculture, Food, Textiles	60	56	3	0	0	1
Coating	80	78	1	1	0	0
Gas	45	41	2	0	0	2
Organic Compounds	120	118	0	0	2	0
Resins	125	124	1	0	0	0
Miscellaneous-chemical	208	200	6	0	0	2
Communications	160	158	0	1	1	0
Computer Hardware	59	58	1	0	0	0
Computer Software	123	119	2	0	2	0
Computer Peripherals	76	75	0	0	0	1
Information Storage	120	119	0	0	0	1
Drugs	127	123	0	1	0	3
Surgery & Medical Instruments	85	79	5	0	0	1
Biotechnology	87	82	1	1	3	0
Miscellaneous-Drug&Med	45	44	1	0	0	0
Electrical Devices	91	89	0	0	2	0
Electrical Lighting	96	95	1	0	0	0
Measuring & Testing	111	105	3	0	2	1
Nuclears & X-rays	72	70	1	0	0	1
Power Systems	172	172	0	0	0	0
Semiconductor Devices	129	125	2	0	2	0
Miscellaneous-Elec.	120	119	1	0	0	0
Materials Processing & Handling	103	97	4	0	0	2
Metal Working	137	135	2	0	0	0
Motors, Engines & Parts	145	143	0	0	1	1
Optics	100	97	0	0	1	2
Transportation	73	70	2	0	0	1
Miscellaneous Mechanical	124	117	6	0	0	1
Agriculture, Husbandry, Food	87	83	4	0	0	0
Apparel & Textile	77	74	3	0	0	0
Earth Working & Wells	20	18	2	0	0	0
Furniture, House Fixtures	51	45	5	0	0	1
Heating	84	76	5	0	2	1
Pipes & Joints	66	65	1	0	0	0
Receptacles	55	53	2	0	0	0
Miscellaneous-Others	225	219	3	0	1	2

%	**N**	**Employed by a firm**	**Self-employed**	**Student**	**Other cases, such as the secondment from a firm to a university**	**Total**
All	3634	97.44	1.93	0.11	0.52	100
Agriculture, Food, Textiles	59	94.92	5.08	0	0	100
Coating	80	97.5	1.25	1.25	0	100
Gas	43	95.35	4.65	0	0	100
Organic Compounds	120	98.33	0	0	1.67	100
Resins	125	99.2	0.8	0	0	100
Miscellaneous-chemical	206	97.09	2.91	0	0	100
Communications	160	98.75	0	0.63	0.63	100
Computer Hardware	59	98.31	1.69	0	0	100
Computer Software	123	96.75	1.63	0	1.63	100
Computer Peripherals	75	100	0	0	0	100
Information Storage	119	100	0	0	0	100
Drugs	124	99.19	0	0.81	0	100
Surgery & Medical Instruments	84	94.05	5.95	0	0	100
Biotechnology	87	94.25	1.15	1.15	3.45	100
Miscellaneous-Drug&Med	45	97.78	2.22	0	0	100
Electrical Devices	91	97.8	0	0	2.2	100
Electrical Lighting	96	98.96	1.04	0	0	100
Measuring & Testing	110	95.45	2.73	0	1.82	100
Nuclears & X-rays	71	98.59	1.41	0	0	100
Power Systems	172	100	0	0	0	100
Semiconductor Devices	129	96.9	1.55	0	1.55	100
Miscellaneous-Elec.	120	99.17	0.83	0	0	100
Materials Processing & Handling	101	96.04	3.96	0	0	100
Metal Working	137	98.54	1.46	0	0	100
Motors, Engines & Parts	144	99.31	0	0	0.69	100
Optics	98	98.98	0	0	1.02	100
Transportation	72	97.22	2.78	0	0	100
Miscellaneous Mechanical	123	95.12	4.88	0	0	100
Agriculture, Husbandry, Food	87	95.4	4.6	0	0	100
Apparel & Textile	77	96.1	3.9	0	0	100
Earth Working & Wells	20	90	10	0	0	100
Furniture, House Fixtures	50	90	10	0	0	100
Heating	83	91.57	6.02	0	2.41	100
Pipes & Joints	66	98.48	1.52	0	0	100
Receptacles	55	96.36	3.64	0	0	100
Miscellaneous-Others	223	98.21	1.35	0	0.45	100
JP weighted		97.96	1.43	0.13	0.49	100

Japan (1/2)

Question 3-2 Type of the organization（その組織の類型）

	All	従業員が501人以上の企業	従業員が251-500人の企業	従業員が101-250人の企業	従業員が100人以下の企業	大学等高等教育機関	国立研究機関	地方公共団体の研究機関	財団法人、民間病院、民間非営利研究機関	その他政府機関	その他の組織	無回答
	All	**A firm with 501 or more employees**	**A firm with 251-500 employees**	**A firm with 101-250 employees**	**A firm with less than 100 employees**	**University or college**	**Central government research organization**	**Local government research organization**	**Foundation, private hospital, private nonprofit research organization**	**Other government organization**	**Other**	**No response**
All	3634	2932	201	130	182	82	14	7	3	3	15	65
Agriculture, Food, Textiles	59	38	8	3	6	0	0	1	0	0	1	2
Coating	80	66	4	4	2	2	0	1	0	0	0	1
Gas	43	32	1	2	4	0	0	0	1	0	1	2
Organic Compounds	120	94	9	3	3	8	2	0	0	0	0	1
Resins	125	105	10	0	2	3	0	1	0	0	0	4
Miscellaneous-chemical	206	155	15	10	13	7	0	0	0	0	1	5
Communications	160	144	4	1	4	4	0	0	0	0	0	3
Computer Hardware	59	48	2	3	4	0	0	0	0	0	1	1
Computer Software	123	105	2	3	7	3	1	0	0	0	1	1
Computer Peripherals	75	71	2	0	1	0	1	0	0	0	0	0
Information Storage	119	111	2	2	1	1	0	0	0	0	0	2
Drugs	124	103	4	2	6	6	0	0	1	0	1	1
Surgery & Medical Instruments	84	57	7	2	10	4	0	0	0	1	0	3
Biotechnology	87	48	6	7	5	10	1	1	0	2	2	5
Miscellaneous-Drug&Med	45	32	2	3	2	4	0	0	0	0	0	2
Electrical Devices	91	83	2	2	4	0	0	0	0	0	0	0
Electrical Lighting	96	86	0	4	4	1	1	0	0	0	0	0
Measuring & Testing	110	85	0	6	7	7	3	2	0	0	0	0
Nuclears & X-rays	71	60	2	2	2	2	1	0	0	0	0	2
Power Systems	172	149	10	6	4	2	0	0	0	0	0	1
Semiconductor Devices	129	113	3	1	6	2	1	0	1	0	0	2
Miscellaneous-Elec.	120	106	7	4	1	1	0	0	0	0	0	1
Materials Processing & Handling	101	77	11	2	7	2	1	0	0	0	1	0
Metal Working	137	113	3	8	11	1	1	0	0	0	0	0
Motors, Engines & Parts	144	128	3	4	3	5	0	0	0	0	0	1
Optics	98	90	2	0	1	3	0	0	0	0	0	2
Transportation	72	66	2	2	0	0	0	0	0	0	1	1
Miscellaneous Mechanical	123	96	9	5	10	1	0	0	0	0	0	2
Agriculture, Husbandry, Food	87	57	6	6	11	2	0	0	0	0	1	4
Apparel & Textile	77	50	7	8	9	0	0	1	0	0	1	1
Earth Working & Wells	20	13	1	2	1	0	0	0	0	0	2	1
Furniture, House Fixtures	50	33	8	2	5	0	0	0	0	0	0	2
Heating	83	67	5	2	6	0	1	0	0	0	0	2
Pipes & Joints	66	44	11	3	4	0	0	0	0	0	1	3
Receptacles	55	31	14	3	4	0	0	0	0	0	0	3
Miscellaneous-Others	223	176	17	13	12	1	0	0	0	0	0	4

%	N	A firm with 501 or more employees	A firm with 251-500 employees	A firm with 101-250 employees	A firm with less than 100 employees	University or college	Central government research organization	Local government research organization	Foundation, private hospital, private nonprofit research organization	Other government organization	Other	Total
All	3569	82.15	5.63	3.64	5.1	2.3	0.39	0.2	0.08	0.08	0.42	100
Agriculture, Food, Textiles	57	66.67	14.04	5.26	10.53	0	0	1.75	0	0	1.75	100
Coating	79	83.54	5.06	5.06	2.53	2.53	0	1.27	0	0	0	100
Gas	41	78.05	2.44	4.88	9.76	0	0	0	2.44	0	2.44	100
Organic Compounds	119	78.99	7.56	2.52	2.52	6.72	1.68	0	0	0	0	100
Resins	121	86.78	8.26	0	1.65	2.48	0	0.83	0	0	0	100
Miscellaneous-chemical	201	77.11	7.46	4.98	6.47	3.48	0	0	0	0	0.5	100
Communications	157	91.72	2.55	0.64	2.55	2.55	0	0	0	0	0	100
Computer Hardware	58	82.76	3.45	5.17	6.9	0	0	0	0	0	1.72	100
Computer Software	122	86.07	1.64	2.46	5.74	2.46	0.82	0	0	0	0.82	100
Computer Peripherals	75	94.67	2.67	0	1.33	0	1.33	0	0	0	0	100
Information Storage	117	94.87	1.71	1.71	0.85	0.85	0	0	0	0	0	100
Drugs	123	83.74	3.25	1.63	4.88	4.88	0	0	0.81	0	0.81	100
Surgery & Medical Instruments	81	70.37	8.64	2.47	12.35	4.94	0	0	0	1.23	0	100
Biotechnology	82	58.54	7.32	8.54	6.1	12.2	1.22	1.22	0	2.44	2.44	100
Miscellaneous-Drug&Med	43	74.42	4.65	6.98	4.65	9.3	0	0	0	0	0	100
Electrical Devices	91	91.21	2.2	2.2	4.4	0	0	0	0	0	0	100
Electrical Lighting	96	89.58	0	4.17	4.17	1.04	1.04	0	0	0	0	100
Measuring & Testing	110	77.27	0	5.45	6.36	6.36	2.73	1.82	0	0	0	100
Nuclears & X-rays	69	86.96	2.9	2.9	2.9	2.9	1.45	0	0	0	0	100
Power Systems	171	87.13	5.85	3.51	2.34	1.17	0	0	0	0	0	100
Semiconductor Devices	127	88.98	2.36	0.79	4.72	1.57	0.79	0	0.79	0	0	100
Miscellaneous-Elec.	119	89.08	5.88	3.36	0.84	0.84	0	0	0	0	0	100
Materials Processing & Handling	101	76.24	10.89	1.98	6.93	1.98	0.99	0	0	0	0.99	100
Metal Working	137	82.48	2.19	5.84	8.03	0.73	0.73	0	0	0	0	100
Motors, Engines & Parts	143	89.51	2.1	2.8	2.1	3.5	0	0	0	0	0	100
Optics	96	93.75	2.08	0	1.04	3.13	0	0	0	0	0	100
Transportation	71	92.96	2.82	2.82	0	0	0	0	0	0	1.41	100
Miscellaneous Mechanical	121	79.34	7.44	4.13	8.26	0.83	0	0	0	0	0	100
Agriculture, Husbandry, Food	83	68.67	7.23	7.23	13.25	2.41	0	0	0	0	1.2	100
Apparel & Textile	76	65.79	9.21	10.53	11.84	0	0	1.32	0	0	1.32	100
Earth Working & Wells	19	68.42	5.26	10.53	5.26	0	0	0	0	0	10.53	100
Furniture, House Fixtures	48	68.75	16.67	4.17	10.42	0	0	0	0	0	0	100
Heating	81	82.72	6.17	2.47	7.41	0	1.23	0	0	0	0	100
Pipes & Joints	63	69.84	17.46	4.76	6.35	0	0	0	0	0	1.59	100
Receptacles	52	59.62	26.92	5.77	7.69	0	0	0	0	0	0	100
Miscellaneous-Others	219	80.37	7.76	5.94	5.48	0.46	0	0	0	0	0	100
US-JP weighted		83.64	5.04	3.13	4.68	2.51	0.36	0.14	0.08	0.09	0.32	100
JP weighted		84.41	5.04	3.21	4.35	2.14	0.34	0.12	0.05	0.05	0.28	100

Japan (2/2)

Question 3-2 Employment at the time of invention（当該発明当時の雇用・勤務形態）

	All	Large firm (> =501)	Medium firm (251-500)	Small firm (101-250)	Very small firm (<=100)	University	Other	No response
All	3634	2932	201	130	182	82	42	65
Agriculture, Food, Textiles	59	38	8	3	6	0	2	2
Coating	80	66	4	4	2	2	1	1
Gas	43	32	1	2	4	0	2	2
Organic Compounds	120	94	9	3	3	8	2	1
Resins	125	105	10	0	2	3	1	4
Miscellaneous-chemical	206	155	15	10	13	7	1	5
Communications	160	144	4	1	4	4	0	3
Computer Hardware	59	48	2	3	4	0	1	1
Computer Software	123	105	2	3	7	3	2	1
Computer Peripherals	75	71	2	0	1	0	1	0
Information Storage	119	111	2	2	1	1	0	2
Drugs	124	103	4	2	6	6	2	1
Surgery & Medical Instruments	84	57	7	2	10	4	1	3
Biotechnology	87	48	6	7	5	10	6	5
Miscellaneous-Drug&Med	45	32	2	3	2	4	0	2
Electrical Devices	91	83	2	2	4	0	0	0
Electrical Lighting	96	86	0	4	4	1	1	0
Measuring & Testing	110	85	0	6	7	7	5	0
Nuclears & X-rays	71	60	2	2	2	2	1	2
Power Systems	172	149	10	6	4	2	0	1
Semiconductor Devices	129	113	3	1	6	2	2	2
Miscellaneous-Elec.	120	106	7	4	1	1	0	1
Materials Processing & Handling	101	77	11	2	7	2	2	0
Metal Working	137	113	3	8	11	1	1	0
Motors, Engines & Parts	144	128	3	4	3	5	0	1
Optics	98	90	2	0	1	3	0	2
Transportation	72	66	2	2	0	0	1	1
Miscellaneous Mechanical	123	96	9	5	10	1	0	2
Agriculture, Husbandry, Food	87	57	6	6	11	2	1	4
Apparel & Textile	77	50	7	8	9	0	2	1
Earth Working & Wells	20	13	1	2	1	0	2	1
Furniture, House Fixtures	50	33	8	2	5	0	0	2
Heating	83	67	5	2	6	0	1	2
Pipes & Joints	66	44	11	3	4	0	1	3
Receptacles	55	31	14	3	4	0	0	3
Miscellaneous-Others	223	176	17	13	12	1	0	4

%	N	Large firm (> =501)	Medium firm (251-500)	Small firm (101-250)	Very small firm (<=100)	University	Other	Total
All	3569	82.15	5.63	3.64	5.1	2.3	1.18	100
Agriculture, Food, Textiles	57	66.67	14.04	5.26	10.53	0	3.51	100
Coating	79	83.54	5.06	5.06	2.53	2.53	1.27	100
Gas	41	78.05	2.44	4.88	9.76	0	4.88	100
Organic Compounds	119	78.99	7.56	2.52	2.52	6.72	1.68	100
Resins	121	86.78	8.26	0	1.65	2.48	0.83	100
Miscellaneous-chemical	201	77.11	7.46	4.98	6.47	3.48	0.5	100
Communications	157	91.72	2.55	0.64	2.55	2.55	0	100
Computer Hardware	58	82.76	3.45	5.17	6.9	0	1.72	100
Computer Software	122	86.07	1.64	2.46	5.74	2.46	1.64	100
Computer Peripherals	75	94.67	2.67	0	1.33	0	1.33	100
Information Storage	117	94.87	1.71	1.71	0.85	0.85	0	100
Drugs	123	83.74	3.25	1.63	4.88	4.88	1.63	100
Surgery & Medical Instruments	81	70.37	8.64	2.47	12.35	4.94	1.23	100
Biotechnology	82	58.54	7.32	8.54	6.1	12.2	7.32	100
Miscellaneous-Drug&Med	43	74.42	4.65	6.98	4.65	9.3	0	100
Electrical Devices	91	91.21	2.2	2.2	4.4	0	0	100
Electrical Lighting	96	89.58	0	4.17	4.17	1.04	1.04	100
Measuring & Testing	110	77.27	0	5.45	6.36	6.36	4.55	100
Nuclears & X-rays	69	86.96	2.9	2.9	2.9	2.9	1.45	100
Power Systems	171	87.13	5.85	3.51	2.34	1.17	0	100
Semiconductor Devices	127	88.98	2.36	0.79	4.72	1.57	1.57	100
Miscellaneous-Elec.	119	89.08	5.88	3.36	0.84	0.84	0	100
Materials Processing & Handling	101	76.24	10.89	1.98	6.93	1.98	1.98	100
Metal Working	137	82.48	2.19	5.84	8.03	0.73	0.73	100
Motors, Engines & Parts	143	89.51	2.1	2.8	2.1	3.5	0	100
Optics	96	93.75	2.08	0	1.04	3.13	0	100
Transportation	71	92.96	2.82	2.82	0	0	1.41	100
Miscellaneous Mechanical	121	79.34	7.44	4.13	8.26	0.83	0	100
Agriculture, Husbandry, Food	83	68.67	7.23	7.23	13.25	2.41	1.2	100
Apparel & Textile	76	65.79	9.21	10.53	11.84	0	2.63	100
Earth Working & Wells	19	68.42	5.26	10.53	5.26	0	10.53	100
Furniture, House Fixtures	48	68.75	16.67	4.17	10.42	0	0	100
Heating	81	82.72	6.17	2.47	7.41	0	1.23	100
Pipes & Joints	63	69.84	17.46	4.76	6.35	0	1.59	100
Receptacles	52	59.62	26.92	5.77	7.69	0	0	100
Miscellaneous-Others	219	80.37	7.76	5.94	5.48	0.46	0	100
US-JP weighted		83.64	5.04	3.13	4.68	2.51	0.99	100
JP weighted		84.41	5.04	3.21	4.35	2.14	0.84	100

US

Question 3-2 Employment at the time of invention（当該発明当時の雇用・勤務形態）

D7 Employment at the time of the invention	All	A firm with 501 or more employees	A firm with 250-500 employees	A firm with 100-250 employees	A firm with less than 100 employees	University or college	other(Hospital, central gov lab & other)	Missing
All	1,919	1,389	74	60	216	42	20	118
Agriculture, Food, Textiles	8	7	0	0	0	1	0	0
Coating	34	27	1	0	5	0	0	1
Gas	11	9	0	0	2	0	0	0
Organic Compounds	61	52	0	1	3	2	0	3
Resins	84	68	5	2	4	1	0	4
Miscellaneous-chemical	233	181	8	4	21	7	1	11
Communications	149	110	2	5	17	0	1	14
Computer Hardware	42	34	1	0	4	0	0	3
Computer Software	93	66	5	1	16	2	0	3
Computer Peripherals	33	27	2	1	0	0	0	3
Information Storage	42	33	1	0	5	1	0	2
Drugs	101	60	8	8	10	5	3	7
Surgery & Medical Instruments	123	59	6	3	32	8	6	9
Biotechnology	41	22	1	3	6	5	2	2
Miscellaneous-Drug&Med	29	15	0	2	7	1	0	4
Electrical Devices	45	38	2	1	1	0	0	3
Electrical Lighting	33	23	1	3	4	0	0	2
Measuring & Testing	62	48	3	1	4	2	0	4
Nuclears & X-rays	39	25	2	2	6	2	1	1
Power Systems	89	68	2	3	10	1	3	2
Semiconductor Devices	55	39	2	2	5	0	1	6
Miscellaneous-Elec.	32	20	1	1	8	0	0	2
Materials Processing & Handlin	56	43	2	0	7	0	0	4
Metal Working	49	37	3	2	4	0	0	3
Motors, Engines & Parts	56	43	4	0	4	1	0	4
Optics	43	30	2	0	6	2	1	2
Transportation	33	26	1	0	2	0	1	3
Miscellaneous Mechanical	42	33	0	3	1	1	0	4
Agriculture, Husbandry, Food	14	9	0	2	2	0	0	1
Apparel & Textile	9	8	0	1	0	0	0	0
Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
Furniture, House Fixtures	9	7	0	0	2	0	0	0
Heating	8	6	1	0	1	0	0	0
Pipes & Joints	13	10	1	0	2	0	0	0
Receptacles	20	14	0	2	2	0	0	2
Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	A firm with 501 or more employees	A firm with 251-500 employees	A firm with 101-250 employees	A firm with less than 100 employees	University or college	other(Hospital, central gov lab & other)	total
NBER	All	1801	77.12	4.11	3.33	11.99	2.33	1.11	100
11	Agriculture, Food, Textiles	8	87.5	0	0	0	12.5	0	100
12	Coating	33	81.82	3.03	0	15.15	0	0	100
13	Gas	11	81.82	0	0	18.18	0	0	100
14	Organic Compounds	58	89.66	0	1.72	5.17	3.45	0	100
15	Resins	80	85	6.25	2.5	5	1.25	0	100
19	Miscellaneous-chemical	222	81.53	3.6	1.8	9.46	3.15	0.45	100
21	Communications	135	81.48	1.48	3.7	12.59	0	0.74	100
22	Computer Hardware	39	87.18	2.56	0	10.26	0	0	100
77	Computer Software	90	73.33	5.56	1.11	17.78	2.22	0	100
23	Computer Peripherals	30	90	6.67	3.33	0	0	0	100
24	Information Storage	40	82.5	2.5	0	12.5	2.5	0	100
31	Drugs	94	63.83	8.51	8.51	10.64	5.32	3.19	100
32	Surgery & Medical Instruments	114	51.75	5.26	2.63	28.07	7.02	5.26	100
33	Biotechnology	39	56.41	2.56	7.69	15.38	12.82	5.13	100
39	Miscellaneous-Drug&Med	25	60	0	8	28	4	0	100
41	Electrical Devices	42	90.48	4.76	2.38	2.38	0	0	100
42	Electrical Lighting	31	74.19	3.23	9.68	12.9	0	0	100
43	Measuring & Testing	58	82.76	5.17	1.72	6.9	3.45	0	100
44	Nuclears & X-rays	38	65.79	5.26	5.26	15.79	5.26	2.63	100
45	Power Systems	87	78.16	2.3	3.45	11.49	1.15	3.45	100
46	Semiconductor Devices	49	79.59	4.08	4.08	10.2	0	2.04	100
49	Miscellaneous-Elec.	30	66.67	3.33	3.33	26.67	0	0	100
51	Materials Processing & Handlin	52	82.69	3.85	0	13.46	0	0	100
52	Metal Working	46	80.43	6.52	4.35	8.7	0	0	100
53	Motors, Engines & Parts	52	82.69	7.69	0	7.69	1.92	0	100
54	Optics	41	73.17	4.88	0	14.63	4.88	2.44	100
55	Transportation	30	86.67	3.33	0	6.67	0	3.33	100
59	Miscellaneous Mechanical	38	86.84	0	7.89	2.63	2.63	0	100
61	Agriculture, Husbandry, Food	13	69.23	0	15.38	15.38	0	0	100
63	Apparel & Textile	9	88.89	0	11.11	0	0	0	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	77.78	0	0	22.22	0	0	100
66	Heating	8	75	12.5	0	12.5	0	0	100
67	Pipes & Joints	13	76.92	7.69	0	15.38	0	0	100
68	Receptacles	18	77.78	0	11.11	11.11	0	0	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**77.11**	**4.2**	**3.26**	**12.09**	**2.26**	**1.07**	100

Japan

Question 3-3 Is the organization one of the applicants? (その組織は、当該特許の出願人でしたか)

	All	はい	いいえ	無回答
	All	**yes**	**No**	**No response**
All	3634	3344	250	40
Agriculture, Food, Textiles	59	56	2	1
Coating	80	74	3	3
Gas	43	42	0	1
Organic Compounds	120	110	10	0
Resins	125	117	6	2
Miscellaneous-chemical	206	184	20	2
Communications	160	139	20	1
Computer Hardware	59	54	5	0
Computer Software	123	113	9	1
Computer Peripherals	75	73	2	0
Information Storage	119	114	5	0
Drugs	124	110	12	2
Surgery & Medical Instruments	84	69	14	1
Biotechnology	87	74	12	1
Miscellaneous-Drug&Med	45	37	6	2
Electrical Devices	91	84	7	0
Electrical Lighting	96	93	2	1
Measuring & Testing	110	96	13	1
Nuclears & X-rays	71	67	3	1
Power Systems	172	160	12	0
Semiconductor Devices	129	121	7	1
Miscellaneous-Elec.	120	111	7	2
Materials Processing & Handling	101	95	4	2
Metal Working	137	131	5	1
Motors, Engines & Parts	144	135	9	0
Optics	98	92	5	1
Transportation	72	64	7	1
Miscellaneous Mechanical	123	116	5	2
Agriculture, Husbandry, Food	87	80	5	2
Apparel & Textile	77	68	7	2
Earth Working & Wells	20	19	0	1
Furniture, House Fixtures	50	45	4	1
Heating	83	75	6	2
Pipes & Joints	66	63	3	0
Receptacles	55	49	5	1
Miscellaneous-Others	223	214	8	1

%	N	yes	no	Total
All	3594	93.04	6.96	100
Agriculture, Food, Textiles	58	96.55	3.45	100
Coating	77	96.1	3.9	100
Gas	42	100	0	100
Organic Compounds	120	91.67	8.33	100
Resins	123	95.12	4.88	100
Miscellaneous-chemical	204	90.2	9.8	100
Communications	159	87.42	12.58	100
Computer Hardware	59	91.53	8.47	100
Computer Software	122	92.62	7.38	100
Computer Peripherals	75	97.33	2.67	100
Information Storage	119	95.8	4.2	100
Drugs	122	90.16	9.84	100
Surgery & Medical Instruments	83	83.13	16.87	100
Biotechnology	86	86.05	13.95	100
Miscellaneous-Drug&Med	43	86.05	13.95	100
Electrical Devices	91	92.31	7.69	100
Electrical Lighting	95	97.89	2.11	100
Measuring & Testing	109	88.07	11.93	100
Nuclears & X-rays	70	95.71	4.29	100
Power Systems	172	93.02	6.98	100
Semiconductor Devices	128	94.53	5.47	100
Miscellaneous-Elec.	118	94.07	5.93	100
Materials Processing & Handling	99	95.96	4.04	100
Metal Working	136	96.32	3.68	100
Motors, Engines & Parts	144	93.75	6.25	100
Optics	97	94.85	5.15	100
Transportation	71	90.14	9.86	100
Miscellaneous Mechanical	121	95.87	4.13	100
Agriculture, Husbandry, Food	85	94.12	5.88	100
Apparel & Textile	75	90.67	9.33	100
Earth Working & Wells	19	100	0	100
Furniture, House Fixtures	49	91.84	8.16	100
Heating	81	92.59	7.41	100
Pipes & Joints	66	95.45	4.55	100
Receptacles	54	90.74	9.26	100
Miscellaneous-Others	222	96.4	3.6	100
US-JP weighted		92.49	7.51	100
JP weighted		92.98	7.02	100

US

Question 3-3 Is the organization one of the applicants? (その組織は、当該特許の出願人でしたか)

	D.8 Is the organization one of the applicants?	All	Yes	No	Missing
NBER	All	1919	1433	346	140
11	Agriculture, Food, Textiles	8	7	1	0
12	Coating	34	24	7	3
13	Gas	11	11	0	0
14	Organic Compounds	61	47	11	3
15	Resins	84	69	9	6
19	Miscellaneous-chemical	233	180	41	12
21	Communications	149	113	19	17
22	Computer Hardware	42	33	5	4
77	Computer Software	93	65	22	6
23	Computer Peripherals	33	25	4	4
24	Information Storage	42	33	6	3
31	Drugs	101	81	13	7
32	Surgery & Medical Instruments	123	76	37	10
33	Biotechnology	41	29	10	2
39	Miscellaneous-Drug&Med	29	18	7	4
41	Electrical Devices	45	36	5	4
42	Electrical Lighting	33	25	5	3
43	Measuring & Testing	62	46	9	7
44	Nuclears & X-rays	39	29	9	1
45	Power Systems	89	73	15	1
46	Semiconductor Devices	55	42	6	7
49	Miscellaneous-Elec.	32	24	6	2
51	Materials Processing & Handling	56	36	15	5
52	Metal Working	49	41	5	3
53	Motors, Engines & Parts	56	40	12	4
54	Optics	43	35	7	1
55	Transportation	33	21	8	4
59	Miscellaneous Mechanical	42	28	8	6
61	Agriculture, Husbandry, Food	14	10	3	1
63	Apparel & Textile	9	6	3	0
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	4	0
66	Heating	8	6	2	0
67	Pipes & Joints	13	10	3	0
68	Receptacles	20	13	5	2
69	Miscellaneous-Others	XX	XX	XX	XX

	%	N	%Yes	%No	Total
NBER	All	1779	80.55	19.45	100
11	Agriculture, Food, Textiles	8	87.5	12.5	100
12	Coating	31	77.42	22.58	100
13	Gas	11	100	0	100
14	Organic Compounds	58	81.03	18.97	100
15	Resins	78	88.46	11.54	100
19	Miscellaneous-chemical	221	81.45	18.55	100
21	Communications	132	85.61	14.39	100
22	Computer Hardware	38	86.84	13.16	100
77	Computer Software	87	74.71	25.29	100
23	Computer Peripherals	29	86.21	13.79	100
24	Information Storage	39	84.62	15.38	100
31	Drugs	94	86.17	13.83	100
32	Surgery & Medical Instruments	113	67.26	32.74	100
33	Biotechnology	39	74.36	25.64	100
39	Miscellaneous-Drug&Med	25	72	28	100
41	Electrical Devices	41	87.8	12.2	100
42	Electrical Lighting	30	83.33	16.67	100
43	Measuring & Testing	55	83.64	16.36	100
44	Nuclears & X-rays	38	76.32	23.68	100
45	Power Systems	88	82.95	17.05	100
46	Semiconductor Devices	48	87.5	12.5	100
49	Miscellaneous-Elec.	30	80	20	100
51	Materials Processing & Handling	51	70.59	29.41	100
52	Metal Working	46	89.13	10.87	100
53	Motors, Engines & Parts	52	76.92	23.08	100
54	Optics	42	83.33	16.67	100
55	Transportation	29	72.41	27.59	100
59	Miscellaneous Mechanical	36	77.78	22.22	100
61	Agriculture, Husbandry, Food	13	76.92	23.08	100
63	Apparel & Textile	9	66.67	33.33	100
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	55.56	44.44	100
66	Heating	8	75	25	100
67	Pipes & Joints	13	76.92	23.08	100
68	Receptacles	18	72.22	27.78	100
69	Miscellaneous-Others	XX	XX	XX	XX
	US-JP weighted		**80.65**	**19.35**	100

Japan

Question 3-4 How many years passed till your invention since you joined this organization or started your business if self-employed?(その組織に採用された年、もしくは自営業の創業年から発明時点までの経過年)

	Mean	Sd	N	Median	P90	Iqr	No response
All	12.97	8.41	3415	12	25	12	137
Agriculture,Food,Textiles	12.07	8.61	54	10	24	13	5
Coating	12.36	8.41	76	11	25	12.5	3
Gas	16.5	10.17	40	15	30	16.5	2
Organic Compounds	13.49	9.35	116	12	27	14.5	1
Resins	12.98	9.96	120	9	29	12	2
Miscellaneous chemical	12.26	8.32	195	10	24	11	9
Communications	11.36	7	157	11	21	9	2
Computer Hardware	11.74	7.79	57	11	23	12	2
Computer Software	12.63	7.23	114	12	23	12	5
Computer Peripherals	11.58	6.45	71	10	22	8	4
Information Storage	12.08	6.09	116	12	19	8.5	3
Drugs	14.12	9.44	120	13.5	27.5	14.5	1
Surgery & Med Inst.	13.71	9.81	76	12.5	28	16	5
Biotechnology	13.24	8.68	84	12.5	25	13.5	2
Miscellaneous-Drug&Med	13.07	7.34	41	11	23	13	2
Electrical Devices	12.87	7.61	89	12	24	9	0
Electrical Lighting	12.21	7.49	91	12	23	10	1
Measuring & Testing	12.44	7.85	103	12	23	10	6
Nuclears & X-rays	13.06	8	65	11	27	10	4
Power Systems	12.89	8.4	166	11	25	12	3
Semiconductor Devices	12.29	7.6	121	11	22	9	5
Miscellaneous-Elec.	12.69	8.32	116	13	22	10.5	4
Materials Processing & Handling	12.62	8.35	95	11	26	13	5
Metal Working	13.85	9.1	127	13	26	12	5
Motors, Engines & Parts	12.45	8.02	137	11	24	11	2
Optics	12.56	7.31	96	12	23	9	1
Transportation	13.83	8.61	64	13.5	28	12.5	5
Miscellaneous Mechanical	12.32	7.72	112	11	21	10	8
Agriculture, Husbandry, Food	16.25	10.13	79	14	29	16	5
Apparel & Textile	17.06	9.63	64	15.5	32	15	5
Earth Working & Wells	22.5	8.23	16	23	30	4	2
Furniture, House Fixtures	12.16	8.28	44	11	26	9.5	5
Heating	12.53	8.82	74	12	25	13	6
Pipes & Joints	15.54	8.68	59	16	26	14	4
Receptacles	17.42	9.33	50	17	28	16	5
Miscellaneous-Others	11.61	8.25	210	10	24.5	12	8
US-JP weighted	12.67						
JP weighted	12.58						

Note: We dropped records if the year joining this organization < birth year + 18, and self-employed.

US (1/4)

Question 3-4 In which year did you join this organization or start your business if self-employed?(その組織に採用された年、もしくは自営業の創業年)

Years at organization at time of patent

	D10. Years at organization at time of patent	All	mean(years)	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	1,919	13.29	10.13	1,843	11	28	15	76
11	Agriculture, Food, Textiles	8	18.63	9.86	8	19	33	15	0
12	Coating	34	13.39	10.30	33	13	25	15	1
13	Gas	11	15.09	12.63	11	13	22	14	0
14	Organic Compounds	61	15.74	10.08	61	15	30	15	0
15	Resins	84	15.92	10.32	79	15	31	17	5
19	Miscellaneous-chemical	233	14.44	9.62	231	13	28	16	2
21	Communications	149	12.80	10.42	137	10	31	15	11
22	Computer Hardware	42	11.95	9.45	39	7	26	15	3
77	Computer Software	93	11.02	9.74	91	6	26	14	2
23	Computer Peripherals	33	12.97	8.45	33	12	26	11	0
24	Information Storage	42	10.45	6.96	40	7	21.5	11	2
31	Drugs	101	10.99	8.04	97	10	19	10	4
32	Surgery & Medical Instruments	123	10.36	8.92	117	7	23	11	6
33	Biotechnology	41	10.00	7.35	39	8	20	9	2
39	Miscellaneous-Drug&Med	29	10.19	9.12	26	8.5	26	16	3
41	Electrical Devices	45	15.78	12.39	45	11	33	18	0
42	Electrical Lighting	33	12.75	8.50	32	11.5	22	14	1
43	Measuring & Testing	62	13.51	10.72	59	10	26	15	3
44	Nuclears & X-rays	39	11.28	8.82	39	8	26	13	0
45	Power Systems	89	12.83	10.77	88	10	30	19	2
46	Semiconductor Devices	55	8.57	7.76	51	6	18	7	4
49	Miscellaneous-Elec.	32	14.84	12.79	31	13	32	13	1
51	Materials Processing & Handling	56	16.17	11.35	53	17	30	20	3
52	Metal Working	49	16.54	11.11	48	16	34	18	1
53	Motors, Engines & Parts	56	14.19	11.18	52	12	32	14.5	4
54	Optics	43	14.19	10.00	43	14	27	18	0
55	Transportation	33	14.97	9.52	33	15	28	16	0
59	Miscellaneous Mechanical	42	13.85	9.38	39	12	25	13	3
61	Agriculture, Husbandry, Food	14	16.50	10.34	12	15	31	14	2
63	Apparel & Textile	9	17.44	16.02	9	18	43	26	0
64	Earth Working & Wells	5	20.50	12.45	4	21	34	20	1
65	Furniture, House Fixtures	9	10.89	9.62	9	8	33	9	0
66	Heating	8	15.50	12.06	8	11.5	33	22.5	0
67	Pipes & Joints	13	11.38	9.52	13	10	26	9	0
68	Receptacles	20	16.12	13.58	17	18	35	23	3
69	Miscellaneous-Others	123	14.52	10.83	116	13	32	18	7
	US-JP weighted		**13.20**	**10.05**					

US (2/4)

Question 3-4(2) Years of your first patent application?(最初の特許出願年)

	D2 Years of your first patent application?	All	mean(year)	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	1,919	1989.30	10.36	1,755	1991	2001	14.0	164
11	Agriculture, Food, Textiles	8	1990.71	7.93	7	1989	2003	16	1
12	Coating	34	1989.36	11.15	33	1993	2000	13	1
13	Gas	11	1989.09	11.70	11	1990	1999	12	0
14	Organic Compounds	61	1986.73	10.01	56	1988	2000	11	5
15	Resins	84	1985.95	10.76	77	1988	2000	15	7
19	Miscellaneous-chemical	233	1988.33	10.11	217	1988	2001	17	16
21	Communications	149	1989.85	9.80	130	1990	2000	13	19
22	Computer Hardware	42	1989.80	11.09	39	1994	2001	12	3
77	Computer Software	93	1991.74	9.29	90	1994	2001	14	3
23	Computer Peripherals	33	1993.14	4.79	29	1993	1998	7	4
24	Information Storage	42	1992.73	7.84	37	1995	2000	9	5
31	Drugs	101	1990.55	7.56	93	1990	2000	10	8
32	Surgery & Medical Instruments	123	1990.58	9.77	113	1994	2001	14	10
33	Biotechnology	41	1993.53	7.25	36	1995	2001	10.5	5
39	Miscellaneous-Drug&Med	29	1990.00	11.39	25	1994	2000	11	4
41	Electrical Devices	45	1986.50	12.49	42	1985	2002	18	3
42	Electrical Lighting	33	1984.14	12.56	29	1985	1999	17	4
43	Measuring & Testing	62	1987.91	10.01	53	1989	2000	13	9
44	Nuclears & X-rays	39	1987.57	10.73	37	1990	2000	17	2
45	Power Systems	89	1989.72	11.01	87	1993	2001	18	2
46	Semiconductor Devices	55	1990.29	10.06	48	1992	2000	13.5	7
49	Miscellaneous-Elec.	32	1990.10	9.34	29	1992	2001	12	3
51	Materials Processing & Handling	56	1989.73	10.81	48	1991	2001	16	8
52	Metal Working	49	1987.16	11.92	44	1990	2000	17	5
53	Motors, Engines & Parts	56	1988.08	10.94	51	1990	2000	14	5
54	Optics	43	1989.98	9.08	40	1990	2000.5	15	3
55	Transportation	33	1989.13	11.75	30	1991	2002	16	3
59	Miscellaneous Mechanical	42	1987.22	11.89	37	1990	2001	17	5
61	Agriculture, Husbandry, Food	14	1992.85	9.48	13	1996	2001	12	1
63	Apparel & Textile	9	1990.13	14.77	8	1998.5	2004	23.5	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1989.67	10.40	9	1991	2002	15	0
66	Heating	8	1985.13	13.23	8	1988	1998	18	0
67	Pipes & Joints	13	1989.42	8.03	12	1990.5	1999	11	1
68	Receptacles	20	1986.11	14.55	19	1990	2001	21	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**1989.40**	**10.19**					

US (3/4)

Question 3-4(3) At the time of the focal patent application, how many years had you worked in the technical field of the patent?(特許の技術領域での経験の長さ)

	D3 How many years had you worked in the technical field of the patent?	All	mean(years)	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	1,919	12.98	10.49	1,780	10	28	16	139
11	Agriculture, Food, Textiles	8	8.75	9.47	8	5	31	6.5	0
12	Coating	34	11.22	10.95	32	8.5	24	15	2
13	Gas	11	12.55	8.00	11	15	20	16	0
14	Organic Compounds	61	12.59	10.07	56	11.5	23	13	5
15	Resins	84	12.29	9.69	80	10	24.5	16.5	4
19	Miscellaneous-chemical	233	12.85	9.96	219	10	26	16	14
21	Communications	149	12.91	11.33	133	10	30	17	16
22	Computer Hardware	42	14.33	11.67	40	13	33.5	17	2
77	Computer Software	93	13.07	9.61	90	10.5	27.5	16	3
23	Computer Peripherals	33	8.27	7.54	30	6	19	7	3
24	Information Storage	42	14.46	8.71	40	15	25	12	2
31	Drugs	101	11.57	8.34	92	10	22	15	9
32	Surgery & Medical Instruments	123	10.55	9.77	112	7	25	14.5	11
33	Biotechnology	41	12.06	9.06	39	12	20	16	2
39	Miscellaneous-Drug&Med	29	10.08	10.75	24	5	25	12.5	5
41	Electrical Devices	45	17.88	13.18	40	15.5	35.5	18.5	5
42	Electrical Lighting	33	13.81	12.17	31	10	30	15	2
43	Measuring & Testing	62	12.32	10.10	58	11.5	26	17	4
44	Nuclears & X-rays	39	14.46	8.86	37	15	26	16	2
45	Power Systems	89	15.51	10.69	87	14	32	19	2
46	Semiconductor Devices	55	12.80	11.17	48	10	33	17	7
49	Miscellaneous-Elec.	32	15.40	8.62	30	15	27.5	10	2
51	Materials Processing & Handling	56	13.00	11.96	51	10	30	17	5
52	Metal Working	49	16.47	11.97	46	17	33	22	3
53	Motors, Engines & Parts	56	15.38	12.23	52	12	35	21	4
54	Optics	43	13.02	9.49	42	11.5	25	15	1
55	Transportation	33	13.34	11.24	28	13.5	30	18	5
59	Miscellaneous Mechanical	42	10.97	9.88	37	7	25	11	5
61	Agriculture, Husbandry, Food	14	13.08	11.97	13	10	31	17	1
63	Apparel & Textile	9	16.06	16.58	9	15	44	28	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	10.00	9.66	9	7	30	6	0
66	Heating	8	15.75	11.21	8	10.5	30	22	0
67	Pipes & Joints	13	15.25	11.52	12	14.5	30	23	1
68	Receptacles	20	15.00	16.01	17	6	47	22	3
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**12.96**	**10.39**					

US (4/4)

Question 3-4(4) What is the approximate number of invention disclosures that you made to your firm in the last three years?

	D4A. # of invention disclosures made by you or your firm?	All	# mean	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	1,919	9.36	13.79	1,769	5	20	8	150
11	Agriculture, Food, Textiles	8	3.63	4.96	8	3	15	4	0
12	Coating	34	7.79	10.47	33	5	20	10	1
13	Gas	11	7.00	5.59	11	5	12	8	0
14	Organic Compounds	61	8.56	12.38	54	5	20	8	7
15	Resins	84	7.73	7.22	78	6	20	8	6
19	Miscellaneous-chemical	233	8.70	13.92	218	5	20	7	15
21	Communications	149	10.94	16.04	133	6	24	9	16
22	Computer Hardware	42	7.18	7.21	40	5	17.5	7.5	2
77	Computer Software	93	9.46	15.19	87	5	20	8	6
23	Computer Peripherals	33	15.27	16.24	30	10	33	17	3
24	Information Storage	42	9.83	11.23	40	6	26	13.5	2
31	Drugs	101	9.30	13.40	90	5	20	8	11
32	Surgery & Medical Instruments	123	11.49	16.51	112	6	30	9	11
33	Biotechnology	41	6.97	8.12	37	3	20	9	4
39	Miscellaneous-Drug&Med	29	11.08	18.83	25	4	20	11	4
41	Electrical Devices	45	8.12	8.96	42	5.5	20	8	3
42	Electrical Lighting	33	11.52	19.65	31	5	25	7	2
43	Measuring & Testing	62	8.28	11.55	57	5	15	7	5
44	Nuclears & X-rays	39	7.92	8.69	38	5	20	7	1
45	Power Systems	89	11.07	16.80	86	6	26	9	3
46	Semiconductor Devices	55	13.72	20.49	47	10	25	11	8
49	Miscellaneous-Elec.	32	9.43	13.84	30	5	28.5	10	2
51	Materials Processing & Handling	56	11.40	19.69	48	5	45	5	8
52	Metal Working	49	4.37	5.33	46	4	10	4	3
53	Motors, Engines & Parts	56	7.27	8.09	51	5	15	6	5
54	Optics	43	6.76	7.06	42	4	20	8	1
55	Transportation	33	7.03	9.87	29	4	30	8	4
59	Miscellaneous Mechanical	42	14.26	22.87	38	5.5	30	12	4
61	Agriculture, Husbandry, Food	14	6.92	6.25	13	4	15	10	1
63	Apparel & Textile	9	12.78	13.20	9	10	40	5	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	7.67	7.45	9	6	20	8	0
66	Heating	8	12.00	8.37	7	10	25	15	1
67	Pipes & Joints	13	5.08	5.62	13	3	12	4	0
68	Receptacles	20	12.84	11.14	19	12	30	16	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**9.43**	**13.84**					

Note: outliers (more than 100 disclosures) set to 100.

% of invention disclosures were applied for patent?

	D4B. % of invention disclosures were applied for patent?	% mean	S.D	N	Median	p90	Interquartile Range	Missing
NBER	All	67.85	32.89	1447	80	100	50	76
11	Agriculture, Food, Textiles	35.40	41.82	5	10	93	63	0
12	Coating	72.13	38.63	23	95	100	70	1
13	Gas	52.55	36.53	11	50	100	65	0
14	Organic Compounds	76.28	29.40	39	80	100	34	6
15	Resins	70.90	31.21	62	80	100	50	4
19	Miscellaneous-chemical	65.32	33.38	179	75	100	60	9
21	Communications	68.68	30.48	108	80	100	50	3
22	Computer Hardware	74.94	27.84	32	80	100	36.5	1
77	Computer Software	67.69	35.91	71	80	100	60	3
23	Computer Peripherals	76.69	28.89	26	90	100	50	2
24	Information Storage	71.26	29.55	31	80	100	50	1
31	Drugs	68.66	33.18	73	80	100	50	10
32	Surgery & Medical Instruments	67.05	31.61	91	75	100	50	7
33	Biotechnology	57.89	40.92	28	70.5	100	90.5	3
39	Miscellaneous-Drug&Med	71.58	26.09	19	80	100	50	1
41	Electrical Devices	67.77	30.42	35	75	100	50	3
42	Electrical Lighting	73.54	28.95	24	85	100	50	1
43	Measuring & Testing	68.40	33.38	55	75	100	50	1
44	Nuclears & X-rays	68.50	33.34	34	80	100	50	1
45	Power Systems	71.87	31.46	70	80	100	50	3
46	Semiconductor Devices	71.08	26.36	40	80	100	42.5	2
49	Miscellaneous-Elec.	57.75	32.58	20	63.5	100	45	2
51	Materials Processing & Handling	63.63	35.88	43	75	100	60	0
52	Metal Working	56.74	41.05	35	70	100	99	1
53	Motors, Engines & Parts	64.53	35.42	45	75	100	70	3
54	Optics	60.86	35.30	36	63.5	100	70	1
55	Transportation	61.45	29.28	20	55	100	45	1
59	Miscellaneous Mechanical	71.56	32.24	32	80	100	50	1
61	Agriculture, Husbandry, Food	69.17	36.61	12	82.5	100	62.5	0
63	Apparel & Textile	76.11	37.56	9	100	100	50	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	70.00	29.44	7	60	100	50	0
66	Heating	77.86	24.81	7	80	100	50	0
67	Pipes & Joints	58.91	40.26	11	50	100	67	0
68	Receptacles	69.35	29.95	17	75	100	50	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted	**67.78**	**32.72**					

Japan

Question 3-5 Type of unit at the time of the invention (勤務していた部署の主要機能)

	All	研究開発	製造	ソフトウェア開発	その他	無回答
	All	**R&D**	**Manufacturing**	**Software development**	**Other**	**No response**
All	3658	3041	217	91	268	41
Agriculture, Food, Textiles	60	54	3	1	1	1
Coating	80	76	0	0	3	1
Gas	45	30	8	0	4	3
Organic Compounds	120	108	3	0	8	1
Resins	125	119	4	0	1	1
Miscellaneous-chemical	208	179	6	1	20	2
Communications	160	144	5	3	7	1
Computer Hardware	59	47	5	7	0	0
Computer Software	123	85	4	23	10	1
Computer Peripherals	76	71	0	2	2	1
Information Storage	120	102	5	5	7	1
Drugs	127	116	0	1	7	3
Surgery & Medical Instruments	85	68	4	0	9	4
Biotechnology	87	79	0	0	7	1
Miscellaneous-Drug&Med	45	30	4	3	6	2
Electrical Devices	91	78	4	1	8	0
Electrical Lighting	96	84	6	1	5	0
Measuring & Testing	111	81	10	6	12	2
Nuclears & X-rays	72	59	5	2	5	1
Power Systems	172	150	7	3	12	0
Semiconductor Devices	129	113	10	1	4	1
Miscellaneous-Elec.	120	95	11	6	7	1
Materials Processing & Handling	103	81	10	3	7	2
Metal Working	137	104	19	1	12	1
Motors, Engines & Parts	145	124	7	3	11	0
Optics	100	85	4	2	8	1
Transportation	73	54	4	1	14	0
Miscellaneous Mechanical	124	102	9	0	13	0
Agriculture, Husbandry, Food	87	78	2	0	6	1
Apparel & Textile	77	60	9	0	7	1
Earth Working & Wells	20	10	2	0	7	1
Furniture, House Fixtures	51	38	5	0	6	2
Heating	84	59	16	0	7	2
Pipes & Joints	66	58	3	2	3	0
Receptacles	55	33	8	3	9	2
Miscellaneous-Others	225	187	15	10	13	0

	N	R&D	Manufacturing	Software development	Other	Total
%						
All	3617	84.08	6	2.52	7.41	100
Agriculture, Food, Textiles	59	91.53	5.08	1.69	1.69	100
Coating	79	96.2	0	0	3.8	100
Gas	42	71.43	19.05	0	9.52	100
Organic Compounds	119	90.76	2.52	0	6.72	100
Resins	124	95.97	3.23	0	0.81	100
Miscellaneous-chemical	206	86.89	2.91	0.49	9.71	100
Communications	159	90.57	3.14	1.89	4.4	100
Computer Hardware	59	79.66	8.47	11.86	0	100
Computer Software	122	69.67	3.28	18.85	8.2	100
Computer Peripherals	75	94.67	0	2.67	2.67	100
Information Storage	119	85.71	4.2	4.2	5.88	100
Drugs	124	93.55	0	0.81	5.65	100
Surgery & Medical Instruments	81	83.95	4.94	0	11.11	100
Biotechnology	86	91.86	0	0	8.14	100
Miscellaneous-Drug&Med	43	69.77	9.3	6.98	13.95	100
Electrical Devices	91	85.71	4.4	1.1	8.79	100
Electrical Lighting	96	87.5	6.25	1.04	5.21	100
Measuring & Testing	109	74.31	9.17	5.5	11.01	100
Nuclears & X-rays	71	83.1	7.04	2.82	7.04	100
Power Systems	172	87.21	4.07	1.74	6.98	100
Semiconductor Devices	128	88.28	7.81	0.78	3.13	100
Miscellaneous-Elec.	119	79.83	9.24	5.04	5.88	100
Materials Processing & Handling	101	80.2	9.9	2.97	6.93	100
Metal Working	136	76.47	13.97	0.74	8.82	100
Motors, Engines & Parts	145	85.52	4.83	2.07	7.59	100
Optics	99	85.86	4.04	2.02	8.08	100
Transportation	73	73.97	5.48	1.37	19.18	100
Miscellaneous Mechanical	124	82.26	7.26	0	10.48	100
Agriculture, Husbandry, Food	86	90.7	2.33	0	6.98	100
Apparel & Textile	76	78.95	11.84	0	9.21	100
Earth Working & Wells	19	52.63	10.53	0	36.84	100
Furniture, House Fixtures	49	77.55	10.2	0	12.24	100
Heating	82	71.95	19.51	0	8.54	100
Pipes & Joints	66	87.88	4.55	3.03	4.55	100
Receptacles	53	62.26	15.09	5.66	16.98	100
Miscellaneous-Others	225	83.11	6.67	4.44	5.78	100
US-JP weighted		85.08	4.99	2.87	7.06	100
JP weighted		84.91	5.22	2.85	7.02	100

If R&D are selected(選択肢1　研究開発)

	All	独立した研究開発部門	製造など研究開発を主たる目的としていない部署に付属	無回答
	All	**R&D - independent research and development unit**	**R&D - sub-unit attached to a unit with focus on non-R&D**	**no response**
All	3041	2469	508	64
Agriculture, Food, Textiles	54	52	2	0
Coating	76	64	9	3
Gas	30	27	2	1
Organic Compounds	108	97	9	2
Resins	119	108	11	0
Miscellaneous-chemical	179	147	25	7
Communications	144	116	27	1
Computer Hardware	47	38	7	2
Computer Software	85	71	13	1
Computer Peripherals	71	60	10	1
Information Storage	102	76	24	2
Drugs	116	109	5	2
Surgery & Medical Instruments	68	59	6	3
Biotechnology	79	70	7	2
Miscellaneous-Drug&Med	30	26	4	0
Electrical Devices	78	59	19	0
Electrical Lighting	84	66	17	1
Measuring & Testing	81	68	13	0
Nuclears & X-rays	59	42	15	2
Power Systems	150	120	28	2
Semiconductor Devices	113	92	19	2
Miscellaneous-Elec.	95	71	23	1
Materials Processing & Handling	81	57	23	1
Metal Working	104	87	17	0
Motors, Engines & Parts	124	101	20	3
Optics	85	67	13	5
Transportation	54	46	8	0
Miscellaneous Mechanical	102	80	19	3
Agriculture, Husbandry, Food	78	64	11	3
Apparel & Textile	60	41	15	4
Earth Working & Wells	10	4	5	1
Furniture, House Fixtures	38	22	15	1
Heating	59	43	13	3
Pipes & Joints	58	43	14	1
Receptacles	33	25	7	1
Miscellaneous-Others	187	151	33	3

	N	R&D - independent research and development unit	R&D - sub-unit attached to a unit with focus on non-R&D	Total
%				
All	2977	82.94	17.06	100
Agriculture, Food, Textiles	54	96.3	3.7	100
Coating	73	87.67	12.33	100
Gas	29	93.1	6.9	100
Organic Compounds	106	91.51	8.49	100
Resins	119	90.76	9.24	100
Miscellaneous-chemical	172	85.47	14.53	100
Communications	143	81.12	18.88	100
Computer Hardware	45	84.44	15.56	100
Computer Software	84	84.52	15.48	100
Computer Peripherals	70	85.71	14.29	100
Information Storage	100	76	24	100
Drugs	114	95.61	4.39	100
Surgery & Medical Instruments	65	90.77	9.23	100
Biotechnology	77	90.91	9.09	100
Miscellaneous-Drug&Med	30	86.67	13.33	100
Electrical Devices	78	75.64	24.36	100
Electrical Lighting	83	79.52	20.48	100
Measuring & Testing	81	83.95	16.05	100
Nuclears & X-rays	57	73.68	26.32	100
Power Systems	148	81.08	18.92	100
Semiconductor Devices	111	82.88	17.12	100
Miscellaneous-Elec.	94	75.53	24.47	100
Materials Processing & Handling	80	71.25	28.75	100
Metal Working	104	83.65	16.35	100
Motors, Engines & Parts	121	83.47	16.53	100
Optics	80	83.75	16.25	100
Transportation	54	85.19	14.81	100
Miscellaneous Mechanical	99	80.81	19.19	100
Agriculture, Husbandry, Food	75	85.33	14.67	100
Apparel & Textile	56	73.21	26.79	100
Earth Working & Wells	9	44.44	55.56	100
Furniture, House Fixtures	37	59.46	40.54	100
Heating	56	76.79	23.21	100
Pipes & Joints	57	75.44	24.56	100
Receptacles	32	78.13	21.88	100
Miscellaneous-Others	184	82.07	17.93	100
US-JP weighted		83.62	16.38	100
JP weighted		82.73	17.27	100

US (1/5)

Question 3-5 Type of unit at the time of the invention (勤務していた部署の主要機能)

Employment at the time of the invention

D11 Employment at the time of the invention	All	R&D – independent research and development unit	R&D – sub-unit attached to a unit with focus on non-R&D	Manufacturing	Software development	Other	missing
NBER All	1,919	1,200	325	154	56	122	62
11 Agriculture, Food, Textiles	8	6	1	1	0	0	0
12 Coating	34	19	10	3	0	1	1
13 Gas	11	6	1	2	0	2	0
14 Organic Compounds	61	48	10	1	0	1	1
15 Resins	84	63	11	4	0	2	4
19 Miscellaneous-chemical	233	158	41	15	2	16	1
21 Communications	149	90	23	7	8	12	9
22 Computer Hardware	42	27	4	2	3	3	3
77 Computer Software	93	40	14	5	27	5	2
23 Computer Peripherals	33	30	2	1	0	0	0
24 Information Storage	42	26	7	3	3	2	1
31 Drugs	101	84	6	4	0	3	4
32 Surgery & Medical Instruments	123	86	9	5	2	16	5
33 Biotechnology	41	29	6	1	0	2	3
39 Miscellaneous-Drug&Med	29	16	3	3	1	3	3
41 Electrical Devices	45	26	13	4	0	2	0
42 Electrical Lighting	33	19	7	4	0	2	1
43 Measuring & Testing	62	35	18	4	3	2	0
44 Nuclears & X-rays	39	18	12	5	1	3	0
45 Power Systems	89	55	20	9	0	5	0
46 Semiconductor Devices	55	34	13	3	0	2	3
49 Miscellaneous-Elec.	32	20	4	3	1	4	0
51 Materials Processing & Handling	56	31	10	4	0	9	2
52 Metal Working	49	23	13	11	0	1	1
53 Motors, Engines & Parts	56	30	10	10	0	2	4
54 Optics	43	30	6	3	3	1	0
55 Transportation	33	23	4	2	0	4	0
59 Miscellaneous Mechanical	42	26	6	6	0	0	4
61 Agriculture, Husbandry, Food	14	7	1	2	0	2	2
63 Apparel & Textile	9	2	2	5	0	0	0
64 Earth Working & Wells	5	2	2	0	0	0	1
65 Furniture, House Fixtures	9	5	2	1	0	1	0
66 Heating	8	6	1	1	0	0	0
67 Pipes & Joints	13	8	4	1	0	0	0
68 Receptacles	20	10	0	7	0	1	2
69 Miscellaneous-Others	123	62	29	12	2	13	5

%	N	R&D – independent research and development unit	R&D – sub-unit attached to a unit with focus on non-R&D	Manufacturing	Software development	Other	Total
NBER All	1857	64.62	17.5	8.29	3.02	6.57	100
11 Agriculture, Food, Textiles	8	75	12.5	12.5	0	0	100
12 Coating	33	57.58	30.3	9.09	0	3.03	100
13 Gas	11	54.55	9.09	18.18	0	18.18	100
14 Organic Compounds	60	80	16.67	1.67	0	1.67	100
15 Resins	80	78.75	13.75	5	0	2.5	100
19 Miscellaneous-chemical	232	68.1	17.67	6.47	0.86	6.9	100
21 Communications	140	64.29	16.43	5	5.71	8.57	100
22 Computer Hardware	39	69.23	10.26	5.13	7.69	7.69	100
77 Computer Software	91	43.96	15.38	5.49	29.67	5.49	100
23 Computer Peripherals	33	90.91	6.06	3.03	0	0	100
24 Information Storage	41	63.41	17.07	7.32	7.32	4.88	100
31 Drugs	97	86.6	6.19	4.12	0	3.09	100
32 Surgery & Medical Instruments	118	72.88	7.63	4.24	1.69	13.56	100
33 Biotechnology	38	76.32	15.79	2.63	0	5.26	100
39 Miscellaneous-Drug&Med	26	61.54	11.54	11.54	3.85	11.54	100
41 Electrical Devices	45	57.78	28.89	8.89	0	4.44	100
42 Electrical Lighting	32	59.38	21.88	12.5	0	6.25	100
43 Measuring & Testing	62	56.45	29.03	6.45	4.84	3.23	100
44 Nuclears & X-rays	39	46.15	30.77	12.82	2.56	7.69	100
45 Power Systems	89	61.8	22.47	10.11	0	5.62	100
46 Semiconductor Devices	52	65.38	25	5.77	0	3.85	100
49 Miscellaneous-Elec.	32	62.5	12.5	9.38	3.13	12.5	100
51 Materials Processing & Handling	54	57.41	18.52	7.41	0	16.67	100
52 Metal Working	48	47.92	27.08	22.92	0	2.08	100
53 Motors, Engines & Parts	52	57.69	19.23	19.23	0	3.85	100
54 Optics	43	69.77	13.95	6.98	6.98	2.33	100
55 Transportation	33	69.7	12.12	6.06	0	12.12	100
59 Miscellaneous Mechanical	38	68.42	15.79	15.79	0	0	100
61 Agriculture, Husbandry, Food	12	58.33	8.33	16.67	0	16.67	100
63 Apparel & Textile	9	22.22	22.22	55.56	0	0	100
64 Earth Working & Wells	4	50	50	0	0	0	100
65 Furniture, House Fixtures	9	55.56	22.22	11.11	0	11.11	100
66 Heating	8	75	12.5	12.5	0	0	100
67 Pipes & Joints	13	61.54	30.77	7.69	0	0	100
68 Receptacles	18	55.56	0	38.89	0	5.56	100
69 Miscellaneous-Others	119	52.54	24.58	10.17	1.69	11.02	100
US-JP weighted		**64.85**	**17.2**	**8.12**	**3.32**	**6.51**	100

Japan

Question 3-6 Within 5 prior years, did you work for another employer? (当該発明前、5年以内の他企業等での常勤経験)

if "yes" are selected(選択肢2 はい)

	All	Yes	No	No response	All	Worked in the other organization (他の組織に雇用されていた)	On loan (or seconded) to the other organization (他の組織に派遣・出向)	No response (無回答)
All	3658	383	3245	30	383	162	211	10
Agriculture, Food, Textiles	60	7	53	0	7	3	3	1
Coating	80	4	74	2	4	2	2	0
Gas	45	3	41	1	3	2	1	0
Organic Compounds	120	11	107	2	11	4	7	0
Resins	125	13	110	2	13	6	7	0
Miscellaneous-chemical	208	29	178	1	29	13	16	0
Communications	160	17	142	1	17	8	9	0
Computer Hardware	59	3	56	0	3	0	3	0
Computer Software	123	11	111	1	11	4	7	0
Computer Peripherals	76	5	69	2	5	3	2	0
Information Storage	120	12	107	1	12	3	9	0
Drugs	127	17	108	2	17	4	13	0
Surgery & Medical Instruments	85	9	76	0	9	6	2	1
Biotechnology	87	14	72	1	14	5	9	0
Miscellaneous-Drug&Med	45	6	39	0	6	3	3	0
Electrical Devices	91	9	82	0	9	3	6	0
Electrical Lighting	96	3	93	0	3	0	3	0
Measuring & Testing	111	16	95	0	16	7	8	1
Nuclears & X-rays	72	7	65	0	7	2	5	0
Power Systems	172	14	156	2	14	4	10	0
Semiconductor Devices	129	13	115	1	13	5	7	1
Miscellaneous-Elec.	120	11	108	1	11	4	7	0
Materials Processing & Handling	103	12	88	3	12	10	2	0
Metal Working	137	19	118	0	19	8	10	1
Motors, Engines & Parts	145	13	132	0	13	6	7	0
Optics	100	4	95	1	4	0	4	0
Transportation	73	9	64	0	9	3	5	1
Miscellaneous Mechanical	124	19	105	0	19	12	7	0
Agriculture, Husbandry, Food	87	14	72	1	14	7	6	1
Apparel & Textile	77	2	74	1	2	2	0	0
Earth Working & Wells	20	1	19	0	1	1	0	0
Furniture, House Fixtures	51	5	46	0	5	2	2	1
Heating	84	11	72	1	11	2	8	1
Pipes & Joints	66	8	58	0	8	2	6	0
Receptacles	55	7	47	1	7	3	4	0
Miscellaneous-Others	225	25	198	2	25	13	11	1

%	N	Yes	No	Total	N	Worked in the other organization	On loan (or seconded) to the other organization	Total
All	3628	10.56	89.44	100	373	43.43	56.57	100
Agriculture, Food, Textiles	60	11.67	88.33	100	6	50	50	100
Coating	78	5.13	94.87	100	4	50	50	100
Gas	44	6.82	93.18	100	3	66.67	33.33	100
Organic Compounds	118	9.32	90.68	100	11	36.36	63.64	100
Resins	123	10.57	89.43	100	13	46.15	53.85	100
Miscellaneous-chemical	207	14.01	85.99	100	29	44.83	55.17	100
Communications	159	10.69	89.31	100	17	47.06	52.94	100
Computer Hardware	59	5.08	94.92	100	3	0	100	100
Computer Software	122	9.02	90.98	100	11	36.36	63.64	100
Computer Peripherals	74	6.76	93.24	100	5	60	40	100
Information Storage	119	10.08	89.92	100	12	25	75	100
Drugs	125	13.6	86.4	100	17	23.53	76.47	100
Surgery & Medical Instruments	85	10.59	89.41	100	8	75	25	100
Biotechnology	86	16.28	83.72	100	14	35.71	64.29	100
Miscellaneous-Drug&Med	45	13.33	86.67	100	6	50	50	100
Electrical Devices	91	9.89	90.11	100	9	33.33	66.67	100
Electrical Lighting	96	3.13	96.88	100	3	0	100	100
Measuring & Testing	111	14.41	85.59	100	15	46.67	53.33	100
Nuclears & X-rays	72	9.72	90.28	100	7	28.57	71.43	100
Power Systems	170	8.24	91.76	100	14	28.57	71.43	100
Semiconductor Devices	128	10.16	89.84	100	12	41.67	58.33	100
Miscellaneous-Elec.	119	9.24	90.76	100	11	36.36	63.64	100
Materials Processing & Handling	100	12	88	100	12	83.33	16.67	100
Metal Working	137	13.87	86.13	100	18	44.44	55.56	100
Motors, Engines & Parts	145	8.97	91.03	100	13	46.15	53.85	100
Optics	99	4.04	95.96	100	4	0	100	100
Transportation	73	12.33	87.67	100	8	37.5	62.5	100
Miscellaneous Mechanical	124	15.32	84.68	100	19	63.16	36.84	100
Agriculture, Husbandry, Food	86	16.28	83.72	100	13	53.85	46.15	100
Apparel & Textile	76	2.63	97.37	100	2	100	0	100
Earth Working & Wells	20	5	95	100	1	100	0	100
Furniture, House Fixtures	51	9.8	90.2	100	4	50	50	100
Heating	83	13.25	86.75	100	10	20	80	100
Pipes & Joints	66	12.12	87.88	100	8	25	75	100
Receptacles	54	12.96	87.04	100	7	42.86	57.14	100
Miscellaneous-Others	223	11.21	88.79	100	24	54.17	45.83	100
US-JP weighted		10.57	89.43	100		43.87	56.13	100
JP weighted		10.22	89.78	100		44.12	55.88	100

US (2/2)

Question 3-6 Within 5 prior years, did you work for another employer? (当該発明前、5年以内の他企業等での常勤経験)

	D5 Within 5 prior years, did you work for another employer?	All	Yes	No	Missing
NBER	All	1919	462	1,341	116
11	Agriculture, Food, Textiles	8	1	7	0
12	Coating	34	7	26	1
13	Gas	11	1	10	0
14	Organic Compounds	61	7	51	3
15	Resins	84	21	59	4
19	Miscellaneous-chemical	233	36	186	11
21	Communications	149	36	99	14
22	Computer Hardware	42	10	29	3
77	Computer Software	93	33	57	3
23	Computer Peripherals	33	5	25	3
24	Information Storage	42	10	30	2
31	Drugs	101	25	68	8
32	Surgery & Medical Instruments	123	47	69	7
33	Biotechnology	41	17	22	2
39	Miscellaneous-Drug&Med	29	6	19	4
41	Electrical Devices	45	9	33	3
42	Electrical Lighting	33	8	23	2
43	Measuring & Testing	62	15	42	5
44	Nuclears & X-rays	39	11	26	2
45	Power Systems	89	26	62	1
46	Semiconductor Devices	55	20	28	7
49	Miscellaneous-Elec.	32	9	21	2
51	Materials Processing & Handling	56	12	40	4
52	Metal Working	49	11	35	3
53	Motors, Engines & Parts	56	13	38	5
54	Optics	43	11	31	1
55	Transportation	33	7	23	3
59	Miscellaneous Mechanical	42	5	33	4
61	Agriculture, Husbandry, Food	14	3	11	0
63	Apparel & Textile	9	3	6	0
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1	8	0
66	Heating	8	1	7	0
67	Pipes & Joints	13	1	12	0
68	Receptacles	20	5	14	1
69	Miscellaneous-Others	XX	XX	XX	XX

	%	N	%Yes	%No	Total
NBER	All	1,803	25.62	74.38	100
11	Agriculture, Food, Textiles	8	12.5	87.5	100
12	Coating	33	21.21	78.79	100
13	Gas	11	9.09	90.91	100
14	Organic Compounds	58	12.07	87.93	100
15	Resins	80	26.25	73.75	100
19	Miscellaneous-chemical	222	16.22	83.78	100
21	Communications	135	26.67	73.33	100
22	Computer Hardware	39	25.64	74.36	100
77	Computer Software	90	36.67	63.33	100
23	Computer Peripherals	30	16.67	83.33	100
24	Information Storage	40	25	75	100
31	Drugs	93	26.88	73.12	100
32	Surgery & Medical Instruments	116	40.52	59.48	100
33	Biotechnology	39	43.59	56.41	100
39	Miscellaneous-Drug&Med	25	24	76	100
41	Electrical Devices	42	21.43	78.57	100
42	Electrical Lighting	31	25.81	74.19	100
43	Measuring & Testing	57	26.32	73.68	100
44	Nuclears & X-rays	37	29.73	70.27	100
45	Power Systems	88	29.55	70.45	100
46	Semiconductor Devices	48	41.67	58.33	100
49	Miscellaneous-Elec.	30	30	70	100
51	Materials Processing & Handling	52	23.08	76.92	100
52	Metal Working	46	23.91	76.09	100
53	Motors, Engines & Parts	51	25.49	74.51	100
54	Optics	42	26.19	73.81	100
55	Transportation	30	23.33	76.67	100
59	Miscellaneous Mechanical	38	13.16	86.84	100
61	Agriculture, Husbandry, Food	14	21.43	78.57	100
63	Apparel & Textile	9	33.33	66.67	100
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	11.11	88.89	100
66	Heating	8	12.5	87.5	100
67	Pipes & Joints	13	7.69	92.31	100
68	Receptacles	19	26.32	73.68	100
69	Miscellaneous-Others	XX	XX	XX	XX
	US-JP weighted		**25.75**	**74.25**	100

US (1/2)

Question 3-6(2) Is the organization at the time of invention less than 5 years old?(発明時の組織は5歳より若かったかどうか)

	D9 Is this organization less than 5 years old?	All	YES	NO	Missing
NBER	All	1919	94	1699	126
11	Agriculture, Food, Textiles	8	1	1	6
12	Coating	34	10	3	19
13	Gas	11	1	2	6
14	Organic Compounds	61	10	1	48
15	Resins	84	11	4	63
19	Miscellaneous-chemical	233	41	15	158
21	Communications	149	23	7	90
22	Computer Hardware	42	4	2	27
77	Computer Software	93	14	5	40
23	Computer Peripherals	33	2	1	30
24	Information Storage	42	7	3	26
31	Drugs	101	6	4	84
32	Surgery & Medical Instruments	123	9	5	86
33	Biotechnology	41	6	1	29
39	Miscellaneous-Drug&Med	29	3	3	16
41	Electrical Devices	45	13	4	26
42	Electrical Lighting	33	7	4	19
43	Measuring & Testing	62	18	4	35
44	Nuclears & X-rays	39	12	5	18
45	Power Systems	89	20	9	55
46	Semiconductor Devices	55	13	3	34
49	Miscellaneous-Elec.	32	4	3	20
51	Materials Processing & Handling	56	10	4	31
52	Metal Working	49	13	11	23
53	Motors, Engines & Parts	56	10	10	30
54	Optics	43	6	3	30
55	Transportation	33	4	2	23
59	Miscellaneous Mechanical	42	6	6	26
61	Agriculture, Husbandry, Food	14	1	2	7
63	Apparel & Textile	9	2	5	2
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	2	1	5
66	Heating	8	1	1	6
67	Pipes & Joints	13	4	1	8
68	Receptacles	20	0	7	10
69	Miscellaneous-Others	XX	XX	XX	XX

	%	N	%YES	%NO	Total
NBER	All	1793	5.24	94.76	100
11	Agriculture, Food, Textiles	8	0	100	100
12	Coating	32	0	100	100
13	Gas	11	0	100	100
14	Organic Compounds	57	5.26	94.74	100
15	Resins	78	0	100	100
19	Miscellaneous-chemical	222	5.86	94.14	100
21	Communications	135	7.41	92.59	100
22	Computer Hardware	39	5.13	94.87	100
77	Computer Software	89	6.74	93.26	100
23	Computer Peripherals	30	0	100	100
24	Information Storage	39	2.56	97.44	100
31	Drugs	94	5.32	94.68	100
32	Surgery & Medical Instruments	114	9.65	90.35	100
33	Biotechnology	38	7.89	92.11	100
39	Miscellaneous-Drug&Med	25	16	84	100
41	Electrical Devices	42	2.38	97.62	100
42	Electrical Lighting	31	12.9	87.1	100
43	Measuring & Testing	58	5.17	94.83	100
44	Nuclears & X-rays	38	0	100	100
45	Power Systems	88	1.14	98.86	100
46	Semiconductor Devices	48	8.33	91.67	100
49	Miscellaneous-Elec.	30	10	90	100
51	Materials Processing & Handling	51	5.88	94.12	100
52	Metal Working	46	4.35	95.65	100
53	Motors, Engines & Parts	52	1.92	98.08	100
54	Optics	42	9.52	90.48	100
55	Transportation	30	0	100	100
59	Miscellaneous Mechanical	37	0	100	100
61	Agriculture, Husbandry, Food	13	7.69	92.31	100
63	Apparel & Textile	9	0	100	100
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	9	0	100	100
66	Heating	8	0	100	100
67	Pipes & Joints	13	7.69	92.31	100
68	Receptacles	17	5.88	94.12	100
69	Miscellaneous-Others	XX	XX	XX	XX
	US-JP weighted		**5.34**	**94.66**	100

Japan

Question 3-7 If "Yes" above, did the experience in any of the above organizations play an important role in your invention? (その経験は当該発明にとって重要な役割を果たしましたか)

	All	yes	no
All	383	233	150
Agriculture, Food, Textiles	7	3	4
Coating	4	0	4
Gas	3	2	1
Organic Compounds	11	9	2
Resins	13	8	5
Miscellaneous-chemical	29	16	13
Communications	17	9	8
Computer Hardware	3	2	1
Computer Software	11	8	3
Computer Peripherals	5	1	4
Information Storage	12	10	2
Drugs	17	11	6
Surgery & Medical Instruments	9	3	6
Biotechnology	14	11	3
Miscellaneous-Drug&Med	6	3	3
Electrical Devices	9	8	1
Electrical Lighting	3	1	2
Measuring & Testing	16	8	8
Nuclears & X-rays	7	4	3
Power Systems	14	6	8
Semiconductor Devices	13	13	0
Miscellaneous-Elec.	11	4	7
Materials Processing & Handling	12	8	4
Metal Working	19	16	3
Motors, Engines & Parts	13	6	7
Optics	4	0	4
Transportation	9	4	5
Miscellaneous Mechanical	19	13	6
Agriculture, Husbandry, Food	14	9	5
Apparel & Textile	2	2	0
Earth Working & Wells	1	1	0
Furniture, House Fixtures	5	3	2
Heating	11	7	4
Pipes & Joints	8	3	5
Receptacles	7	7	0
Miscellaneous-Others	25	14	11

%	N	yes	no	Total
All	383	60.84	39.16	100
Agriculture, Food, Textiles	7	42.86	57.14	100
Coating	4	0	100	100
Gas	3	66.67	33.33	100
Organic Compounds	11	81.82	18.18	100
Resins	13	61.54	38.46	100
Miscellaneous-chemical	29	55.17	44.83	100
Communications	17	52.94	47.06	100
Computer Hardware	3	66.67	33.33	100
Computer Software	11	72.73	27.27	100
Computer Peripherals	5	20	80	100
Information Storage	12	83.33	16.67	100
Drugs	17	64.71	35.29	100
Surgery & Medical Instruments	9	33.33	66.67	100
Biotechnology	14	78.57	21.43	100
Miscellaneous-Drug&Med	6	50	50	100
Electrical Devices	9	88.89	11.11	100
Electrical Lighting	3	33.33	66.67	100
Measuring & Testing	16	50	50	100
Nuclears & X-rays	7	57.14	42.86	100
Power Systems	14	42.86	57.14	100
Semiconductor Devices	13	100	0	100
Miscellaneous-Elec.	11	36.36	63.64	100
Materials Processing & Handling	12	66.67	33.33	100
Metal Working	19	84.21	15.79	100
Motors, Engines & Parts	13	46.15	53.85	100
Optics	4	0	100	100
Transportation	9	44.44	55.56	100
Miscellaneous Mechanical	19	68.42	31.58	100
Agriculture, Husbandry, Food	14	64.29	35.71	100
Apparel & Textile	2	100	0	100
Earth Working & Wells	1	100	0	100
Furniture, House Fixtures	5	60	40	100
Heating	11	63.64	36.36	100
Pipes & Joints	8	37.5	62.5	100
Receptacles	7	100	0	100
Miscellaneous-Others	25	56	44	100
JP weighted		59.49	40.51	100

Japan

Question 3-7(2) If "Yes", how did your experience in the most relevant other organization contribute to your invention? You can check all relevant boxes.(「はい」の場合の理由、重複回答あり)

	All	研究開発の企画あるいは実施に重要な先端的な知識などの習得	当該発明に重要な具体的な技術シーズを獲得することができた	当該発明へのニーズを把握することができた	以前の組織と現在の組織との間の共同開発が行いやすくなった	その他	無回答
	All	**acquire the advanced knowledge useful for the planning and implementation of the research**	**acquire the specific technology seeds for the invention.**	**clarify the needs for the invention.**	**It facilitated the collaboration between the firm and the previous organization**	**Other**	**No response**
All	233	141	105	60	21	8	3
Agriculture, Food, Textiles	3	2	1	2	0	0	0
Coating	0	0	0	0	0	0	0
Gas	2	1	1	0	0	0	0
Organic Compounds	9	6	2	1	0	1	0
Resins	8	4	6	0	0	0	0
Miscellaneous-chemical	16	12	10	6	2	0	0
Communications	9	7	4	4	0	0	0
Computer Hardware	2	2	1	1	0	0	0
Computer Software	8	7	5	3	1	0	0
Computer Peripherals	1	0	0	0	0	0	1
Information Storage	10	6	4	2	1	2	0
Drugs	11	9	3	1	0	0	0
Surgery & Medical Instruments	3	0	2	1	0	0	0
Biotechnology	11	4	8	2	1	1	0
Miscellaneous-Drug&Med	3	3	1	0	0	0	0
Electrical Devices	8	5	4	0	0	0	0
Electrical Lighting	1	0	1	0	0	0	0
Measuring & Testing	8	6	1	2	0	1	0
Nuclears & X-rays	4	3	1	0	1	0	0
Power Systems	6	2	4	0	0	0	0
Semiconductor Devices	13	8	3	3	2	0	0
Miscellaneous-Elec.	4	3	3	2	0	0	0
Materials Processing & Handling	8	5	6	3	1	0	0
Metal Working	16	7	7	6	4	1	0
Motors, Engines & Parts	6	3	3	4	3	0	0
Optics	0	0	0	0	0	0	0
Transportation	4	1	2	1	0	0	1
Miscellaneous Mechanical	13	5	4	4	1	1	1
Agriculture, Husbandry, Food	9	7	3	4	0	0	0
Apparel & Textile	2	0	1	0	1	0	0
Earth Working & Wells	1	0	0	0	0	1	0
Furniture, House Fixtures	3	3	0	0	0	0	0
Heating	7	3	3	2	0	0	0
Pipes & Joints	3	1	2	2	0	0	0
Receptacles	7	5	5	2	2	0	0
Miscellaneous-Others	14	11	4	2	1	0	0

%	**N**	**acquire the advanced knowledge useful for the planning and implementation of the research**	**acquire the specific technology seeds for the invention.**	**clarify the needs for the invention.**	**It facilitated the collaboration between the firm and the previous organization**	**Other**
All	230	61.30	45.65	26.09	9.13	3.48
Agriculture, Food, Textiles	3	66.67	33.33	66.67	0.00	0.00
Coating	0	0.00	0.00	0.00	0.00	0.00
Gas	2	50.00	50.00	0.00	0.00	0.00
Organic Compounds	9	66.67	22.22	11.11	0.00	11.11
Resins	8	50.00	75.00	0.00	0.00	0.00
Miscellaneous-chemical	16	75.00	62.50	37.50	12.50	0.00
Communications	9	77.78	44.44	44.44	0.00	0.00
Computer Hardware	2	100.00	50.00	50.00	0.00	0.00
Computer Software	8	87.50	62.50	37.50	12.50	0.00
Computer Peripherals	0	0.00	0.00	0.00	0.00	0.00
Information Storage	10	60.00	40.00	20.00	10.00	20.00
Drugs	11	81.82	27.27	9.09	0.00	0.00
Surgery & Medical Instruments	3	0.00	66.67	33.33	0.00	0.00
Biotechnology	11	36.36	72.73	18.18	9.09	9.09
Miscellaneous-Drug&Med	3	100.00	33.33	0.00	0.00	0.00
Electrical Devices	8	62.50	50.00	0.00	0.00	0.00
Electrical Lighting	1	0.00	100.00	0.00	0.00	0.00
Measuring & Testing	8	75.00	12.50	25.00	0.00	12.50
Nuclears & X-rays	4	75.00	25.00	0.00	25.00	0.00
Power Systems	6	33.33	66.67	0.00	0.00	0.00
Semiconductor Devices	13	61.54	23.08	23.08	15.38	0.00
Miscellaneous-Elec.	4	75.00	75.00	50.00	0.00	0.00
Materials Processing & Handling	8	62.50	75.00	37.50	12.50	0.00
Metal Working	16	43.75	43.75	37.50	25.00	6.25
Motors, Engines & Parts	6	50.00	50.00	66.67	50.00	0.00
Optics	0	0.00	0.00	0.00	0.00	0.00
Transportation	3	33.33	66.67	33.33	0.00	0.00
Miscellaneous Mechanical	12	41.67	33.33	33.33	8.33	8.33
Agriculture, Husbandry, Food	9	77.78	33.33	44.44	0.00	0.00
Apparel & Textile	2	0.00	50.00	0.00	50.00	0.00
Earth Working & Wells	1	0.00	0.00	0.00	0.00	100.00
Furniture, House Fixtures	3	100.00	0.00	0.00	0.00	0.00
Heating	7	42.86	42.86	28.57	0.00	0.00
Pipes & Joints	3	33.33	66.67	66.67	0.00	0.00
Receptacles	7	71.43	71.43	28.57	28.57	0.00
Miscellaneous-Others	14	78.57	28.57	14.29	7.14	0.00
JP weighted		63.47	47.34	27.66	9.30	2.72

Japan

Question 3-8 For how long did you work in the above previous organization which contributed importantly to your invention?（雇用あるいは派遣・出向期間）

	All	1 year	2 years	3 years	4-6 years	7-9 years	10-19 years	more than 20 years	No response
All	233	32	49	31	34	18	30	30	9
Agriculture, Food, Textiles	3	1	0	0	1	0	0	0	1
Coating	0	0	0	0	0	0	0	0	0
Gas	2	0	0	0	0	0	0	2	0
Organic Compounds	9	4	2	3	0	0	0	0	0
Resins	8	1	2	2	2	0	0	1	0
Miscellaneous-chemical	16	0	5	0	2	2	5	2	0
Communications	9	0	3	1	1	1	2	1	0
Computer Hardware	2	0	2	0	0	0	0	0	0
Computer Software	8	1	2	1	1	1	1	1	0
Computer Peripherals	1	0	0	1	0	0	0	0	0
Information Storage	10	4	2	1	1	1	1	0	0
Drugs	11	3	3	0	2	0	0	2	1
Surgery & Medical Instruments	3	0	0	1	0	0	1	0	1
Biotechnology	11	3	3	1	1	1	1	1	0
Miscellaneous-Drug&Med	3	0	2	1	0	0	0	0	0
Electrical Devices	8	0	0	3	2	1	0	1	1
Electrical Lighting	1	1	0	0	0	0	0	0	0
Measuring & Testing	8	0	1	1	1	2	3	0	0
Nuclears & X-rays	4	1	0	1	0	0	0	2	0
Power Systems	6	1	1	0	3	0	0	1	0
Semiconductor Devices	13	1	4	3	1	2	0	2	0
Miscellaneous-Elec.	4	1	2	0	1	0	0	0	0
Materials Processing & Handling	8	0	0	0	1	0	6	1	0
Metal Working	16	1	4	1	5	1	0	3	1
Motors, Engines & Parts	6	2	0	1	0	1	1	1	0
Optics	0	0	0	0	0	0	0	0	0
Transportation	4	0	0	1	0	1	0	0	2
Miscellaneous Mechanical	13	2	2	1	3	1	2	2	0
Agriculture, Husbandry, Food	9	0	2	2	2	0	0	3	0
Apparel & Textile	2	0	0	0	0	1	1	0	0
Earth Working & Wells	1	0	0	0	0	1	0	0	0
Furniture, House Fixtures	3	0	0	0	1	0	2	0	0
Heating	7	2	4	0	0	0	1	0	0
Pipes & Joints	3	0	0	1	0	0	1	1	0
Receptacles	7	1	0	2	1	0	1	2	0
Miscellaneous-Others	14	2	3	2	2	1	1	1	2

%	N	1 year	2 years	3 years	4-6 years	7-9 years	10-19 years	more than 20 years	Total
All	224	14.29	21.88	13.84	15.18	8.04	13.39	13.39	100
Agriculture, Food, Textiles	2	50	0	0	50	0	0	0	100
Coating									
Gas	2	0	0	0	0	0	0	100	100
Organic Compounds	9	44.44	22.22	33.33	0	0	0	0	100
Resins	8	12.5	25	25	25	0	0	12.5	100
Miscellaneous-chemical	16	0	31.25	0	12.5	12.5	31.25	12.5	100
Communications	9	0	33.33	11.11	11.11	11.11	22.22	11.11	100
Computer Hardware	2	0	100	0	0	0	0	0	100
Computer Software	8	12.5	25	12.5	12.5	12.5	12.5	12.5	100
Computer Peripherals	1	0	0	100	0	0	0	0	100
Information Storage	10	40	20	10	10	10	10	0	100
Drugs	10	30	30	0	20	0	0	20	100
Surgery & Medical Instruments	2	0	0	50	0	0	50	0	100
Biotechnology	11	27.27	27.27	9.09	9.09	9.09	9.09	9.09	100
Miscellaneous-Drug&Med	3	0	66.67	33.33	0	0	0	0	100
Electrical Devices	7	0	0	42.86	28.57	14.29	0	14.29	100
Electrical Lighting	1	100	0	0	0	0	0	0	100
Measuring & Testing	8	0	12.5	12.5	12.5	25	37.5	0	100
Nuclears & X-rays	4	25	0	25	0	0	0	50	100
Power Systems	6	16.67	16.67	0	50	0	0	16.67	100
Semiconductor Devices	13	7.69	30.77	23.08	7.69	15.38	0	15.38	100
Miscellaneous-Elec.	4	25	50	0	25	0	0	0	100
Materials Processing & Handling	8	0	0	0	12.5	0	75	12.5	100
Metal Working	15	6.67	26.67	6.67	33.33	6.67	0	20	100
Motors, Engines & Parts	6	33.33	0	16.67	0	16.67	16.67	16.67	100
Optics									
Transportation	2	0	0	50	0	50	0	0	100
Miscellaneous Mechanical	13	15.38	15.38	7.69	23.08	7.69	15.38	15.38	100
Agriculture, Husbandry, Food	9	0	22.22	22.22	22.22	0	0	33.33	100
Apparel & Textile	2	0	0	0	0	50	50	0	100
Earth Working & Wells	1	0	0	0	0	100	0	0	100
Furniture, House Fixtures	3	0	0	0	33.33	0	66.67	0	100
Heating	7	28.57	57.14	0	0	0	14.29	0	100
Pipes & Joints	3	0	0	33.33	0	0	33.33	33.33	100
Receptacles	7	14.29	0	28.57	14.29	0	14.29	28.57	100
Miscellaneous-Others	12	16.67	25	16.67	16.67	8.33	8.33	8.33	100
JP weighted		13.14	22.15	13.75	15.19	9.34	14.1	12.33	100

Japan

Question 3-9 Previous organization if moved（前組織の類型）

	All	大学など高等教育機関（付属研究所を含む）	国立研究機関	地方公共団体の研究機関	財団法人、民間病院、民間非営利研究機関	顧客・製品ユーザー	設備、材料、部品、ソフトウェア等のサプライヤー企業	競争企業	直接競合していないが同じ産業内の他企業	その他	無回答
	All	**University**	**National government research organization**	**Local government research organization**	**Foundation, hospital, or private research organization**	**Customers or users**	**Suppliers**	**Competitor**	**Non-competitor within the same industry**	**Other**	**No response**
All	233	62	8	2	9	20	22	9	43	56	2
Agriculture, Food, Textiles	3	2	0	0	0	0	0	0	1	0	0
Coating	0	0	0	0	0	0	0	0	0	0	0
Gas	2	0	0	0	0	0	2	0	0	0	0
Organic Compounds	9	5	0	0	1	0	1	0	1	1	0
Resins	8	4	0	0	0	0	1	0	1	2	0
Miscellaneous-chemical	16	3	0	0	1	0	1	2	5	4	0
Communications	9	3	0	0	1	1	0	0	2	2	0
Computer Hardware	2	2	0	0	0	0	0	0	0	0	0
Computer Software	8	0	0	0	0	0	0	0	3	5	0
Computer Peripherals	1	1	0	0	0	0	0	0	0	0	0
Information Storage	10	2	1	0	0	0	0	2	2	3	0
Drugs	11	6	0	0	0	0	0	0	3	2	0
Surgery & Medical Instruments	3	0	0	0	2	0	0	0	0	1	0
Biotechnology	11	5	2	0	1	0	0	1	1	1	0
Miscellaneous-Drug&Med	3	3	0	0	0	0	0	0	0	0	0
Electrical Devices	8	0	0	0	0	3	0	0	1	4	0
Electrical Lighting	1	0	0	0	0	0	1	0	0	0	0
Measuring & Testing	8	1	0	1	0	0	1	1	0	4	0
Nuclears & X-rays	4	0	1	0	2	0	0	0	0	1	0
Power Systems	6	2	0	0	0	0	1	0	1	2	0
Semiconductor Devices	13	5	0	0	0	1	1	1	1	4	0
Miscellaneous-Elec.	4	1	0	0	0	2	0	0	0	1	0
Materials Processing & Handling	8	1	0	0	0	0	0	0	6	0	1
Metal Working	16	5	0	1	1	0	0	0	1	8	0
Motors, Engines & Parts	6	1	0	0	0	3	0	0	0	2	0
Optics	0	0	0	0	0	0	0	0	0	0	0
Transportation	4	0	0	0	0	1	2	0	0	1	0
Miscellaneous Mechanical	13	2	0	0	0	3	2	1	3	2	0
Agriculture, Husbandry, Food	9	3	0	0	0	0	2	0	3	1	0
Apparel & Textile	2	0	0	0	0	0	1	0	0	0	1
Earth Working & Wells	1	0	0	0	0	0	0	1	0	0	0
Furniture, House Fixtures	3	1	0	0	0	0	1	0	1	0	0
Heating	7	1	1	0	0	3	0	0	1	1	0
Pipes & Joints	3	0	0	0	0	1	1	0	0	1	0
Receptacles	7	1	0	0	0	1	1	0	3	1	0
Miscellaneous-Others	14	2	3	0	0	1	3	0	3	2	0

%	N	University	National government research organization	Local government research organization	Foundation, hospital, or private research organization	Customers or users	Suppliers	Competitor	Non-competitor within the same industry	Other	Total
All	231	26.84	3.46	0.87	3.9	8.66	9.52	3.9	18.61	24.24	100
Agriculture, Food, Textiles	3	66.67	0	0	0	0	0	0	33.33	0	100
Coating											
Gas	2	0	0	0	0	0	100	0	0	0	100
Organic Compounds	9	55.56	0	0	11.11	0	11.11	0	11.11	11.11	100
Resins	8	50	0	0	0	0	12.5	0	12.5	25	100
Miscellaneous-chemical	16	18.75	0	0	6.25	0	6.25	12.5	31.25	25	100
Communications	9	33.33	0	0	11.11	11.11	0	0	22.22	22.22	100
Computer Hardware	2	100	0	0	0	0	0	0	0	0	100
Computer Software	8	0	0	0	0	0	0	0	37.5	62.5	100
Computer Peripherals	1	100	0	0	0	0	0	0	0	0	100
Information Storage	10	20	10	0	0	0	0	20	20	30	100
Drugs	11	54.55	0	0	0	0	0	0	27.27	18.18	100
Surgery & Medical Instruments	3	0	0	0	66.67	0	0	0	0	33.33	100
Biotechnology	11	45.45	18.18	0	9.09	0	0	9.09	9.09	9.09	100
Miscellaneous-Drug&Med	3	100	0	0	0	0	0	0	0	0	100
Electrical Devices	8	0	0	0	0	37.5	0	0	12.5	50	100
Electrical Lighting	1	0	0	0	0	0	100	0	0	0	100
Measuring & Testing	8	12.5	0	12.5	0	0	12.5	12.5	0	50	100
Nuclears & X-rays	4	0	25	0	50	0	0	0	0	25	100
Power Systems	6	33.33	0	0	0	0	16.67	0	16.67	33.33	100
Semiconductor Devices	13	38.46	0	0	0	7.69	7.69	7.69	7.69	30.77	100
Miscellaneous-Elec.	4	25	0	0	0	50	0	0	0	25	100
Materials Processing & Handling	7	14.29	0	0	0	0	0	0	85.71	0	100
Metal Working	16	31.25	0	6.25	6.25	0	0	0	6.25	50	100
Motors, Engines & Parts	6	16.67	0	0	0	50	0	0	0	33.33	100
Optics											
Transportation	4	0	0	0	0	25	50	0	0	25	100
Miscellaneous Mechanical	13	15.38	0	0	0	23.08	15.38	7.69	23.08	15.38	100
Agriculture, Husbandry, Food	9	33.33	0	0	0	0	22.22	0	33.33	11.11	100
Apparel & Textile	1	0	0	0	0	0	100	0	0	0	100
Earth Working & Wells	1	0	0	0	0	0	0	100	0	0	100
Furniture, House Fixtures	3	33.33	0	0	0	0	33.33	0	33.33	0	100
Heating	7	14.29	14.29	0	0	42.86	0	0	14.29	14.29	100
Pipes & Joints	3	0	0	0	0	33.33	33.33	0	0	33.33	100
Receptacles	7	14.29	0	0	0	14.29	14.29	0	42.86	14.29	100
Miscellaneous-Others	14	14.29	21.43	0	0	7.14	21.43	0	21.43	14.29	100
US-JP weighted		26.79	3.03	0.65	4.67	7.39	7.44	3.91	20.21	25.91	100
JP weighted		24.81	3.01	0.76	3.52	8.82	8.51	4.11	20.72	25.74	100

US

Question 3-9 Previous organization if moved（前組織の類型）

D6 Previous organization if moved	All	University	Federal Gov research organization	Suppliers	Customers	Competitor	Non-competitors	Hospital	Other	Missing
NBER All	579	98	19	16	11	53	150	11	85	136
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	8	1	0	0	1	0	3	0	1	2
13 Gas	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	10	1	0	0	0	0	4	0	1	4
15 Resins	25	6	1	1	0	2	9	0	1	5
19 Miscellaneous-chemical	47	8	1	0	3	7	11	1	3	13
21 Communications	50	9	2	0	3	2	13	1	3	17
22 Computer Hardware	13	4	0	0	0	0	4	1	2	2
23 Computer Software	36	5	0	1	0	3	20	0	4	3
77 Computer Peripherals	8	0	1	0	0	0	1	0	3	3
24 Information Storage	12	1	2	1	0	2	4	0	0	2
31 Drugs	33	7	0	1	0	4	9	3	1	8
32 Surgery & Medical Instruments	54	7	0	0	0	3	17	3	15	9
33 Biotechnology	19	8	0	0	0	1	6	0	1	3
39 Miscellaneous-Drug&Med	11	2	1	0	0	0	2	1	1	4
41 Electrical Devices	12	1	0	0	1	1	2	0	3	4
42 Electrical Lighting	10	4	1	0	0	0	1	0	2	2
43 Measuring & Testing	20	2	1	2	0	4	5	0	1	5
44 Nuclears & X-rays	13	1	1	1	0	1	3	1	3	2
45 Power Systems	27	2	1	0	0	8	8	0	4	4
46 Semiconductor Devices	27	8	1	2	0	5	3	0	1	7
49 Miscellaneous-Elec.	11	0	0	0	0	0	4	0	4	3
51 Materials Processing & Handling	16	1	0	1	0	2	2	0	6	4
52 Metal Working	14	3	2	1	0	0	1	0	4	3
53 Motors, Engines & Parts	18	2	1	2	0	1	3	0	3	6
54 Optics	12	4	1	0	0	1	2	0	2	2
55 Transportation	10	1	0	1	0	1	0	0	3	4
59 Miscellaneous Mechanical	9	0	0	0	0	0	3	0	1	5
61 Agriculture, Husbandry, Food	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
63 Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
66 Heating	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
67 Pipes & Joints	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
68 Receptacles	6	0	0	0	0	0	2	0	2	2
69 Miscellaneous-Others	35	7	2	2	1	3	8	0	6	6

%	N	University	Federal Gov research organization	Suppliers	Customers	Competitor	Non-competitors	Hospital	Other	Total
NBER All	443	22.12	4.29	3.61	2.48	11.96	33.86	2.48	19.19	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	6	16.67	0	0	16.67	0	50	0	16.67	100
13 Gas	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	6	16.67	0	0	0	0	66.67	0	16.67	100
15 Resins	20	30	5	5	0	10	45	0	5	100
19 Miscellaneous-chemical	34	23.53	2.94	0	8.82	20.59	32.35	2.94	8.82	100
21 Communications	33	27.27	6.06	0	9.09	6.06	39.39	3.03	9.09	100
22 Computer Hardware	11	36.36	0	0	0	0	36.36	9.09	18.18	100
77 Computer Software	33	15.15	0	3.03	0	9.09	60.61	0	12.12	100
23 Computer Peripherals	5	0	20	0	0	0	20	0	60	100
24 Information Storage	10	10	20	10	0	20	40	0	0	100
31 Drugs	25	28	0	4	0	16	36	12	4	100
32 Surgery & Medical Instruments	45	15.56	0	0	0	6.67	37.78	6.67	33.33	100
33 Biotechnology	16	50	0	0	0	6.25	37.5	0	6.25	100
39 Miscellaneous-Drug&Med	7	28.57	14.29	0	0	0	28.57	14.29	14.29	100
41 Electrical Devices	8	12.5	0	0	12.5	12.5	25	0	37.5	100
42 Electrical Lighting	8	50	12.5	0	0	0	12.5	0	25	100
43 Measuring & Testing	15	13.33	6.67	13.33	0	26.67	33.33	0	6.67	100
44 Nuclears & X-rays	11	9.09	9.09	9.09	0	9.09	27.27	9.09	27.27	100
45 Power Systems	23	8.7	4.35	0	0	34.78	34.78	0	17.39	100
46 Semiconductor Devices	20	40	5	10	0	25	15	0	5	100
49 Miscellaneous-Elec.	8	0	0	0	0	0	50	0	50	100
51 Materials Processing & Handling	12	8.33	0	8.33	0	16.67	16.67	0	50	100
52 Metal Working	11	27.27	18.18	9.09	0	0	9.09	0	36.36	100
53 Motors, Engines & Parts	12	16.67	8.33	16.67	0	8.33	25	0	25	100
54 Optics	10	40	10	0	0	10	20	0	20	100
55 Transportation	6	16.67	0	16.67	0	16.67	0	0	50	100
59 Miscellaneous Mechanical	4	0	0	0	0	0	75	0	25	100
61 Agriculture, Husbandry, Food	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
63 Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
66 Heating	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
67 Pipes & Joints	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
68 Receptacles	4	0	0	0	0	0	50	0	50	100
69 Miscellaneous-Others	29	24.14	6.9	6.9	3.45	10.34	27.59	0	20.69	100
US-JP weighted		**21.63**	**4.68**	**4.05**	**2.2**	**12.17**	**33.53**	**2.49**	**19.24**	100

Japan

Question 4-1 What would best describe the business objective of your research leading to this invention?（当該発明につながる研究の事業上の目的）

	全体	新規事業立ち上げ	既存事業の強化	当面の事業とは直結しない、企業の技術基盤の強化	その他	無回答
	All	**Creating a new business line***	**Enhancement of existing business line**	**Enhancement of the technology base of the firm**	**other**	**no response**
All	3658	828	2405	286	94	45
Agriculture, Food, Textiles	60	19	36	4	1	0
Coating	80	23	51	5	1	0
Gas	45	13	21	8	1	2
Organic Compounds	120	35	65	11	4	5
Resins	125	20	93	7	1	4
Miscellaneous-chemical	208	54	129	12	6	7
Communications	160	43	100	12	4	1
Computer Hardware	59	12	41	6	0	0
Computer Software	123	28	83	10	1	1
Computer Peripherals	76	20	49	6	0	1
Information Storage	120	34	76	7	2	1
Drugs	127	31	75	15	5	1
Surgery & Medical Instruments	85	26	44	8	5	2
Biotechnology	87	21	35	20	11	0
Miscellaneous-Drug&Med	45	7	31	2	3	2
Electrical Devices	91	19	65	7	0	0
Electrical Lighting	96	29	57	7	2	1
Measuring & Testing	111	33	62	7	9	0
Nuclears & X-rays	72	18	39	11	3	1
Power Systems	172	45	106	17	3	1
Semiconductor Devices	129	42	74	13	0	0
Miscellaneous-Elec.	120	27	86	7	0	0
Materials Processing & Handling	103	23	66	11	0	3
Metal Working	137	24	98	11	3	1
Motors, Engines & Parts	145	20	112	9	3	1
Optics	100	20	71	4	2	3
Transportation	73	9	58	2	4	0
Miscellaneous Mechanical	124	26	88	6	2	2
Agriculture, Husbandry, Food	87	17	62	5	3	0
Apparel & Textile	77	6	60	7	3	1
Earth Working & Wells	20	2	14	1	2	1
Furniture, House Fixtures	51	5	43	1	2	0
Heating	84	12	65	5	2	0
Pipes & Joints	66	7	55	2	2	0
Receptacles	55	10	38	4	2	1
Miscellaneous-Others	225	48	157	16	2	2

When "Enhancement of existing business line" are chosen（選択肢2 既存事業の強化）

	全体	企業のコア事業が対象	非コア事業が対象	わからない	無回答
	All	**directed to the "core business"**	**directed to the "non-core business"**	**don't know**	**no response**
All	2405	1748	492	78	87
Agriculture, Food, Textiles	36	23	11	2	0
Coating	51	41	6	1	3
Gas	21	12	5	3	1
Organic Compounds	65	39	18	4	4
Resins	93	76	15	2	0
Miscellaneous-chemical	129	86	29	5	9
Communications	100	70	23	5	2
Computer Hardware	41	26	12	1	2
Computer Software	83	59	20	3	1
Computer Peripherals	49	37	10	1	1
Information Storage	76	55	16	4	1
Drugs	75	54	16	3	2
Surgery & Medical Instruments	44	33	8	2	1
Biotechnology	35	21	13	0	1
Miscellaneous-Drug&Med	31	21	6	0	4
Electrical Devices	65	55	9	1	0
Electrical Lighting	57	37	14	4	2
Measuring & Testing	62	45	11	4	2
Nuclears & X-rays	39	26	12	0	1
Power Systems	106	80	20	4	2
Semiconductor Devices	74	56	14	1	3
Miscellaneous-Elec.	86	59	22	5	0
Materials Processing & Handling	66	51	12	0	3
Metal Working	98	71	21	2	4
Motors, Engines & Parts	112	92	12	2	6
Optics	71	47	19	2	3
Transportation	58	41	15	1	1
Miscellaneous Mechanical	88	67	16	0	5
Agriculture, Husbandry, Food	62	35	18	3	6
Apparel & Textile	60	45	11	1	3
Earth Working & Wells	14	12	1	0	1
Furniture, House Fixtures	43	39	2	1	1
Heating	65	46	13	4	2
Pipes & Joints	55	48	3	2	2
Receptacles	38	33	3	1	1
Miscellaneous-Others	157	110	36	4	7

%	N	Creating a new business line*	Enhancement of existing business line	Enhancement of the technology base of the firm	other	Total
All	3613	22.92	66.57	7.92	2.6	100
Agriculture, Food, Textiles	60	31.67	60	6.67	1.67	100
Coating	80	28.75	63.75	6.25	1.25	100
Gas	43	30.23	48.84	18.6	2.33	100
Organic Compounds	115	30.43	56.52	9.57	3.48	100
Resins	121	16.53	76.86	5.79	0.83	100
Miscellaneous-chemical	201	26.87	64.18	5.97	2.99	100
Communications	159	27.04	62.89	7.55	2.52	100
Computer Hardware	59	20.34	69.49	10.17	0	100
Computer Software	122	22.95	68.03	8.2	0.82	100
Computer Peripherals	75	26.67	65.33	8	0	100
Information Storage	119	28.57	63.87	5.88	1.68	100
Drugs	126	24.6	59.52	11.9	3.97	100
Surgery & Medical Instruments	83	31.33	53.01	9.64	6.02	100
Biotechnology	87	24.14	40.23	22.99	12.64	100
Miscellaneous-Drug&Med	43	16.28	72.09	4.65	6.98	100
Electrical Devices	91	20.88	71.43	7.69	0	100
Electrical Lighting	95	30.53	60	7.37	2.11	100
Measuring & Testing	111	29.73	55.86	6.31	8.11	100
Nuclears & X-rays	71	25.35	54.93	15.49	4.23	100
Power Systems	171	26.32	61.99	9.94	1.75	100
Semiconductor Devices	129	32.56	57.36	10.08	0	100
Miscellaneous-Elec.	120	22.5	71.67	5.83	0	100
Materials Processing & Handling	100	23	66	11	0	100
Metal Working	136	17.65	72.06	8.09	2.21	100
Motors, Engines & Parts	144	13.89	77.78	6.25	2.08	100
Optics	97	20.62	73.2	4.12	2.06	100
Transportation	73	12.33	79.45	2.74	5.48	100
Miscellaneous Mechanical	122	21.31	72.13	4.92	1.64	100
Agriculture, Husbandry, Food	87	19.54	71.26	5.75	3.45	100
Apparel & Textile	76	7.89	78.95	9.21	3.95	100
Earth Working & Wells	19	10.53	73.68	5.26	10.53	100
Furniture, House Fixtures	51	9.8	84.31	1.96	3.92	100
Heating	84	14.29	77.38	5.95	2.38	100
Pipes & Joints	66	10.61	83.33	3.03	3.03	100
Receptacles	54	18.52	70.37	7.41	3.7	100
Miscellaneous-Others	223	21.52	70.4	7.17	0.9	100
US-JP weighted		23.99	65.58	8.01	2.42	100
JP weighted		23.48	66.95	7.43	2.14	100

	N	directed to the "core business"	directed to the "non-core business"	Total
All	2240	78.04	21.96	100
Agriculture, Food, Textiles	34	67.65	32.35	100
Coating	47	87.23	12.77	100
Gas	17	70.59	29.41	100
Organic Compounds	57	68.42	31.58	100
Resins	91	83.52	16.48	100
Miscellaneous-chemical	115	74.78	25.22	100
Communications	93	75.27	24.73	100
Computer Hardware	38	68.42	31.58	100
Computer Software	79	74.68	25.32	100
Computer Peripherals	47	78.72	21.28	100
Information Storage	71	77.46	22.54	100
Drugs	70	77.14	22.86	100
Surgery & Medical Instruments	41	80.49	19.51	100
Biotechnology	34	61.76	38.24	100
Miscellaneous-Drug&Med	27	77.78	22.22	100
Electrical Devices	64	85.94	14.06	100
Electrical Lighting	51	72.55	27.45	100
Measuring & Testing	56	80.36	19.64	100
Nuclears & X-rays	38	68.42	31.58	100
Power Systems	100	80	20	100
Semiconductor Devices	70	80	20	100
Miscellaneous-Elec.	81	72.84	27.16	100
Materials Processing & Handling	63	80.95	19.05	100
Metal Working	92	77.17	22.83	100
Motors, Engines & Parts	104	88.46	11.54	100
Optics	66	71.21	28.79	100
Transportation	56	73.21	26.79	100
Miscellaneous Mechanical	83	80.72	19.28	100
Agriculture, Husbandry, Food	53	66.04	33.96	100
Apparel & Textile	56	80.36	19.64	100
Earth Working & Wells	13	92.31	7.69	100
Furniture, House Fixtures	41	95.12	4.88	100
Heating	59	77.97	22.03	100
Pipes & Joints	51	94.12	5.88	100
Receptacles	36	91.67	8.33	100
Miscellaneous-Others	146	75.34	24.66	100
US-JP weighted		77.64	22.36	100
JP weighted		77.78	22.22	100

US (1/2)

Question 4-1 What would best describe the business objective of your research leading to this invention? (当該発明につながる研究の事業上の目的)

	A.1 What would best describe the purpose of your research leading to this invention, in relation to the business objective of your firm?	all	Creating a new business line*	Enhancement of existing business line	Enhancement of the technology base of the firm or the long-term cultivation of technology seeds, which are not associated with current business	other	Missing
NBER	All	1,919	450	925	455	68	21
11	Agriculture, Food, Textiles	8	1	4	3	0	0
12	Coating	34	9	18	6	0	1
13	Gas	11	2	5	3	0	1
14	Organic Compounds	61	16	28	13	4	0
15	Resins	84	17	49	15	3	0
19	Miscellaneous-chemical	233	45	137	45	6	0
21	Communications	149	40	61	40	4	4
22	Computer Hardware	42	5	22	13	2	0
77	Computer Software	93	20	42	26	4	1
23	Computer Peripherals	33	13	13	6	1	0
24	Information Storage	42	12	16	14	0	0
31	Drugs	101	30	44	24	3	0
32	Surgery & Medical Instruments	123	38	54	20	10	1
33	Biotechnology	41	8	11	15	6	1
39	Miscellaneous-Drug&Med	29	6	15	6	1	1
41	Electrical Devices	45	12	21	11	1	0
42	Electrical Lighting	33	9	13	8	2	1
43	Measuring & Testing	62	13	37	12	0	0
44	Nuclears & X-rays	39	10	17	11	1	0
45	Power Systems	89	19	38	28	2	2
46	Semiconductor Devices	55	11	20	23	1	0
49	Miscellaneous-Elec.	32	9	13	7	1	2
51	Materials Processing & Handling	56	6	32	15	1	2
52	Metal Working	49	12	24	10	3	0
53	Motors, Engines & Parts	56	10	27	14	4	1
54	Optics	43	8	17	18	0	0
55	Transportation	33	5	17	9	1	1
59	Miscellaneous Mechanical	42	9	24	8	1	0
61	Agriculture, Husbandry, Food	14	6	5	2	1	0
63	Apparel & Textile	9	1	7	1	0	0
64	Earth Working & Wells	5	2	1	1	0	1
65	Furniture, House Fixtures	9	2	6	0	1	0
66	Heating	8	2	6	0	0	0
67	Pipes & Joints	13	4	8	1	0	0
68	Receptacles	20	6	10	4	0	0
69	Miscellaneous-Others	123	32	63	23	4	1

	%	N	Creating a new business line*	Enhancement of existing business line	Enhancement of the technology base of the firm or the long-term cultivation of technology seeds, which are not associated with current business	other	Total
NBER	All	1898	23.71	48.74	23.97	3.58	100
11	Agriculture, Food, Textiles	8	12.5	50	37.5	0	100
12	Coating	33	27.27	54.55	18.18	0	100
13	Gas	10	20	50	30	0	100
14	Organic Compounds	61	26.23	45.9	21.31	6.56	100
15	Resins	84	20.24	58.33	17.86	3.57	100
19	Miscellaneous-chemical	233	19.31	58.8	19.31	2.58	100
21	Communications	145	27.59	42.07	27.59	2.76	100
22	Computer Hardware	42	11.9	52.38	30.95	4.76	100
77	Computer Software	92	21.74	45.65	28.26	4.35	100
23	Computer Peripherals	33	39.39	39.39	18.18	3.03	100
24	Information Storage	42	28.57	38.1	33.33	0	100
31	Drugs	101	29.7	43.56	23.76	2.97	100
32	Surgery & Medical Instruments	122	31.15	44.26	16.39	8.2	100
33	Biotechnology	40	20	27.5	37.5	15	100
39	Miscellaneous-Drug&Med	28	21.43	53.57	21.43	3.57	100
41	Electrical Devices	45	26.67	46.67	24.44	2.22	100
42	Electrical Lighting	32	28.13	40.63	25	6.25	100
43	Measuring & Testing	62	20.97	59.68	19.35	0	100
44	Nuclears & X-rays	39	25.64	43.59	28.21	2.56	100
45	Power Systems	87	21.84	43.68	32.18	2.3	100
46	Semiconductor Devices	55	20	36.36	41.82	1.82	100
49	Miscellaneous-Elec.	30	30	43.33	23.33	3.33	100
51	Materials Processing & Handling	54	11.11	59.26	27.78	1.85	100
52	Metal Working	49	24.49	48.98	20.41	6.12	100
53	Motors, Engines & Parts	55	18.18	49.09	25.45	7.27	100
54	Optics	43	18.6	39.53	41.86	0	100
55	Transportation	32	15.63	53.13	28.13	3.13	100
59	Miscellaneous Mechanical	42	21.43	57.14	19.05	2.38	100
61	Agriculture, Husbandry, Food	14	42.86	35.71	14.29	7.14	100
63	Apparel & Textile	9	11.11	77.78	11.11	0	100
64	Earth Working & Wells	4	50	25	25	0	100
65	Furniture, House Fixtures	9	22.22	66.67	0	11.11	100
66	Heating	8	25	75	0	0	100
67	Pipes & Joints	13	30.77	61.54	7.69	0	100
68	Receptacles	20	30	50	20	0	100
69	Miscellaneous-Others	122	26.23	51.64	18.85	3.28	100
	US-JP weighted		**23.95**	**48.37**	**24.32**	**3.36**	100

Japan

Question 4-1 (2) What would best describe the type of the innovation your research was expected to realize? (それは、どの類型の技術革新であったか)

	All	新生産技術の開発	既存生産技術の改善	新製品の開発	既存製品の改良	その他	無回答
	All	**Creating a new process**	**Improvement of an existing process**	**Creating a new product**	**Improvement of an existing product**	**other**	**no response**
All	3613	351	290	2142	698	63	69
Agriculture, Food, Textiles	60	5	2	41	10	0	2
Coating	80	14	7	45	13	0	1
Gas	43	2	5	28	6	2	0
Organic Compounds	115	40	20	41	5	2	7
Resins	121	14	11	62	28	3	3
Miscellaneous-chemical	201	23	21	112	42	2	1
Communications	159	10	9	116	22	2	0
Computer Hardware	59	5	7	26	19	1	1
Computer Software	122	6	11	74	25	3	3
Computer Peripherals	75	1	2	55	17	0	0
Information Storage	119	6	6	75	30	1	1
Drugs	126	8	1	102	9	4	2
Surgery & Medical Instruments	83	2	4	55	19	2	1
Biotechnology	87	28	5	40	3	7	4
Miscellaneous-Drug&Med	43	5	1	23	10	1	3
Electrical Devices	91	1	1	61	26	1	1
Electrical Lighting	95	5	6	60	21	1	2
Measuring & Testing	111	5	11	64	23	6	2
Nuclears & X-rays	71	2	9	39	14	3	4
Power Systems	171	9	6	106	42	4	4
Semiconductor Devices	129	25	9	76	16	2	1
Miscellaneous-Elec.	120	12	10	78	19	0	1
Materials Processing & Handling	100	25	11	52	9	0	3
Metal Working	136	31	23	61	16	4	1
Motors, Engines & Parts	144	3	4	86	48	2	1
Optics	97	4	4	74	13	2	0
Transportation	73	1	2	49	19	1	1
Miscellaneous Mechanical	122	7	12	73	25	3	2
Agriculture, Husbandry, Food	87	16	10	52	7	1	1
Apparel & Textile	76	2	9	36	25	1	3
Earth Working & Wells	19	2	1	9	7	0	0
Furniture, House Fixtures	51	3	0	34	9	0	5
Heating	84	9	14	31	28	0	2
Pipes & Joints	66	1	4	40	20	0	1
Receptacles	54	4	10	24	12	2	2
Miscellaneous-Others	223	15	22	142	41	0	3

%	N	Creating a new process	Improvement of an existing process	Creating a new product	Improvement of an existing product	other	Total
All	3544	9.9	8.18	60.44	19.7	1.78	100
Agriculture, Food, Textiles	58	8.62	3.45	70.69	17.24	0	100
Coating	79	17.72	8.86	56.96	16.46	0	100
Gas	43	4.65	11.63	65.12	13.95	4.65	100
Organic Compounds	108	37.04	18.52	37.96	4.63	1.85	100
Resins	118	11.86	9.32	52.54	23.73	2.54	100
Miscellaneous-chemical	200	11.5	10.5	56	21	1	100
Communications	159	6.29	5.66	72.96	13.84	1.26	100
Computer Hardware	58	8.62	12.07	44.83	32.76	1.72	100
Computer Software	119	5.04	9.24	62.18	21.01	2.52	100
Computer Peripherals	75	1.33	2.67	73.33	22.67	0	100
Information Storage	118	5.08	5.08	63.56	25.42	0.85	100
Drugs	124	6.45	0.81	82.26	7.26	3.23	100
Surgery & Medical Instruments	82	2.44	4.88	67.07	23.17	2.44	100
Biotechnology	83	33.73	6.02	48.19	3.61	8.43	100
Miscellaneous-Drug&Med	40	12.5	2.5	57.5	25	2.5	100
Electrical Devices	90	1.11	1.11	67.78	28.89	1.11	100
Electrical Lighting	93	5.38	6.45	64.52	22.58	1.08	100
Measuring & Testing	109	4.59	10.09	58.72	21.1	5.5	100
Nuclears & X-rays	67	2.99	13.43	58.21	20.9	4.48	100
Power Systems	167	5.39	3.59	63.47	25.15	2.4	100
Semiconductor Devices	128	19.53	7.03	59.38	12.5	1.56	100
Miscellaneous-Elec.	119	10.08	8.4	65.55	15.97	0	100
Materials Processing & Handling	97	25.77	11.34	53.61	9.28	0	100
Metal Working	135	22.96	17.04	45.19	11.85	2.96	100
Motors, Engines & Parts	143	2.1	2.8	60.14	33.57	1.4	100
Optics	97	4.12	4.12	76.29	13.4	2.06	100
Transportation	72	1.39	2.78	68.06	26.39	1.39	100
Miscellaneous Mechanical	120	5.83	10	60.83	20.83	2.5	100
Agriculture, Husbandry, Food	86	18.6	11.63	60.47	8.14	1.16	100
Apparel & Textile	73	2.74	12.33	49.32	34.25	1.37	100
Earth Working & Wells	19	10.53	5.26	47.37	36.84	0	100
Furniture, House Fixtures	46	6.52	0	73.91	19.57	0	100
Heating	82	10.98	17.07	37.8	34.15	0	100
Pipes & Joints	65	1.54	6.15	61.54	30.77	0	100
Receptacles	52	7.69	19.23	46.15	23.08	3.85	100
Miscellaneous-Others	220	6.82	10	64.55	18.64	0	100
US-JP weighted		9.3	7.56	62.21	19.17	1.76	100
JP weighted		9	7.67	62.05	19.74	1.54	100

US (2/2)

Question 4-1 (2) What would best describe the type of the innovation your research was expected to realize? (それは、どの類型の技術革新であったか)

	A.2 What would best describe the type of innovation your research was expected to realize?	all	Creating a new process	Improvement of an existing process	Creating a new product	Improvement of an existing product	other	Missing
NBER	All	1,919	240	263	849	513	34	20
11	Agriculture, Food, Textiles	8	0	0	7	1	0	0
12	Coating	34	3	6	14	9	1	1
13	Gas	11	2	2	3	4	0	0
14	Organic Compounds	61	20	16	19	6	0	0
15	Resins	84	9	10	44	20	1	0
19	Miscellaneous-chemical	233	52	44	74	58	5	0
21	Communications	149	14	16	67	42	6	4
22	Computer Hardware	42	5	7	15	15	0	0
77	Computer Software	93	11	16	37	25	3	1
23	Computer Peripherals	33	3	3	21	6	0	0
24	Information Storage	42	2	4	22	14	0	0
31	Drugs	101	5	0	81	12	3	0
32	Surgery & Medical Instruments	123	9	8	63	38	4	1
33	Biotechnology	41	10	13	10	7	0	1
39	Miscellaneous-Drug&Med	29	1	3	13	11	0	1
41	Electrical Devices	45	5	4	21	15	0	0
42	Electrical Lighting	33	3	0	21	7	1	1
43	Measuring & Testing	62	3	9	24	23	3	0
44	Nuclears & X-rays	39	3	6	17	13	0	0
45	Power Systems	89	2	9	40	36	0	2
46	Semiconductor Devices	55	13	19	16	6	1	0
49	Miscellaneous-Elec.	32	8	5	9	9	0	1
51	Materials Processing & Handling	56	7	12	18	15	1	3
52	Metal Working	49	19	9	12	7	2	0
53	Motors, Engines & Parts	56	2	3	27	23	0	1
54	Optics	43	3	8	15	17	0	0
55	Transportation	33	2	2	17	11	0	1
59	Miscellaneous Mechanical	42	5	6	18	12	1	0
61	Agriculture, Husbandry, Food	14	2	1	8	3	0	0
63	Apparel & Textile	9	0	0	5	4	0	0
64	Earth Working & Wells	5	0	1	2	1	0	1
65	Furniture, House Fixtures	9	0	2	4	3	0	0
66	Heating	8	0	3	3	2	0	0
67	Pipes & Joints	13	0	0	7	6	0	0
68	Receptacles	20	4	3	8	3	2	0
69	Miscellaneous-Others	123	13	13	67	29	0	1

	%	N	Creating a new process	Improvement of an existing process	Creating a new product	Improvement of an existing product	other	Total
NBER	All	1899	12.64	13.85	44.71	27.01	1.79	100
11	Agriculture, Food, Textiles	8	0	0	87.5	12.5	0	100
12	Coating	33	9.09	18.18	42.42	27.27	3.03	100
13	Gas	11	18.18	18.18	27.27	36.36	0	100
14	Organic Compounds	61	32.79	26.23	31.15	9.84	0	100
15	Resins	84	10.71	11.9	52.38	23.81	1.19	100
19	Miscellaneous-chemical	233	22.32	18.88	31.76	24.89	2.15	100
21	Communications	145	9.66	11.03	46.21	28.97	4.14	100
22	Computer Hardware	42	11.9	16.67	35.71	35.71	0	100
77	Computer Software	92	11.96	17.39	40.22	27.17	3.26	100
23	Computer Peripherals	33	9.09	9.09	63.64	18.18	0	100
24	Information Storage	42	4.76	9.52	52.38	33.33	0	100
31	Drugs	101	4.95	0	80.2	11.88	2.97	100
32	Surgery & Medical Instruments	122	7.38	6.56	51.64	31.15	3.28	100
33	Biotechnology	40	25	32.5	25	17.5	0	100
39	Miscellaneous-Drug&Med	28	3.57	10.71	46.43	39.29	0	100
41	Electrical Devices	45	11.11	8.89	46.67	33.33	0	100
42	Electrical Lighting	32	9.38	0	65.63	21.88	3.13	100
43	Measuring & Testing	62	4.84	14.52	38.71	37.1	4.84	100
44	Nuclears & X-rays	39	7.69	15.38	43.59	33.33	0	100
45	Power Systems	87	2.3	10.34	45.98	41.38	0	100
46	Semiconductor Devices	55	23.64	34.55	29.09	10.91	1.82	100
49	Miscellaneous-Elec.	31	25.81	16.13	29.03	29.03	0	100
51	Materials Processing & Handling	53	13.21	22.64	33.96	28.3	1.89	100
52	Metal Working	49	38.78	18.37	24.49	14.29	4.08	100
53	Motors, Engines & Parts	55	3.64	5.45	49.09	41.82	0	100
54	Optics	43	6.98	18.6	34.88	39.53	0	100
55	Transportation	32	6.25	6.25	53.13	34.38	0	100
59	Miscellaneous Mechanical	42	11.9	14.29	42.86	28.57	2.38	100
61	Agriculture, Husbandry, Food	14	14.29	7.14	57.14	21.43	0	100
63	Apparel & Textile	9	0	0	55.56	44.44	0	100
64	Earth Working & Wells	4	0	25	50	25	0	100
65	Furniture, House Fixtures	9	0	22.22	44.44	33.33	0	100
66	Heating	8	0	37.5	37.5	25	0	100
67	Pipes & Joints	13	0	0	53.85	46.15	0	100
68	Receptacles	20	20	15	40	15	10	100
69	Miscellaneous-Others	122	10.66	10.66	54.92	23.77	0	100
	US-JP weighted		**12.06**	**13.37**	**45.71**	**26.97**	**1.88**	100

Japan

Question 4-2 What is the scope of your research leading to the invention? You can check all relevant boxeses. (当該発明につながった研究の範囲(重複回答あり))

	All All	基礎研究 Basic Research	応用研究 Applied Research	開発 Development	技術サービス technical support(quality control, manufacturing process design or product experiments)	その他 other	無回答 no response
All	3658	816	1389	2406	311	58	18
Agriculture, Food, Textiles	60	28	30	23	6	0	0
Coating	80	24	34	52	4	1	0
Gas	45	11	18	29	3	1	1
Organic Compounds	120	57	59	49	7	1	0
Resins	125	45	77	65	17	0	1
Miscellaneous-chemical	208	65	87	127	22	4	3
Communications	160	20	66	116	6	0	0
Computer Hardware	59	7	26	41	3	2	0
Computer Software	123	18	41	93	10	3	1
Computer Peripherals	76	12	25	59	3	0	0
Information Storage	120	8	34	92	11	2	1
Drugs	127	67	62	38	5	2	1
Surgery & Medical Instruments	85	20	35	62	8	0	0
Biotechnology	87	53	37	27	4	3	0
Miscellaneous-Drug&Med	45	7	14	34	0	0	1
Electrical Devices	91	10	29	69	17	0	0
Electrical Lighting	96	15	34	64	10	2	0
Measuring & Testing	111	23	41	73	8	3	0
Nuclears & X-rays	72	20	29	49	6	0	0
Power Systems	172	38	55	117	7	2	1
Semiconductor Devices	129	32	57	79	4	1	1
Miscellaneous-Elec.	120	19	44	100	10	2	0
Materials Processing & Handling	103	18	32	72	13	1	4
Metal Working	137	36	62	83	21	4	0
Motors, Engines & Parts	145	19	40	112	7	2	0
Optics	100	15	41	67	6	2	0
Transportation	73	5	12	59	8	1	0
Miscellaneous Mechanical	124	17	31	88	18	5	1
Agriculture, Husbandry, Food	87	28	51	60	8	1	0
Apparel & Textile	77	6	19	58	6	2	0
Earth Working & Wells	20	2	5	13	1	2	0
Furniture, House Fixtures	51	1	10	41	0	1	0
Heating	84	16	32	58	7	0	0
Pipes & Joints	66	8	16	51	9	0	0
Receptacles	55	7	16	34	17	1	1
Miscellaneous-Others	225	39	88	152	19	7	1

%	N	Basic Research	Applied Research	Development	technical support(quality control, manufacturing process design or product experiments)	other
All	3640	22.42	38.16	66.10	8.54	1.59
Agriculture, Food, Textiles	60	46.67	50.00	38.33	10.00	0.00
Coating	80	30.00	42.50	65.00	5.00	1.25
Gas	44	25.00	40.91	65.91	6.82	2.27
Organic Compounds	120	47.50	49.17	40.83	5.83	0.83
Resins	124	36.29	62.10	52.42	13.71	0.00
Miscellaneous-chemical	205	31.71	42.44	61.95	10.73	1.95
Communications	160	12.50	41.25	72.50	3.75	0.00
Computer Hardware	59	11.86	44.07	69.49	5.08	3.39
Computer Software	122	14.75	33.61	76.23	8.20	2.46
Computer Peripherals	76	15.79	32.89	77.63	3.95	0.00
Information Storage	119	6.72	28.57	77.31	9.24	1.68
Drugs	126	53.17	49.21	30.16	3.97	1.59
Surgery & Medical Instruments	85	23.53	41.18	72.94	9.41	0.00
Biotechnology	87	60.92	42.53	31.03	4.60	3.45
Miscellaneous-Drug&Med	44	15.91	31.82	77.27	0.00	0.00
Electrical Devices	91	10.99	31.87	75.82	18.68	0.00
Electrical Lighting	96	15.63	35.42	66.67	10.42	2.08
Measuring & Testing	111	20.72	36.94	65.77	7.21	2.70
Nuclears & X-rays	72	27.78	40.28	68.06	8.33	0.00
Power Systems	171	22.22	32.16	68.42	4.09	1.17
Semiconductor Devices	128	25.00	44.53	61.72	3.13	0.78
Miscellaneous-Elec.	120	15.83	36.67	83.33	8.33	1.67
Materials Processing & Handling	99	18.18	32.32	72.73	13.13	1.01
Metal Working	137	26.28	45.26	60.58	15.33	2.92
Motors, Engines & Parts	145	13.10	27.59	77.24	4.83	1.38
Optics	100	15.00	41.00	67.00	6.00	2.00
Transportation	73	6.85	16.44	80.82	10.96	1.37
Miscellaneous Mechanical	123	13.82	25.20	71.54	14.63	4.07
Agriculture, Husbandry, Food	87	32.18	58.62	68.97	9.20	1.15
Apparel & Textile	77	7.79	24.68	75.32	7.79	2.60
Earth Working & Wells	20	10.00	25.00	65.00	5.00	10.00
Furniture, House Fixtures	51	1.96	19.61	80.39	0.00	1.96
Heating	84	19.05	38.10	69.05	8.33	0.00
Pipes & Joints	66	12.12	24.24	77.27	13.64	0.00
Receptacles	54	12.96	29.63	62.96	31.48	1.85
Miscellaneous-Others	224	17.41	39.29	67.86	8.48	3.13
JP weighted		20.94	37.79	67.54	8.62	1.51

US (2/5)

Question 4-2(2) At the time of the research leading to the focal patent, approximately what percentage of your R&D effort was for each stage of research? （当該特許を生み出す研究開発を行っていた時期に、研究開発努力のおおよそ何%を各研究開発の段階に向けていたか）

	C.1 (% mean)	All	N	Basic research(%)	Applied research(%)	Design and Development(%)	Technical service(%)	Total	Missing
NBER	All	1,919	1,780	9.69	41.6	39.46	9.26	100	131
11	Agriculture, Food, Textiles	8	8	5.63	43.75	44.38	6.25	100	0
12	Coating	34	33	10.55	46.76	28.76	13.94	100	1
13	Gas	11	11	8.64	36.82	28.18	26.36	100	0
14	Organic Compounds	61	60	20.92	48.25	22.5	8.33	100	1
15	Resins	84	79	12.22	51.25	29.85	6.68	100	4
19	Miscellaneous-chemical	233	220	8.5	49.39	31.16	10.95	100	13
21	Communications	149	136	7.07	40.71	45.94	6.28	100	11
22	Computer Hardware	42	39	11.03	37.95	48.46	2.56	100	3
77	Computer Software	93	88	7.19	36.03	47.91	8.86	100	5
23	Computer Peripherals	33	32	6.41	47.41	37.81	8.38	100	1
24	Information Storage	42	38	10.74	44.42	41.03	3.82	100	4
31	Drugs	101	90	25.11	52.87	17.25	4.78	100	11
32	Surgery & Medical Instruments	123	110	9.25	37.07	47.55	6.14	100	13
33	Biotechnology	41	38	30.26	45.26	20.39	4.08	100	3
39	Miscellaneous-Drug&Med	29	25	8.4	28.6	42.6	20.4	100	4
41	Electrical Devices	45	44	1.95	32.23	55.41	10.41	100	1
42	Electrical Lighting	33	30	5	54.27	33.4	7.33	100	2
43	Measuring & Testing	62	59	5.17	40.34	42.12	12.37	100	2
44	Nuclears & X-rays	39	39	7.18	34.23	47.31	11.28	100	0
45	Power Systems	89	87	6.15	36.72	48.68	8.45	100	2
46	Semiconductor Devices	55	52	11.15	43.85	36.83	8.17	100	3
49	Miscellaneous-Elec.	32	30	7	30.5	50.83	11.67	100	2
51	Materials Processing & Handling	56	49	6.73	38.57	42.35	12.35	100	7
52	Metal Working	49	45	6.56	37.09	42.18	14.18	100	3
53	Motors, Engines & Parts	56	50	3.4	39.7	45.14	11.76	100	6
54	Optics	43	41	7.2	39.59	47.15	6.07	100	2
55	Transportation	33	30	5.17	32.27	51.33	11.23	100	3
59	Miscellaneous Mechanical	42	37	12.51	28	49.08	10.41	100	4
61	Agriculture, Husbandry, Food	14	13	13.08	30.38	44.62	11.92	100	1
63	Apparel & Textile	9	8	5	26.25	46.25	22.5	100	1
64	Earth Working & Wells	5	4	5	8.75	60	26.25	100	1
65	Furniture, House Fixtures	9	8	2.5	32.5	51.88	13.13	100	1
66	Heating	8	8	5	45	40	10	100	0
67	Pipes & Joints	13	12	7.5	17.5	63.33	11.67	100	1
68	Receptacles	20	18	12.22	38.33	41.94	7.5	100	2
69	Miscellaneous-Others	123	109	8.67	43.76	35.96	11.61	100	13
	US-JP weighted		**1,780**	**9.68**	**41.55**	**39.66**	**9.1**	100	

Note: cases where sum not equal 100 excluded

US (3/5)

Question 4-2(2) At the time of the research leading to the focal patent, is the following R&D stage covered? Count any positive response. (当該特許を生み出す研究開発を行っていた時期に、以下の研究開発段階が含まれていたか)

	C.1 (count, any basic/applied/development/techsvc)	All	Basic research	Applied research	Design and Development	Technical service	missing
NBER	All	1,919	623	1478	1379	702	131
11	Agriculture, Food, Textiles	8	3	6	6	3	0
12	Coating	34	12	28	24	19	1
13	Gas	11	4	9	7	7	0
14	Organic Compounds	61	35	51	35	24	1
15	Resins	84	33	68	56	27	4
19	Miscellaneous-chemical	233	68	195	150	93	13
21	Communications	149	42	112	116	40	11
22	Computer Hardware	42	14	28	32	7	3
77	Computer Software	93	26	66	71	30	5
23	Computer Peripherals	33	10	29	22	10	1
24	Information Storage	42	13	31	32	8	4
31	Drugs	101	50	72	40	21	11
32	Surgery & Medical Instruments	123	42	91	88	35	13
33	Biotechnology	41	22	29	18	9	3
39	Miscellaneous-Drug&Med	29	5	18	20	15	4
41	Electrical Devices	45	9	34	39	19	1
42	Electrical Lighting	33	9	28	26	13	2
43	Measuring & Testing	62	19	54	52	27	2
44	Nuclears & X-rays	39	13	28	35	17	0
45	Power Systems	89	21	70	76	34	2
46	Semiconductor Devices	55	15	44	41	16	3
49	Miscellaneous-Elec.	32	10	24	27	13	2
51	Materials Processing & Handling	56	17	42	41	26	7
52	Metal Working	49	12	41	38	24	3
53	Motors, Engines & Parts	56	8	40	41	23	6
54	Optics	43	10	34	34	16	2
55	Transportation	33	8	24	28	15	3
59	Miscellaneous Mechanical	42	19	30	34	21	4
61	Agriculture, Husbandry, Food	14	5	9	13	6	1
63	Apparel & Textile	9	3	6	8	5	1
64	Earth Working & Wells	5	3	3	4	4	1
65	Furniture, House Fixtures	9	2	7	7	5	1
66	Heating	8	3	8	6	3	0
67	Pipes & Joints	13	4	8	12	7	1
68	Receptacles	20	7	14	14	6	2
69	Miscellaneous-Others	123	47	97	86	54	13

	C.1 %Yes (any)	N	Basic research	Applied research	Design and Development	Technical service
NBER	All	1,780	34.78	82.64	77.13	39.16
11	Agriculture, Food, Textiles	8	37.50	75.00	75.00	37.50
12	Coating	33	36.36	84.85	72.73	57.58
13	Gas	11	36.36	81.82	63.64	63.64
14	Organic Compounds	60	58.33	85.00	58.33	40.00
15	Resins	79	41.77	84.81	70.89	34.18
19	Miscellaneous-chemical	220	30.91	88.64	68.18	42.27
21	Communications	136	30.15	80.88	84.56	27.94
22	Computer Hardware	39	35.90	71.79	82.05	17.95
77	Computer Software	88	29.55	75.00	80.68	34.09
23	Computer Peripherals	32	31.25	90.63	68.75	31.25
24	Information Storage	38	34.21	81.58	84.21	21.05
31	Drugs	90	55.56	80.00	44.44	23.33
32	Surgery & Medical Instruments	110	38.18	82.73	80.00	31.82
33	Biotechnology	38	57.89	76.32	47.37	23.68
39	Miscellaneous-Drug&Med	25	20.00	72.00	80.00	60.00
41	Electrical Devices	44	20.45	77.27	88.64	43.18
42	Electrical Lighting	30	26.67	90.00	83.33	43.33
43	Measuring & Testing	59	30.51	91.53	86.44	44.07
44	Nuclears & X-rays	39	33.33	71.79	89.74	43.59
45	Power Systems	87	24.14	80.46	87.36	39.08
46	Semiconductor Devices	52	28.85	84.62	78.85	30.77
49	Miscellaneous-Elec.	30	33.33	80.00	90.00	43.33
51	Materials Processing & Handling	49	34.69	85.71	83.67	53.06
52	Metal Working	45	26.67	88.89	82.22	51.11
53	Motors, Engines & Parts	50	16.00	80.00	82.00	46.00
54	Optics	41	24.39	82.93	82.93	39.02
55	Transportation	30	26.67	80.00	93.33	50.00
59	Miscellaneous Mechanical	37	51.35	78.38	89.19	54.05
61	Agriculture, Husbandry, Food	13	38.46	69.23	100.00	46.15
63	Apparel & Textile	8	37.50	75.00	100.00	62.50
64	Earth Working & Wells	4	75.00	75.00	100.00	100.00
65	Furniture, House Fixtures	8	25.00	87.50	87.50	62.50
66	Heating	8	37.50	100.00	75.00	37.50
67	Pipes & Joints	12	33.33	66.67	100.00	58.33
68	Receptacles	18	38.89	77.78	77.78	33.33
69	Miscellaneous-Others	109	42.20	88.07	77.98	49.54
	US-JP weighted	**1,780**	**34.76**	**82.66**	**77.59**	**38.70**

Note: cases where sum of percents not equal 100 excluded

Japan

Question 4-3 What was the main motivation of your research leading to the invention? You can check all relevant boxes. (当該発明につながる研究の主たる動機(重複回答あり))

	All	Solving technological issues for existing (or new) business of the firm ("needs"-oriented)	Commercialization of a scientific or technological discovery with potential for practical application ("seeds"-oriented)	Exploration of new technical seeds	other	no response
All	3658	2736	812	386	53	29
Agriculture, Food, Textiles	60	38	19	10	2	0
Coating	80	55	19	11	1	0
Gas	45	35	6	5	1	1
Organic Compounds	120	82	32	14	2	2
Resins	125	91	36	12	1	1
Miscellaneous-chemical	208	155	50	14	1	4
Communications	160	124	38	13	0	1
Computer Hardware	59	48	13	6	0	0
Computer Software	123	83	36	18	1	1
Computer Peripherals	76	64	12	2	1	1
Information Storage	120	91	25	11	1	1
Drugs	127	71	64	9	4	1
Surgery & Medical Instruments	85	62	19	8	2	1
Biotechnology	87	39	40	12	5	0
Miscellaneous-Drug&Med	45	31	8	9	0	0
Electrical Devices	91	81	10	5	1	0
Electrical Lighting	96	76	17	8	0	0
Measuring & Testing	111	80	25	10	3	1
Nuclears & X-rays	72	49	17	9	2	1
Power Systems	172	136	40	14	2	1
Semiconductor Devices	129	94	32	17	1	1
Miscellaneous-Elec.	120	92	30	19	3	0
Materials Processing & Handling	103	76	21	14	1	3
Metal Working	137	104	36	10	1	1
Motors, Engines & Parts	145	130	12	13	1	0
Optics	100	77	19	8	1	3
Transportation	73	63	8	6	2	0
Miscellaneous Mechanical	124	100	16	14	3	1
Agriculture, Husbandry, Food	87	56	28	15	1	0
Apparel & Textile	77	59	16	9	0	0
Earth Working & Wells	20	18	2	2	1	0
Furniture, House Fixtures	51	38	5	8	2	0
Heating	84	74	7	5	2	0
Pipes & Joints	66	58	8	4	0	0
Receptacles	55	43	8	10	0	1
Miscellaneous-Others	225	163	38	32	4	2

%	N	Solving technological issues for existing (or new) business of the firm ("needs"-oriented)	Commercialization of a scientific or technological discovery with potential for matical application ("seeds"-oriented)	Exploration of new technical seeds	other
All	3629	75.39	22.38	10.64	1.46
Agriculture, Food, Textiles	60	63.33	31.67	16.67	3.33
Coating	80	68.75	23.75	13.75	1.25
Gas	44	79.55	13.64	11.36	2.27
Organic Compounds	118	69.49	27.12	11.86	1.69
Resins	124	73.39	29.03	9.68	0.81
Miscellaneous-chemical	204	75.98	24.51	6.86	0.49
Communications	159	77.99	23.90	8.18	0.00
Computer Hardware	59	81.36	22.03	10.17	0.00
Computer Software	122	68.03	29.51	14.75	0.82
Computer Peripherals	75	85.33	16.00	2.67	1.33
Information Storage	119	76.47	21.01	9.24	0.84
Drugs	126	56.35	50.79	7.14	3.17
Surgery & Medical Instruments	84	73.81	22.62	9.52	2.38
Biotechnology	87	44.83	45.98	13.79	5.75
Miscellaneous-Drug&Med	45	68.89	17.78	20.00	0.00
Electrical Devices	91	89.01	10.99	5.49	1.10
Electrical Lighting	96	79.17	17.71	8.33	0.00
Measuring & Testing	110	72.73	22.73	9.09	2.73
Nuclears & X-rays	71	69.01	23.94	12.68	2.82
Power Systems	171	79.53	23.39	8.19	1.17
Semiconductor Devices	128	73.44	25.00	13.28	0.78
Miscellaneous-Elec.	120	76.67	25.00	15.83	2.50
Materials Processing & Handling	100	76.00	21.00	14.00	1.00
Metal Working	136	76.47	26.47	7.35	0.74
Motors, Engines & Parts	145	89.66	8.28	8.97	0.69
Optics	97	79.38	19.59	8.25	1.03
Transportation	73	86.30	10.96	8.22	2.74
Miscellaneous Mechanical	123	81.30	13.01	11.38	2.44
Agriculture, Husbandry, Food	87	64.37	32.18	17.24	1.15
Apparel & Textile	77	76.62	20.78	11.69	0.00
Earth Working & Wells	20	90.00	10.00	10.00	5.00
Furniture, House Fixtures	51	74.51	9.80	15.69	3.92
Heating	84	88.10	8.33	5.95	2.38
Pipes & Joints	66	87.88	12.12	6.06	0.00
Receptacles	54	79.63	14.81	18.52	0.00
Miscellaneous-Others	223	73.09	17.04	14.35	1.79
JP weighted		76.48	21.91	10.00	1.19

Japan (1/2)

Question 4-4 How many months of the research led up to this patent application? (研究開始から特許出願までに経過した時間)

	All	0.5 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	Over 8 years	No response
All	3658	232	450	1319	798	365	89	134	24	19	76	152
Agriculture, Food, Textiles	60	1	4	18	17	6	4	4	0	0	2	4
Coating	80	7	5	34	20	4	0	3	0	1	2	4
Gas	45	1	1	16	14	5	1	1	0	0	2	4
Organic Compounds	120	3	13	49	22	10	4	8	2	2	1	6
Resins	125	6	9	42	28	19	4	7	0	0	2	8
Miscellaneous-chemical	208	8	18	58	58	31	6	5	2	0	8	14
Communications	160	10	20	66	34	15	1	4	1	1	6	2
Computer Hardware	59	4	16	24	8	2	0	1	0	0	3	1
Computer Software	123	16	11	48	26	10	2	4	0	0	1	5
Computer Peripherals	76	5	13	33	5	10	3	2	2	1	0	2
Information Storage	120	11	29	47	18	5	2	2	1	1	0	4
Drugs	127	3	13	30	34	22	5	5	1	0	9	5
Surgery & Medical Instruments	85	6	14	17	21	11	2	3	1	1	2	7
Biotechnology	87	4	1	17	20	14	8	9	3	2	7	2
Miscellaneous-Drug&Med	45	2	7	17	11	3	0	2	0	0	0	3
Electrical Devices	91	11	20	35	15	6	0	2	0	0	0	2
Electrical Lighting	96	4	13	38	19	7	1	5	1	1	3	4
Measuring & Testing	111	4	9	46	26	14	5	3	0	0	1	3
Nuclears & X-rays	72	2	6	29	17	5	2	3	0	0	2	6
Power Systems	172	5	33	69	26	16	8	6	2	3	2	2
Semiconductor Devices	129	6	12	47	35	10	2	8	0	0	2	7
Miscellaneous-Elec.	120	9	16	44	28	11	1	4	0	1	1	5
Materials Processing & Handling	103	5	16	40	20	7	2	3	2	2	2	4
Metal Working	137	8	9	39	43	18	4	7	1	1	3	4
Motors, Engines & Parts	145	9	17	54	30	14	5	7	2	0	1	6
Optics	100	7	17	34	22	7	3	1	0	0	2	7
Transportation	73	5	7	27	21	4	3	1	0	0	0	5
Miscellaneous Mechanical	124	13	15	50	26	6	4	3	0	1	1	5
Agriculture, Husbandry, Food	87	3	10	28	22	15	1	5	0	0	1	2
Apparel & Textile	77	12	9	29	12	7	2	2	0	1	1	2
Earth Working & Wells	20	1	2	11	2	2	0	0	0	0	2	0
Furniture, House Fixtures	51	6	6	22	11	3	0	0	0	0	2	1
Heating	84	3	8	31	23	11	0	2	1	0	2	3
Pipes & Joints	66	8	10	25	10	7	0	3	0	0	0	3
Receptacles	55	6	8	18	14	4	0	0	1	0	1	3
Miscellaneous-Others	225	18	33	87	40	24	4	9	1	0	2	7

%	N	0.5 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	Over 8 years	Total
All	3506	6.62	12.84	37.62	22.76	10.41	2.54	3.82	0.68	0.54	2.17	100
Agriculture, Food, Textiles	56	1.79	7.14	32.14	30.36	10.71	7.14	7.14	0	0	3.57	100
Coating	76	9.21	6.58	44.74	26.32	5.26	0	3.95	0	1.32	2.63	100
Gas	41	2.44	2.44	39.02	34.15	12.2	2.44	2.44	0	0	4.88	100
Organic Compounds	114	2.63	11.4	42.98	19.3	8.77	3.51	7.02	1.75	1.75	0.88	100
Resins	117	5.13	7.69	35.9	23.93	16.24	3.42	5.98	0	0	1.71	100
Miscellaneous-chemical	194	4.12	9.28	29.9	29.9	15.98	3.09	2.58	1.03	0	4.12	100
Communications	158	6.33	12.66	41.77	21.52	9.49	0.63	2.53	0.63	0.63	3.8	100
Computer Hardware	58	6.9	27.59	41.38	13.79	3.45	0	1.72	0	0	5.17	100
Computer Software	118	13.56	9.32	40.68	22.03	8.47	1.69	3.39	0	0	0.85	100
Computer Peripherals	74	6.76	17.57	44.59	6.76	13.51	4.05	2.7	2.7	1.35	0	100
Information Storage	116	9.48	25	40.52	15.52	4.31	1.72	1.72	0.86	0.86	0	100
Drugs	122	2.46	10.66	24.59	27.87	18.03	4.1	4.1	0.82	0	7.38	100
Surgery & Medical Instruments	78	7.69	17.95	21.79	26.92	14.1	2.56	3.85	1.28	1.28	2.56	100
Biotechnology	85	4.71	1.18	20	23.53	16.47	9.41	10.59	3.53	2.35	8.24	100
Miscellaneous-Drug&Med	42	4.76	16.67	40.48	26.19	7.14	0	4.76	0	0	0	100
Electrical Devices	89	12.36	22.47	39.33	16.85	6.74	0	2.25	0	0	0	100
Electrical Lighting	92	4.35	14.13	41.3	20.65	7.61	1.09	5.43	1.09	1.09	3.26	100
Measuring & Testing	108	3.7	8.33	42.59	24.07	12.96	4.63	2.78	0	0	0.93	100
Nuclears & X-rays	66	3.03	9.09	43.94	25.76	7.58	3.03	4.55	0	0	3.03	100
Power Systems	170	2.94	19.41	40.59	15.29	9.41	4.71	3.53	1.18	1.76	1.18	100
Semiconductor Devices	122	4.92	9.84	38.52	28.69	8.2	1.64	6.56	0	0	1.64	100
Miscellaneous-Elec.	115	7.83	13.91	38.26	24.35	9.57	0.87	3.48	0	0.87	0.87	100
Materials Processing & Handling	99	5.05	16.16	40.4	20.2	7.07	2.02	3.03	2.02	2.02	2.02	100
Metal Working	133	6.02	6.77	29.32	32.33	13.53	3.01	5.26	0.75	0.75	2.26	100
Motors, Engines & Parts	139	6.47	12.23	38.85	21.58	10.07	3.6	5.04	1.44	0	0.72	100
Optics	93	7.53	18.28	36.56	23.66	7.53	3.23	1.08	0	0	2.15	100
Transportation	68	7.35	10.29	39.71	30.88	5.88	4.41	1.47	0	0	0	100
Miscellaneous Mechanical	119	10.92	12.61	42.02	21.85	5.04	3.36	2.52	0	0.84	0.84	100
Agriculture, Husbandry, Food	85	3.53	11.76	32.94	25.88	17.65	1.18	5.88	0	0	1.18	100
Apparel & Textile	75	16	12	38.67	16	9.33	2.67	2.67	0	1.33	1.33	100
Earth Working & Wells	20	5	10	55	10	10	0	0	0	0	10	100
Furniture, House Fixtures	50	12	12	44	22	6	0	0	0	0	4	100
Heating	81	3.7	9.88	38.27	28.4	13.58	0	2.47	1.23	0	2.47	100
Pipes & Joints	63	12.7	15.87	39.68	15.87	11.11	0	4.76	0	0	0	100
Receptacles	52	11.54	15.38	34.62	26.92	7.69	0	0	1.92	0	1.92	100
Miscellaneous-Others	218	8.26	15.14	39.91	18.35	11.01	1.83	4.13	0.46	0	0.92	100
US-JP weighted		6.55	13.15	37.27	22.52	10.67	2.56	3.7	0.74	0.54	2.3	100
JP weighted		6.59	13.57	38.65	21.53	10.38	2.47	3.58	0.72	0.55	1.96	100

US (1/2)

Question 4-4 How many months of the research led up to this patent application? (研究開始から特許出願までに経過した時間)

	A.3 How many months did the research leading to this patent last until its application?	all	within 0.5 year	1 year	2 year	3 year	4 year	5 year	6 year	7 year	8 year	9 year or more	Missing
NBER	All	1,919	480	476	524	209	75	53	12	5	6	27	52
11	Agriculture, Food, Textiles	8	1	4	0	2	1	0	0	0	0	0	0
12	Coating	34	4	5	20	2	0	0	2	0	0	0	1
13	Gas	11	4	0	5	1	1	0	0	0	0	0	0
14	Organic Compounds	61	13	9	23	10	3	2	0	0	1	0	0
15	Resins	84	10	20	29	15	2	4	1	0	0	1	2
19	Miscellaneous-chemical	233	49	57	61	37	8	13	1	0	1	4	2
21	Communications	149	66	30	32	9	4	1	0	0	0	1	6
22	Computer Hardware	42	9	13	10	8	1	1	0	0	0	0	0
77	Computer Software	93	28	27	24	3	4	3	0	0	0	3	1
23	Computer Peripherals	33	8	12	11	1	0	1	0	0	0	0	0
24	Information Storage	42	16	11	7	5	1	0	0	1	0	1	0
31	Drugs	101	5	16	34	24	9	5	1	1	0	3	3
32	Surgery & Medical Instruments	123	23	31	39	9	5	3	1	0	1	4	7
33	Biotechnology	41	7	9	11	6	2	2	1	1	0	0	2
39	Miscellaneous-Drug&Med	29	8	10	5	1	3	0	0	0	0	1	1
41	Electrical Devices	45	18	13	7	5	0	0	0	0	0	0	2
42	Electrical Lighting	33	7	6	11	1	2	1	1	0	1	1	2
43	Measuring & Testing	62	15	15	21	4	2	0	0	0	0	1	4
44	Nuclears & X-rays	39	12	14	6	3	1	0	0	0	1	0	2
45	Power Systems	89	25	22	25	8	4	0	1	0	0	2	2
46	Semiconductor Devices	55	16	14	13	6	2	0	1	0	0	0	3
49	Miscellaneous-Elec.	32	4	10	11	5	0	1	0	0	0	0	1
51	Materials Processing & Handling	56	13	12	16	9	2	1	0	0	0	1	2
52	Metal Working	49	15	10	10	6	3	2	2	0	0	1	0
53	Motors, Engines & Parts	56	14	17	16	6	1	0	0	1	0	0	1
54	Optics	43	16	16	5	2	2	1	0	0	0	0	1
55	Transportation	33	8	9	9	3	1	1	0	0	0	0	2
59	Miscellaneous Mechanical	42	11	13	14	2	0	0	0	0	0	0	2
61	Agriculture, Husbandry, Food	14	2	5	3	2	1	0	0	0	0	1	0
63	Apparel & Textile	9	4	4	1	0	0	0	0	0	0	0	0
64	Earth Working & Wells	5	0	0	1	1	1	1	0	0	0	0	1
65	Furniture, House Fixtures	9	4	3	1	1	0	0	0	0	0	0	0
66	Heating	8	1	4	2	0	1	0	0	0	0	0	0
67	Pipes & Joints	13	4	3	3	0	0	2	0	1	0	0	0
68	Receptacles	20	11	4	2	0	1	1	0	0	0	0	1
69	Miscellaneous-Others	123	29	28	36	12	7	7	0	0	1	2	1

	%	N	within 0.5 year	1 year	2 year	3 year	4 year	5 year	6 year	7 year	8 year	9 year or more	Total
NBER	All	1867	25.71	25.50	28.07	11.19	4.02	2.84	0.64	0.27	0.32	1.45	100
11	Agriculture, Food, Textiles	8	12.50	50.00	0.00	25.00	12.50	0.00	0.00	0.00	0.00	0.00	100
12	Coating	33	12.12	15.15	60.61	6.06	0.00	0.00	6.06	0.00	0.00	0.00	100
13	Gas	11	36.36	0.00	45.45	9.09	9.09	0.00	0.00	0.00	0.00	0.00	100
14	Organic Compounds	61	21.31	14.75	37.70	16.39	4.92	3.28	0.00	0.00	1.64	0.00	100
15	Resins	82	12.20	24.39	35.37	18.29	2.44	4.88	1.22	0.00	0.00	1.22	100
19	Miscellaneous-chemical	231	21.21	24.68	26.41	16.02	3.46	5.63	0.43	0.00	0.43	1.73	100
21	Communications	143	46.15	20.98	22.38	6.29	2.80	0.70	0.00	0.00	0.00	0.70	100
22	Computer Hardware	42	21.43	30.95	23.81	19.05	2.38	2.38	0.00	0.00	0.00	0.00	100
77	Computer Software	92	30.43	29.35	26.09	3.26	4.35	3.26	0.00	0.00	0.00	3.26	100
23	Computer Peripherals	33	24.24	36.36	33.33	3.03	0.00	3.03	0.00	0.00	0.00	0.00	100
24	Information Storage	42	38.10	26.19	16.67	11.90	2.38	0.00	0.00	2.38	0.00	2.38	100
31	Drugs	98	5.10	16.33	34.69	24.49	9.18	5.10	1.02	1.02	0.00	3.06	100
32	Surgery & Medical Instruments	116	19.83	26.72	33.62	7.76	4.31	2.59	0.86	0.00	0.86	3.45	100
33	Biotechnology	39	17.95	23.08	28.21	15.38	5.13	5.13	2.56	2.56	0.00	0.00	100
39	Miscellaneous-Drug&Med	28	28.57	35.71	17.86	3.57	10.71	0.00	0.00	0.00	0.00	3.57	100
41	Electrical Devices	43	41.86	30.24	16.28	11.63	0.00	0.00	0.00	0.00	0.00	0.00	100
42	Electrical Lighting	31	22.58	19.35	35.48	3.23	6.45	3.23	3.23	0.00	3.23	3.23	100
43	Measuring & Testing	58	25.86	25.86	36.21	6.90	3.45	0.00	0.00	0.00	0.00	1.72	100
44	Nuclears & X-rays	37	32.43	37.84	16.22	8.11	2.70	0.00	0.00	0.00	2.70	0.00	100
45	Power Systems	87	28.74	25.29	28.74	9.20	4.60	0.00	1.15	0.00	0.00	2.30	100
46	Semiconductor Devices	52	30.77	26.92	25.00	11.54	3.85	0.00	1.92	0.00	0.00	0.00	100
49	Miscellaneous-Elec.	31	12.90	32.26	35.48	16.13	0.00	3.23	0.00	0.00	0.00	0.00	100
51	Materials Processing & Handling	54	24.07	22.22	29.63	16.67	3.70	1.85	0.00	0.00	0.00	1.85	100
52	Metal Working	49	30.61	20.41	20.41	12.24	6.12	4.08	4.08	0.00	0.00	2.04	100
53	Motors, Engines & Parts	55	25.45	30.91	29.09	10.91	1.82	0.00	0.00	1.82	0.00	0.00	100
54	Optics	42	38.10	38.10	11.90	4.76	4.76	2.38	0.00	0.00	0.00	0.00	100
55	Transportation	31	25.81	29.03	29.03	9.68	3.23	3.23	0.00	0.00	0.00	0.00	100
59	Miscellaneous Mechanical	40	27.50	32.50	35.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	100
61	Agriculture, Husbandry, Food	14	14.29	35.71	21.43	14.29	7.14	0.00	0.00	0.00	0.00	7.14	100
63	Apparel & Textile	9	44.44	44.44	11.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells	4	0.00	0.00	25.00	25.00	25.00	25.00	0.00	0.00	0.00	0.00	100
65	Furniture, House Fixtures	9	44.44	33.33	11.11	11.11	0.00	0.00	0.00	0.00	0.00	0.00	100
66	Heating	8	12.50	50.00	25.00	0.00	12.50	0.00	0.00	0.00	0.00	0.00	100
67	Pipes & Joints	13	30.77	23.08	23.08	0.00	0.00	15.38	0.00	7.69	0.00	0.00	100
68	Receptacles	19	57.89	21.05	10.53	0.00	5.26	5.26	0.00	0.00	0.00	0.00	100
69	Miscellaneous-Others	122	23.77	22.95	29.51	9.84	5.74	5.74	0.00	0.00	0.82	1.64	100
	US-JP weighted		**25.73**	**25.48**	**28.04**	**11.17**	**4.08**	**2.74**	**0.63**	**0.32**	**0.29**	**1.52**	100

Japan (2/2)

Question 4-4 How many months did the research leading to this patent last until its application? (研究開始から特許出願までに経過した時間)

	Mean (month)	Sd	N	Median	P90	Iqr
All	23.69	26.43	3506	18	42	12
Agriculture, Food, Textiles	28.86	21.5	56	24	60	21
Coating	22.18	19.73	76	18	39	12
Gas	27.68	25.24	41	24	38	18
Organic Compounds	25.25	23.33	114	18	60	17
Resins	25.74	22.39	117	24	48	24
Miscellaneous-chemical	28.82	35.9	194	24	48	24
Communications	23.63	26.4	158	18	36	12
Computer Hardware	20.19	28.05	58	12	36	15
Computer Software	19.08	15.1	118	14	36	12
Computer Peripherals	21.11	18.1	74	14	48	18
Information Storage	16.34	14.49	116	12	34	16.5
Drugs	31.83	27.9	122	24	60	24
Surgery & Medical Instruments	27.23	36.26	78	24	48	28
Biotechnology	45.96	47.14	85	36	84	33
Miscellaneous-Drug&Med	18.81	13.73	42	12.5	36	12
Electrical Devices	15.34	12.21	89	12	35	18
Electrical Lighting	25.33	31.95	92	18	60	12
Measuring & Testing	22.1	16.27	108	18	42	12.5
Nuclears & X-rays	23.23	21.14	66	16	48	12
Power Systems	23.79	30.23	170	14	48	12
Semiconductor Devices	23.38	21.28	122	18	39	12
Miscellaneous-Elec.	20.16	16.28	115	18	36	12
Materials Processing & Handling	24.47	29.86	99	17	54	12
Metal Working	26.17	19.06	133	24	48	24
Motors, Engines & Parts	22.84	18.18	139	18	48	18
Optics	19.84	18.48	93	14	36	14
Transportation	19.6	12.46	68	18	36	12
Miscellaneous Mechanical	21.76	38.55	119	14	36	12
Agriculture, Husbandry, Food	24.09	17.51	85	24	36	24
Apparel & Textile	19.59	17.87	75	12	42	18
Earth Working & Wells	31	53.1	20	12	66	12
Furniture, House Fixtures	24.56	50.6	50	17.5	33	12
Heating	26.63	43.65	81	18	36	13
Pipes & Joints	17.94	14.06	63	12	36	15
Receptacles	19.19	17.16	52	12.5	36	17
Miscellaneous-Others	20.67	19.26	218	14	36	12
US-JP weighted	23.81					
JP weighted	23.04					

US (2/2)

Question 4-4 How many months did the research leading to this patent last until its application? (研究開始から特許出願までに経過した時間)

		A.3	mean (month)	sd	N
NBER		All	20.55	24.37	1867
	11	Agriculture, Food, Textiles	19.25	15.23	8
	12	Coating	21.00	14.72	33
	13	Gas	19.45	13.92	11
	14	Organic Compounds	21.48	16.09	61
	15	Resins	23.39	18.11	82
	19	Miscellaneous-chemical	23.26	25.73	231
	21	Communications	14.17	17.66	143
	22	Computer Hardware	18.14	13.77	42
	77	Computer Software	20.88	31.23	92
	23	Computer Peripherals	14.61	11.49	33
	24	Information Storage	18.44	22.21	42
	31	Drugs	31.94	31.37	98
	32	Surgery & Medical Instruments	22.75	23.62	116
	33	Biotechnology	24.18	19.16	39
	39	Miscellaneous-Drug&Med	19.93	25.58	28
	41	Electrical Devices	12.28	10.13	43
	42	Electrical Lighting	30.26	44.32	31
	43	Measuring & Testing	21.79	46.40	58
	44	Nuclears & X-rays	16.08	17.27	37
	45	Power Systems	20.20	29.50	87
	46	Semiconductor Devices	16.77	14.00	52
	49	Miscellaneous-Elec.	18.77	11.78	31
	51	Materials Processing & Handling	19.56	18.98	54
	52	Metal Working	22.78	23.12	49
	53	Motors, Engines & Parts	16.96	14.25	55
	54	Optics	13.60	12.74	42
	55	Transportation	17.68	13.51	31
	59	Miscellaneous Mechanical	13.33	8.03	40
	61	Agriculture, Husbandry, Food	24.57	30.17	14
	63	Apparel & Textile	9.00	4.53	9
	64	Earth Working & Wells	39.50	19.62	4
	65	Furniture, House Fixtures	13.33	10.30	9
	66	Heating	17.38	11.62	8
	67	Pipes & Joints	24.08	24.27	13
	68	Receptacles	11.54	14.81	19
	69	Miscellaneous-Others	22.89	31.76	122
		US-JP weighted	**20.64**	**24.69**	

Japan

Question 4-5 Which of the following scenarios best describes the creative process that led to your invention? (当該発明の創造プロセス)

	All	研究プロジェクトの主要目標	研究プロジェクトの主要目標ではないが予想できた副産物	研究プロジェクトの主要目標とは関係なく予想もしていない副産物	アイデアを通常業務で着想し、研究プロジェクトの中で発展	アイデアを研究開発費をかけることなく直接特許化した	その他	無回答
	All	**targeted achievement**	**expected by-product**	**unexpected by product**	**related to your normal job**	**no R&D involved**	**other**	**no response**
All	3658	1798	804	123	414	430	44	45
Agriculture, Food, Textiles	60	36	14	1	4	2	1	2
Coating	80	37	19	3	14	4	2	1
Gas	45	19	10	1	7	3	3	2
Organic Compounds	120	75	16	8	10	5	1	5
Resins	125	66	29	7	13	4	0	6
Miscellaneous-chemical	208	113	44	6	18	17	3	7
Communications	160	67	51	4	14	23	1	0
Computer Hardware	59	27	20	1	2	9	0	0
Computer Software	123	48	38	3	15	15	2	2
Computer Peripherals	76	41	15	3	5	11	1	0
Information Storage	120	46	36	1	12	23	1	1
Drugs	127	84	20	7	9	4	2	1
Surgery & Medical Instruments	85	41	17	6	9	11	1	0
Biotechnology	87	51	14	11	3	5	2	1
Miscellaneous-Drug&Med	45	20	11	2	5	7	0	0
Electrical Devices	91	38	17	0	19	16	1	0
Electrical Lighting	96	47	21	5	12	9	2	0
Measuring & Testing	111	56	25	2	12	12	3	1
Nuclears & X-rays	72	30	17	3	8	14	0	0
Power Systems	172	86	51	3	19	13	0	0
Semiconductor Devices	129	56	36	9	11	16	0	1
Miscellaneous-Elec.	120	51	33	5	13	16	1	1
Materials Processing & Handling	103	53	16	2	16	10	3	3
Metal Working	137	76	17	6	22	14	1	1
Motors, Engines & Parts	145	79	33	3	14	14	1	1
Optics	100	50	28	3	7	10	0	2
Transportation	73	33	15	0	10	14	1	0
Miscellaneous Mechanical	124	53	28	1	18	21	0	3
Agriculture, Husbandry, Food	87	51	13	1	9	10	3	0
Apparel & Textile	77	29	9	1	10	24	3	1
Earth Working & Wells	20	10	1	0	4	5	0	0
Furniture, House Fixtures	51	20	9	2	6	12	2	0
Heating	84	36	18	3	17	9	1	0
Pipes & Joints	66	33	13	0	10	10	0	0
Receptacles	55	20	9	1	14	9	0	2
Miscellaneous-Others	225	120	41	9	23	29	2	1

%	N	targeted achievement	expected by-product	unexpected by product	related to your normal job	no R&D involved	other	Total
All	3613	49.76	22.25	3.4	11.46	11.9	1.22	100
Agriculture, Food, Textiles	58	62.07	24.14	1.72	6.9	3.45	1.72	100
Coating	79	46.84	24.05	3.8	17.72	5.06	2.53	100
Gas	43	44.19	23.26	2.33	16.28	6.98	6.98	100
Organic Compounds	115	65.22	13.91	6.96	8.7	4.35	0.87	100
Resins	119	55.46	24.37	5.88	10.92	3.36	0	100
Miscellaneous-chemical	201	56.22	21.89	2.99	8.96	8.46	1.49	100
Communications	160	41.88	31.87	2.5	8.75	14.37	0.63	100
Computer Hardware	59	45.76	33.9	1.69	3.39	15.25	0	100
Computer Software	121	39.67	31.4	2.48	12.4	12.4	1.65	100
Computer Peripherals	76	53.95	19.74	3.95	6.58	14.47	1.32	100
Information Storage	119	38.66	30.25	0.84	10.08	19.33	0.84	100
Drugs	126	66.67	15.87	5.56	7.14	3.17	1.59	100
Surgery & Medical Instruments	85	48.24	20	7.06	10.59	12.94	1.18	100
Biotechnology	86	59.3	16.28	12.79	3.49	5.81	2.33	100
Miscellaneous-Drug&Med	45	44.44	24.44	4.44	11.11	15.56	0	100
Electrical Devices	91	41.76	18.68	0	20.88	17.58	1.1	100
Electrical Lighting	96	48.96	21.88	5.21	12.5	9.38	2.08	100
Measuring & Testing	110	50.91	22.73	1.82	10.91	10.91	2.73	100
Nuclears & X-rays	72	41.67	23.61	4.17	11.11	19.44	0	100
Power Systems	172	50	29.65	1.74	11.05	7.56	0	100
Semiconductor Devices	128	43.75	28.13	7.03	8.59	12.5	0	100
Miscellaneous-Elec.	119	42.86	27.73	4.2	10.92	13.45	0.84	100
Materials Processing & Handling	100	53	16	2	16	10	3	100
Metal Working	136	55.88	12.5	4.41	16.18	10.29	0.74	100
Motors, Engines & Parts	144	54.86	22.92	2.08	9.72	9.72	0.69	100
Optics	98	51.02	28.57	3.06	7.14	10.2	0	100
Transportation	73	45.21	20.55	0	13.7	19.18	1.37	100
Miscellaneous Mechanical	121	43.8	23.14	0.83	14.88	17.36	0	100
Agriculture, Husbandry, Food	87	58.62	14.94	1.15	10.34	11.49	3.45	100
Apparel & Textile	76	38.16	11.84	1.32	13.16	31.58	3.95	100
Earth Working & Wells	20	50	5	0	20	25	0	100
Furniture, House Fixtures	51	39.22	17.65	3.92	11.76	23.53	3.92	100
Heating	84	42.86	21.43	3.57	20.24	10.71	1.19	100
Pipes & Joints	66	50	19.7	0	15.15	15.15	0	100
Receptacles	53	37.74	16.98	1.89	26.42	16.98	0	100
Miscellaneous-Others	224	53.57	18.3	4.02	10.27	12.95	0.89	100
US-JP weighted		50.01	23.18	3.54	10.78	11.41	1.09	100
JP weighted		49.33	23.76	3.16	10.96	11.73	1.06	100

US

Question 4-5 Which of the following scenarios best describes the creative process that led to your invention? (当該発明の創造プロセス)

		all	Targets	Expected	Unexpected	Related to job	No R&D	other	Missing
	A.4 Which of the following scenarios best describes the creative process that led to your invention?								
NBER	All	1,919	974	207	220	212	270	14	22
11	Agriculture, Food, Textiles	8	5	1	0	0	1	0	1
12	Coating	34	19	0	5	5	4	0	1
13	Gas	11	5	2	1	0	3	0	0
14	Organic Compounds	61	38	6	10	5	2	0	0
15	Resins	84	60	5	6	7	4	2	0
19	Miscellaneous-chemical	233	130	25	24	20	32	2	0
21	Communications	149	53	16	24	16	36	0	4
22	Computer Hardware	42	20	4	5	5	8	0	0
77	Computer Software	93	37	17	16	12	10	0	1
23	Computer Peripherals	33	18	7	3	2	3	0	0
24	Information Storage	42	14	10	5	3	10	0	0
31	Drugs	101	77	7	4	6	6	1	0
32	Surgery & Medical Instruments	123	68	10	13	12	18	1	1
33	Biotechnology	41	22	5	5	6	2	0	1
39	Miscellaneous-Drug&Med	29	13	1	1	8	5	0	1
41	Electrical Devices	45	23	3	3	7	8	1	0
42	Electrical Lighting	33	15	6	6	3	1	0	2
43	Measuring & Testing	62	27	13	8	6	5	2	1
44	Nuclears & X-rays	39	21	4	4	3	6	0	1
45	Power Systems	89	35	10	15	7	20	0	2
46	Semiconductor Devices	55	23	9	10	8	4	0	1
49	Miscellaneous-Elec.	32	16	4	2	5	4	0	1
51	Materials Processing & Handling	56	32	4	3	7	9	0	1
52	Metal Working	49	22	6	3	9	7	2	0
53	Motors, Engines & Parts	56	23	4	7	12	9	0	1
54	Optics	43	14	6	6	8	8	1	0
55	Transportation	33	19	3	2	3	6	0	0
59	Miscellaneous Mechanical	42	27	2	2	6	5	0	0
61	Agriculture, Husbandry, Food	14	8	2	2	0	2	0	0
63	Apparel & Textile	9	1	0	2	3	3	0	0
64	Earth Working & Wells	5	1	2	0	1	0	0	1
65	Furniture, House Fixtures	9	8	1	0	0	0	0	0
66	Heating	8	2	3	1	2	0	0	0
67	Pipes & Joints	13	5	1	4	0	3	0	0
68	Receptacles	20	10	1	4	1	3	1	0
69	Miscellaneous-Others	123	63	7	14	14	23	1	1

	%	N	The invention was the targeted achievement of a research or development project	The invention was an **expected by-product** of a research or development project, not directly related to the main target of the project	The invention was an **unexpected by-product** of a research or development project, not directly related to the main target of the project	The idea for the invention was directly **related to your normal job** (which is not inventing), and was then further developed in a (research or development) project	**pure inspiration/creativity** or from your normal job (which is not inventing)	other	Total
NBER	All	1897	51.34	10.91	11.6	11.18	14.23	0.74	100
11	Agriculture, Food, Textiles	7	71.43	14.29	0	0	14.29	0	100
12	Coating	33	57.58	0	15.15	15.15	12.12	0	100
13	Gas	11	45.45	18.18	9.09	0	27.27	0	100
14	Organic Compounds	61	62.3	9.84	16.39	8.2	3.28	0	100
15	Resins	84	71.43	5.95	7.14	8.33	4.76	2.38	100
19	Miscellaneous-chemical	233	55.79	10.73	10.3	8.58	13.73	0.86	100
21	Communications	145	36.55	11.03	16.55	11.03	24.83	0	100
22	Computer Hardware	42	47.62	9.52	11.9	11.9	19.05	0	100
77	Computer Software	92	40.22	18.48	17.39	13.04	10.87	0	100
23	Computer Peripherals	33	54.55	21.21	9.09	6.06	9.09	0	100
24	Information Storage	42	33.33	23.81	11.9	7.14	23.81	0	100
31	Drugs	101	76.24	6.93	3.96	5.94	5.94	0.99	100
32	Surgery & Medical Instruments	122	55.74	8.2	10.66	9.84	14.75	0.82	100
33	Biotechnology	40	55	12.5	12.5	15	5	0	100
39	Miscellaneous-Drug&Med	28	46.43	3.57	3.57	28.57	17.86	0	100
41	Electrical Devices	45	51.11	6.67	6.67	15.56	17.78	2.22	100
42	Electrical Lighting	31	48.39	19.35	19.35	9.68	3.23	0	100
43	Measuring & Testing	61	44.26	21.31	13.11	9.84	8.2	3.28	100
44	Nuclears & X-rays	38	55.26	10.53	10.53	7.89	15.79	0	100
45	Power Systems	87	40.23	11.49	17.24	8.05	22.99	0	100
46	Semiconductor Devices	54	42.59	16.67	18.52	14.81	7.41	0	100
49	Miscellaneous-Elec.	31	51.61	12.9	6.45	16.13	12.9	0	100
51	Materials Processing & Handling	55	58.18	7.27	5.45	12.73	16.36	0	100
52	Metal Working	49	44.9	12.24	6.12	18.37	14.29	4.08	100
53	Motors, Engines & Parts	55	41.82	7.27	12.73	21.82	16.36	0	100
54	Optics	43	32.56	13.95	13.95	18.6	18.6	2.33	100
55	Transportation	33	57.58	9.09	6.06	9.09	18.18	0	100
59	Miscellaneous Mechanical	42	64.29	4.76	4.76	14.29	11.9	0	100
61	Agriculture, Husbandry, Food	14	57.14	14.29	14.29	0	14.29	0	100
63	Apparel & Textile	9	11.11	0	22.22	33.33	33.33	0	100
64	Earth Working & Wells	4	25	50	0	25	0	0	100
65	Furniture, House Fixtures	9	88.89	11.11	0	0	0	0	100
66	Heating	8	25	37.5	12.5	25	0	0	100
67	Pipes & Joints	13	38.46	7.69	30.77	0	23.08	0	100
68	Receptacles	20	50	5	20	5	15	5	100
69	Miscellaneous-Others	122	51.64	5.74	11.48	11.48	18.85	0.82	100
	US-JP weighted		**50.94**	**11.57**	**11.5**	**11.11**	**14.15**	**0.73**	100

Japan

Question 4-6 What would best describe the type of the invention? (当該発明は「もの」「方法」どちらの発明であったか)

	All **All**	「もの」の発明 **Product**	「方法」の発明 **Process**	上記の両方 **both**	無回答 **no response**
All	3658	1638	1127	879	14
Agriculture, Food, Textiles	60	36	10	14	0
Coating	80	41	15	23	1
Gas	45	20	11	13	1
Organic Compounds	120	24	69	27	0
Resins	125	69	23	33	0
Miscellaneous-chemical	208	83	61	62	2
Communications	160	56	57	47	0
Computer Hardware	59	10	35	14	0
Computer Software	123	22	73	27	1
Computer Peripherals	76	17	35	24	0
Information Storage	120	40	53	27	0
Drugs	127	91	12	24	0
Surgery & Medical Instruments	85	55	13	16	1
Biotechnology	87	24	34	29	0
Miscellaneous-Drug&Med	45	30	5	10	0
Electrical Devices	91	51	19	21	0
Electrical Lighting	96	60	15	21	0
Measuring & Testing	111	40	44	27	0
Nuclears & X-rays	72	28	25	19	0
Power Systems	172	83	50	39	0
Semiconductor Devices	129	51	32	46	0
Miscellaneous-Elec.	120	39	53	28	0
Materials Processing & Handling	103	32	46	23	2
Metal Working	137	34	62	41	0
Motors, Engines & Parts	145	93	35	17	0
Optics	100	44	29	26	1
Transportation	73	52	13	7	1
Miscellaneous Mechanical	124	74	26	22	2
Agriculture, Husbandry, Food	87	36	28	23	0
Apparel & Textile	77	36	24	17	0
Earth Working & Wells	20	7	8	5	0
Furniture, House Fixtures	51	36	8	7	0
Heating	84	49	20	15	0
Pipes & Joints	66	41	16	9	0
Receptacles	55	24	19	11	1
Miscellaneous-Others	225	110	49	65	1

%	**N**	**Product**	**Process**	**both**	**Total**
All	3644	44.95	30.93	24.12	100
Agriculture, Food, Textiles	60	60	16.67	23.33	100
Coating	79	51.9	18.99	29.11	100
Gas	44	45.45	25	29.55	100
Organic Compounds	120	20	57.5	22.5	100
Resins	125	55.2	18.4	26.4	100
Miscellaneous-chemical	206	40.29	29.61	30.1	100
Communications	160	35	35.63	29.38	100
Computer Hardware	59	16.95	59.32	23.73	100
Computer Software	122	18.03	59.84	22.13	100
Computer Peripherals	76	22.37	46.05	31.58	100
Information Storage	120	33.33	44.17	22.5	100
Drugs	127	71.65	9.45	18.9	100
Surgery & Medical Instruments	84	65.48	15.48	19.05	100
Biotechnology	87	27.59	39.08	33.33	100
Miscellaneous-Drug&Med	45	66.67	11.11	22.22	100
Electrical Devices	91	56.04	20.88	23.08	100
Electrical Lighting	96	62.5	15.63	21.88	100
Measuring & Testing	111	36.04	39.64	24.32	100
Nuclears & X-rays	72	38.89	34.72	26.39	100
Power Systems	172	48.26	29.07	22.67	100
Semiconductor Devices	129	39.53	24.81	35.66	100
Miscellaneous-Elec.	120	32.5	44.17	23.33	100
Materials Processing & Handling	101	31.68	45.54	22.77	100
Metal Working	137	24.82	45.26	29.93	100
Motors, Engines & Parts	145	64.14	24.14	11.72	100
Optics	99	44.44	29.29	26.26	100
Transportation	72	72.22	18.06	9.72	100
Miscellaneous Mechanical	122	60.66	21.31	18.03	100
Agriculture, Husbandry, Food	87	41.38	32.18	26.44	100
Apparel & Textile	77	46.75	31.17	22.08	100
Earth Working & Wells	20	35	40	25	100
Furniture, House Fixtures	51	70.59	15.69	13.73	100
Heating	84	58.33	23.81	17.86	100
Pipes & Joints	66	62.12	24.24	13.64	100
Receptacles	54	44.44	35.19	20.37	100
Miscellaneous-Others	224	49.11	21.88	29.02	100
US-JP weighted		43.83	31.31	24.86	100
JP weighted		43.15	31.95	24.9	100

US

Question 4-6 What would best describe the type of the invention? (当該発明は「もの」「方法」どちらの発明であったか)

	A.5 Which of the following would best describe the type of the invention in the focal patent?	all	Product	Process	Both	Missing
NBER	All	1,919	899	378	529	113
11	Agriculture, Food, Textiles	8	4	2	2	0
12	Coating	34	13	5	14	2
13	Gas	11	3	3	5	0
14	Organic Compounds	61	15	29	16	1
15	Resins	84	41	13	29	1
19	Miscellaneous-chemical	233	83	67	69	14
21	Communications	149	78	26	35	10
22	Computer Hardware	42	21	11	10	0
77	Computer Software	93	31	28	30	4
23	Computer Peripherals	33	15	8	7	3
24	Information Storage	42	23	9	7	3
31	Drugs	101	56	8	27	10
32	Surgery & Medical Instruments	123	73	10	29	11
33	Biotechnology	41	11	12	15	3
39	Miscellaneous-Drug&Med	29	17	2	9	1
41	Electrical Devices	45	31	3	8	3
42	Electrical Lighting	33	19	3	8	3
43	Measuring & Testing	62	28	8	19	7
44	Nuclears & X-rays	39	18	5	12	4
45	Power Systems	89	54	10	22	3
46	Semiconductor Devices	55	13	24	14	4
49	Miscellaneous-Elec.	32	12	9	8	3
51	Materials Processing & Handling	56	19	19	16	2
52	Metal Working	49	10	23	15	1
53	Motors, Engines & Parts	56	47	2	6	1
54	Optics	43	13	10	17	3
55	Transportation	33	19	1	10	3
59	Miscellaneous Mechanical	42	23	3	15	1
61	Agriculture, Husbandry, Food	14	7	2	4	1
63	Apparel & Textile	9	4	1	4	0
64	Earth Working & Wells	5	4	0	0	1
65	Furniture, House Fixtures	9	8	0	1	0
66	Heating	8	5	0	1	2
67	Pipes & Joints	13	7	0	5	1
68	Receptacles	20	8	4	7	1
69	Miscellaneous-Others	123	66	18	33	6

	%	N	Product	Process	Both	Total
NBER	All	1806	49.78	20.93	29.29	100
11	Agriculture, Food, Textiles	8	50	25	25	100
12	Coating	32	40.63	15.63	43.75	100
13	Gas	11	27.27	27.27	45.45	100
14	Organic Compounds	60	25	48.33	26.67	100
15	Resins	83	49.4	15.66	34.94	100
19	Miscellaneous-chemical	219	37.9	30.59	31.51	100
21	Communications	139	56.12	18.71	25.18	100
22	Computer Hardware	45	50	26.19	23.81	100
77	Computer Software	89	34.83	31.46	33.71	100
23	Computer Peripherals	30	50	26.67	23.33	100
24	Information Storage	39	58.97	23.08	17.95	100
31	Drugs	91	61.54	8.79	29.67	100
32	Surgery & Medical Instruments	112	65.18	8.93	25.89	100
33	Biotechnology	38	28.95	31.58	39.47	100
39	Miscellaneous-Drug&Med	28	60.71	7.14	32.14	100
41	Electrical Devices	42	73.81	7.14	19.05	100
42	Electrical Lighting	30	63.33	10	26.67	100
43	Measuring & Testing	55	50.91	14.55	34.55	100
44	Nuclears & X-rays	35	51.43	14.29	34.29	100
45	Power Systems	86	62.79	11.63	25.58	100
46	Semiconductor Devices	51	25.49	47.06	27.45	100
49	Miscellaneous-Elec.	29	41.38	31.03	27.59	100
51	Materials Processing & Handling	54	35.19	35.19	29.63	100
52	Metal Working	48	20.83	47.92	31.25	100
53	Motors, Engines & Parts	55	85.45	3.64	10.91	100
54	Optics	40	32.5	25	42.5	100
55	Transportation	30	63.33	3.33	33.33	100
59	Miscellaneous Mechanical	41	56.1	7.32	36.59	100
61	Agriculture, Husbandry, Food	13	53.85	15.38	30.77	100
63	Apparel & Textile	9	44.44	11.11	44.44	100
64	Earth Working & Wells	4	100	0	0	100
65	Furniture, House Fixtures	9	88.89	0	11.11	100
66	Heating	6	83.33	0	16.67	100
67	Pipes & Joints	12	58.33	0	41.67	100
68	Receptacles	19	42.11	21.05	36.84	100
69	Miscellaneous-Others	117	56.41	15.38	28.21	100
	US-JP weighted		**49.91**	**20.92**	**29.17**	100

Japan

Question 4-7 Did the invention build in a substantial way on any prior patent that you were aware of? (当該発明は、先行特許を基礎として生み出されたものか)

if "yes", had the inventions of these prior patents been made in the firm (including the affiliated firms)firms as you belonged to?(当該発明の先行特許は所属企業内で生み出されたものか)

	All	no	yes	no response	All	no	yes	no response
All	3658	1776	1848	34	1848	701	1131	16
Agriculture, Food, Textiles	60	21	38	1	38	21	17	0
Coating	80	28	52	0	52	20	32	0
Gas	45	20	24	1	24	7	17	0
Organic Compounds	120	48	67	5	67	21	45	1
Resins	125	47	73	5	73	32	41	0
Miscellaneous-chemical	208	87	116	5	116	48	67	1
Communications	160	81	79	0	79	30	48	1
Computer Hardware	59	32	27	0	27	6	21	0
Computer Software	123	79	43	1	43	13	29	1
Computer Peripherals	76	38	37	1	37	11	25	1
Information Storage	120	65	55	0	55	25	30	0
Drugs	127	58	67	2	67	26	41	0
Surgery & Medical Instruments	85	46	38	1	38	12	26	0
Biotechnology	87	45	41	1	41	18	23	0
Miscellaneous-Drug&Med	45	25	20	0	20	9	11	0
Electrical Devices	91	42	49	0	49	26	23	0
Electrical Lighting	96	43	53	0	53	23	29	1
Measuring & Testing	111	68	43	0	43	14	29	0
Nuclears & X-rays	72	36	36	0	36	8	27	1
Power Systems	172	73	98	1	98	38	59	1
Semiconductor Devices	129	75	54	0	54	27	27	0
Miscellaneous-Elec.	120	59	61	0	61	23	38	0
Materials Processing & Handling	103	50	50	3	50	22	28	0
Metal Working	137	61	76	0	76	25	50	1
Motors, Engines & Parts	145	61	84	0	84	31	53	0
Optics	100	53	46	1	46	19	26	1
Transportation	73	37	36	0	36	13	23	0
Miscellaneous Mechanical	124	66	56	2	56	18	38	0
Agriculture, Husbandry, Food	87	48	37	2	37	11	26	0
Apparel & Textile	77	37	40	0	40	9	30	1
Earth Working & Wells	20	11	9	0	9	3	5	1
Furniture, House Fixtures	51	27	24	0	24	9	13	2
Heating	84	38	46	0	46	20	26	0
Pipes & Joints	66	33	32	1	32	12	20	0
Receptacles	55	26	28	1	28	13	15	0
Miscellaneous-Others	225	112	113	0	113	38	73	2

%	N	no	yes	Total	N	no	yes	Total
All	3624	49.01	50.99	100	1832	38.26	61.74	100
Agriculture, Food, Textiles	59	35.59	64.41	100	38	55.26	44.74	100
Coating	80	35	65	100	52	38.46	61.54	100
Gas	44	45.45	54.55	100	24	29.17	70.83	100
Organic Compounds	115	41.74	58.26	100	66	31.82	68.18	100
Resins	120	39.17	60.83	100	73	43.84	56.16	100
Miscellaneous-chemical	203	42.86	57.14	100	115	41.74	58.26	100
Communications	160	50.63	49.38	100	78	38.46	61.54	100
Computer Hardware	59	54.24	45.76	100	27	22.22	77.78	100
Computer Software	122	64.75	35.25	100	42	30.95	69.05	100
Computer Peripherals	75	50.67	49.33	100	36	30.56	69.44	100
Information Storage	120	54.17	45.83	100	55	45.45	54.55	100
Drugs	125	46.4	53.6	100	67	38.81	61.19	100
Surgery & Medical Instruments	84	54.76	45.24	100	38	31.58	68.42	100
Biotechnology	86	52.33	47.67	100	41	43.9	56.1	100
Miscellaneous-Drug&Med	45	55.56	44.44	100	20	45	55	100
Electrical Devices	91	46.15	53.85	100	49	53.06	46.94	100
Electrical Lighting	96	44.79	55.21	100	52	44.23	55.77	100
Measuring & Testing	111	61.26	38.74	100	43	32.56	67.44	100
Nuclears & X-rays	72	50	50	100	35	22.86	77.14	100
Power Systems	171	42.69	57.31	100	97	39.18	60.82	100
Semiconductor Devices	129	58.14	41.86	100	54	50	50	100
Miscellaneous-Elec.	120	49.17	50.83	100	61	37.7	62.3	100
Materials Processing & Handling	100	50	50	100	50	44	56	100
Metal Working	137	44.53	55.47	100	75	33.33	66.67	100
Motors, Engines & Parts	145	42.07	57.93	100	84	36.9	63.1	100
Optics	99	53.54	46.46	100	45	42.22	57.78	100
Transportation	73	50.68	49.32	100	36	36.11	63.89	100
Miscellaneous Mechanical	122	54.1	45.9	100	56	32.14	67.86	100
Agriculture, Husbandry, Food	85	56.47	43.53	100	37	29.73	70.27	100
Apparel & Textile	77	48.05	51.95	100	39	23.08	76.92	100
Earth Working & Wells	20	55	45	100	8	37.5	62.5	100
Furniture, House Fixtures	51	52.94	47.06	100	22	40.91	59.09	100
Heating	84	45.24	54.76	100	46	43.48	56.52	100
Pipes & Joints	65	50.77	49.23	100	32	37.5	62.5	100
Receptacles	54	48.15	51.85	100	28	46.43	53.57	100
Miscellaneous-Others	225	49.78	50.22	100	111	34.23	65.77	100
JP weighted		48.93	51.07	100		38.15	61.85	100

Japan

Question 4-8 Has this invention led to any improvement inventions afterwards?（当該発明は、その後の改良発明につながったか）

	All	no	yes	no response
All	1848	647	1192	9
Agriculture, Food, Textiles	38	19	19	0
Coating	52	12	39	1
Gas	24	9	15	0
Organic Compounds	67	28	39	0
Resins	73	23	50	0
Miscellaneous-chemical	116	43	73	0
Communications	79	24	55	0
Computer Hardware	27	10	17	0
Computer Software	43	14	27	2
Computer Peripherals	37	9	28	0
Information Storage	55	31	24	0
Drugs	67	26	41	0
Surgery & Medical Instruments	38	10	28	0
Biotechnology	41	14	27	0
Miscellaneous-Drug&Med	20	9	11	0
Electrical Devices	49	21	28	0
Electrical Lighting	53	13	40	0
Measuring & Testing	43	14	28	1
Nuclears & X-rays	36	16	20	0
Power Systems	98	42	56	0
Semiconductor Devices	54	20	34	0
Miscellaneous-Elec.	61	23	38	0
Materials Processing & Handling	50	20	30	0
Metal Working	76	22	53	1
Motors, Engines & Parts	84	25	58	1
Optics	46	12	33	1
Transportation	36	14	22	0
Miscellaneous Mechanical	56	20	34	2
Agriculture, Husbandry, Food	37	13	24	0
Apparel & Textile	40	9	31	0
Earth Working & Wells	9	1	8	0
Furniture, House Fixtures	24	5	19	0
Heating	46	20	26	0
Pipes & Joints	32	11	21	0
Receptacles	28	10	18	0
Miscellaneous-Others	113	35	78	0

If YES, which type of the firms accounted for these improvement patents?（改良発明を行った組織の割合）

	All	自社	この研究で提携関係にある他社	競争企業	顧客・製品ユーザー	サプライヤー企業	その他	無回答
	All	**Your firm, including related firms**	**Firms in alliance such as co-applicants**	**The other competitor**	**Customers and product users**	**Suppliers**	**others**	**no response**
All	1192	1150	143	141	55	26	14	10
Agriculture, Food, Textiles	19	19	5	2	1	0	0	0
Coating	39	37	7	4	3	2	0	0
Gas	15	15	3	1	0	1	0	0
Organic Compounds	39	36	3	5	3	0	1	2
Resins	50	47	5	4	4	1	2	1
Miscellaneous-chemical	73	69	11	4	5	1	1	0
Communications	55	54	7	12	3	3	0	0
Computer Hardware	17	17	0	0	0	0	0	0
Computer Software	27	26	2	4	0	0	1	0
Computer Peripherals	28	27	1	2	0	0	0	1
Information Storage	24	23	3	12	0	0	0	0
Drugs	41	40	5	7	0	0	3	0
Surgery & Medical Instruments	28	24	3	3	0	0	1	1
Biotechnology	27	25	7	1	1	0	1	1
Miscellaneous-Drug&Med	11	9	3	2	1	0	0	1
Electrical Devices	28	28	3	7	1	1	0	0
Electrical Lighting	40	40	4	5	3	0	0	0
Measuring & Testing	28	27	3	1	1	0	0	0
Nuclears & X-rays	20	20	1	1	0	0	0	0
Power Systems	56	54	7	8	2	2	1	0
Semiconductor Devices	34	34	5	6	0	0	0	0
Miscellaneous-Elec.	38	36	4	3	1	1	1	0
Materials Processing & Handling	30	30	1	2	0	0	0	0
Metal Working	53	53	8	7	3	1	0	0
Motors, Engines & Parts	58	54	7	9	5	4	1	0
Optics	33	32	3	3	0	2	0	0
Transportation	22	20	2	2	0	1	0	1
Miscellaneous Mechanical	34	31	5	2	1	2	0	1
Agriculture, Husbandry, Food	24	24	0	2	2	0	0	0
Apparel & Textile	31	30	4	3	2	0	0	1
Earth Working & Wells	8	8	0	1	0	0	0	0
Furniture, House Fixtures	19	19	4	3	2	2	0	0
Heating	26	26	4	0	0	1	1	0
Pipes & Joints	21	21	1	1	1	1	0	0
Receptacles	18	18	4	0	3	0	0	0
Miscellaneous-Others	78	77	8	12	7	0	0	0

%	N	no	yes	Total
All	1839	35.18	64.82	100
Agriculture, Food, Textiles	38	50	50	100
Coating	51	23.53	76.47	100
Gas	24	37.5	62.5	100
Organic Compounds	67	41.79	58.21	100
Resins	73	31.51	68.49	100
Miscellaneous-chemical	116	37.07	62.93	100
Communications	79	30.38	69.62	100
Computer Hardware	27	37.04	62.96	100
Computer Software	41	34.15	65.85	100
Computer Peripherals	37	24.32	75.68	100
Information Storage	55	56.36	43.64	100
Drugs	67	38.81	61.19	100
Surgery & Medical Instruments	38	26.32	73.68	100
Biotechnology	41	34.15	65.85	100
Miscellaneous-Drug&Med	20	45	55	100
Electrical Devices	49	42.86	57.14	100
Electrical Lighting	53	24.53	75.47	100
Measuring & Testing	42	33.33	66.67	100
Nuclears & X-rays	36	44.44	55.56	100
Power Systems	98	42.86	57.14	100
Semiconductor Devices	54	37.04	62.96	100
Miscellaneous-Elec.	61	37.7	62.3	100
Materials Processing & Handling	50	40	60	100
Metal Working	75	29.33	70.67	100
Motors, Engines & Parts	83	30.12	69.88	100
Optics	45	26.67	73.33	100
Transportation	36	38.89	61.11	100
Miscellaneous Mechanical	54	37.04	62.96	100
Agriculture, Husbandry, Food	37	35.14	64.86	100
Apparel & Textile	40	22.5	77.5	100
Earth Working & Wells	9	11.11	88.89	100
Furniture, House Fixtures	24	20.83	79.17	100
Heating	46	43.48	56.52	100
Pipes & Joints	32	34.38	65.63	100
Receptacles	28	35.71	64.29	100
Miscellaneous-Others	113	30.97	69.03	100
JP weighted		35.01	64.99	100

	N	Your firm, including related firms	Firms in alliance such as co-applicants	The other competitor	Customers and product users	Suppliers	others	Total
All	1182	97.29	12.10	11.93	4.65	2.20	1.18	100
Agriculture, Food, Textiles	19	100.00	26.32	10.53	5.26	0.00	0.00	100
Coating	39	94.87	17.95	10.26	7.69	5.13	0.00	100
Gas	15	100.00	20.00	6.67	0.00	6.67	0.00	100
Organic Compounds	37	97.30	8.11	13.51	8.11	0.00	2.70	100
Resins	49	95.92	10.20	8.16	8.16	2.04	4.08	100
Miscellaneous-chemical	73	94.52	15.07	5.48	6.85	1.37	1.37	100
Communications	55	98.18	12.73	21.82	5.45	5.45	0.00	100
Computer Hardware	17	100.00	0.00	0.00	0.00	0.00	0.00	100
Computer Software	27	96.30	7.41	14.81	0.00	0.00	3.70	100
Computer Peripherals	27	100.00	3.70	7.41	0.00	0.00	0.00	100
Information Storage	24	95.83	12.50	50.00	0.00	0.00	0.00	100
Drugs	41	97.56	12.20	17.07	0.00	0.00	7.32	100
Surgery & Medical Instruments	27	88.89	11.11	11.11	0.00	0.00	3.70	100
Biotechnology	26	96.15	26.92	3.85	3.85	0.00	3.85	100
Miscellaneous-Drug&Med	10	90.00	30.00	20.00	10.00	0.00	0.00	100
Electrical Devices	28	100.00	10.71	25.00	3.57	3.57	0.00	100
Electrical Lighting	40	100.00	10.00	12.50	7.50	0.00	0.00	100
Measuring & Testing	28	96.43	10.71	3.57	3.57	0.00	0.00	100
Nuclears & X-rays	20	100.00	5.00	5.00	0.00	0.00	0.00	100
Power Systems	56	96.43	12.50	14.29	3.57	3.57	1.79	100
Semiconductor Devices	34	100.00	14.71	17.65	0.00	0.00	0.00	100
Miscellaneous-Elec.	38	94.74	10.53	7.89	2.63	2.63	2.63	100
Materials Processing & Handling	30	100.00	3.33	6.67	0.00	0.00	0.00	100
Metal Working	53	100.00	15.09	13.21	5.66	1.89	0.00	100
Motors, Engines & Parts	58	93.10	12.07	15.52	8.62	6.90	1.72	100
Optics	33	96.97	9.09	9.09	0.00	6.06	0.00	100
Transportation	21	95.24	9.52	9.52	0.00	4.76	0.00	100
Miscellaneous Mechanical	33	93.94	15.15	6.06	3.03	6.06	0.00	100
Agriculture, Husbandry, Food	24	100.00	0.00	8.33	8.33	0.00	0.00	100
Apparel & Textile	30	100.00	13.33	10.00	6.67	0.00	0.00	100
Earth Working & Wells	8	100.00	0.00	12.50	0.00	0.00	0.00	100
Furniture, House Fixtures	19	100.00	21.05	15.79	10.53	10.53	0.00	100
Heating	26	100.00	15.38	0.00	0.00	3.85	3.85	100
Pipes & Joints	21	100.00	4.76	4.76	4.76	4.76	0.00	100
Receptacles	18	100.00	22.22	0.00	16.67	0.00	0.00	100
Miscellaneous-Others	78	98.72	10.26	15.38	8.97	0.00	0.00	100
JP weighted		97.19	11.50	12.88	4.79	2.21	1.12	100

Japan (1/3)

Question 4-9 Please indicate whether the co-inventor exists, according to the type of the following organizations. You can check all relevant boxes. (当該発明の共同発明者の類型(複回答あり))

	All	自社	いずれかの外部組織	設備、材料、部品、ソフトウェア等のサプライヤー企業	顧客・製品ユーザー	競争企業	直接競合していないが同じ産業内の他企業	上記以外の企業	大学など高等教育機関(付属研究所を含む)	国立研究機関	地方公共団体の研究機関	財団法人、民間病院、民間非営利研究機関	その他の政府機関	その他	無回答
	All	**Your firm**	**any exnternal co-inventor**	**Suppliers for parts, materials, equipments, software etc. (including contract manufactures)**	**Customers and product users**	**Competitor**	**Non-competitor(s) within the same industry**	**Other firm(s)**	**University and education**	**Government Research Organization**	**Local Government Research Organization**	**Hospital, Foundation, or Private Research Organization**	**Other government organizaition**	**other**	**no response**
All	3658	2417	477	124	147	16	37	69	86	18	6	5	1	41	55
Agriculture, Food, Textiles	60	46	14	2	4	0	2	1	4	1	2	1	0	0	2
Coating	80	56	14	5	6	1	0	2	0	0	1	0	0	1	4
Gas	45	33	7	3	1	1	0	1	1	1	0	1	0	0	0
Organic Compounds	120	98	15	2	2	0	1	3	7	1	0	0	0	0	4
Resins	125	99	19	11	7	0	1	0	3	0	0	0	0	2	6
Miscellaneous-chemical	208	149	33	9	7	0	3	7	6	1	0	0	0	4	4
Communications	160	99	19	6	5	1	3	1	2	0	0	0	0	3	1
Computer Hardware	59	32	1	0	0	0	0	0	1	0	0	0	0	0	0
Computer Software	123	73	10	3	3	0	1	1	2	0	0	0	0	1	1
Computer Peripherals	76	44	3	0	1	0	1	1	0	1	0	0	0	1	1
Information Storage	120	69	7	1	3	2	0	0	1	0	0	0	0	0	1
Drugs	127	105	22	5	2	0	5	3	11	0	0	0	0	1	1
Surgery & Medical Instruments	85	56	20	7	2	0	3	4	3	0	0	1	0	3	0
Biotechnology	87	65	26	3	1	1	0	7	16	1	1	0	1	4	1
Miscellaneous-Drug&Med	45	25	10	5	1	0	1	1	2	0	0	0	0	0	0
Electrical Devices	91	47	8	2	5	0	0	0	0	0	0	0	0	1	1
Electrical Lighting	96	62	7	2	1	0	0	1	2	1	0	0	0	0	0
Measuring & Testing	111	72	20	3	5	1	2	5	4	1	1	0	0	0	0
Nuclears & X-rays	72	43	6	0	0	0	0	3	2	0	0	2	0	1	0
Power Systems	172	120	13	2	4	2	1	4	4	0	0	0	0	1	2
Semiconductor Devices	129	83	19	6	1	1	3	4	4	1	0	0	0	1	1
Miscellaneous-Elec.	120	74	14	6	5	0	4	2	1	1	0	0	0	0	1
Materials Processing & Handling	103	63	11	3	5	0	0	1	1	1	0	0	0	1	5
Metal Working	137	103	25	4	12	0	1	4	2	2	0	0	0	2	2
Motors, Engines & Parts	145	93	14	0	9	0	0	3	0	1	0	0	0	2	1
Optics	100	59	7	2	0	1	0	2	0	0	0	0	0	2	0
Transportation	73	39	7	1	6	0	0	0	0	0	0	0	0	0	1
Miscellaneous Mechanical	124	69	14	4	7	0	1	2	0	0	0	0	0	2	1
Agriculture, Husbandry, Food	87	64	10	4	3	0	1	1	2	2	0	0	0	1	0
Apparel & Textile	77	38	4	2	1	0	0	0	0	0	1	0	0	1	1
Earth Working & Wells	20	11	7	1	4	1	0	1	0	0	0	0	0	1	0
Furniture, House Fixtures	51	22	5	2	2	0	1	0	0	0	0	0	0	0	0
Heating	84	63	10	2	6	1	0	0	2	0	0	0	0	1	1
Pipes & Joints	66	48	9	0	8	0	0	0	0	0	0	0	0	1	2
Receptacles	55	35	14	7	5	0	0	1	0	0	0	0	0	1	3
Miscellaneous-Others	225	160	33	9	13	3	2	3	3	2	0	0	0	2	7

Note1: There are cases that respondent's answer of Question 4-9 discords with the number of inventors in the patent bibliographic data. We suppose that co-inventor does not exist if the number of inventor is 1 in bibliographic data. And the respondent's answer is assumed to be correct, if the number in bibliographic data are more than 1.
Note2: Any external co-inventor is 1 if there are co-inventor outside thier own firm. Otherwise it is 0.

%	N	Your firm	any exnternal co-inventor	Suppliers for parts, materials, equipments, software etc. (including contract manufactures)	Customers and product users	Competitor	Non-competitor(s) within the same industry	Other firm(s)	University and education	Government Research Organization	Local Government Research Organization	Hospital, Foundation, or Private Research Organization	Other government organizaition	other
All	3603	67.48	13.24	3.46	4.1	0.45	1.03	1.93	2.4	0.5	0.17	0.14	0.03	1.14
Agriculture, Food, Textiles	58	79.73	24.14	3.47	6.93	0	3.47	1.73	6.93	1.73	3.47	1.73	0	0
Coating	76	74.67	18.42	6.67	8	1.33	0	2.67	0	0	1.33	0	0	1.33
Gas	45	73.33	15.56	6.67	2.22	2.22	0	2.22	2.22	2.22	0	2.22	0	0
Organic Compounds	116	84.78	12.93	1.73	1.73	0	0.87	2.6	6.06	0.87	0	0	0	0
Resins	119	83.73	15.97	9.3	5.92	0	0.85	0	2.54	0	0	0	0	1.69
Miscellaneous-chemical	204	73.43	16.18	4.44	3.45	0	1.48	3.45	2.96	0.49	0	0	0	1.97
Communications	159	62.45	11.95	3.79	3.15	0.63	1.89	0.63	1.26	0	0	0	0	1.89
Computer Hardware	59	54.24	1.69	0	0	0	0	0	1.69	0	0	0	0	0
Computer Software	122	60.12	8.20	2.47	2.47	0	0.82	0.82	1.65	0	0	0	0	0.82
Computer Peripherals	75	59.18	4.00	0	1.35	0	1.35	1.35	0	1.35	0	0	0	1.35
Information Storage	119	58.32	5.88	0.85	2.54	1.69	0	0	0.85	0	0	0	0	0
Drugs	126	83.39	17.46	3.97	1.59	0	3.97	2.38	8.74	0	0	0	0	0.79
Surgery & Medical Instruments	85	65.88	23.53	8.24	2.35	0	3.53	4.71	3.53	0	0	1.18	0	3.53
Biotechnology	86	75.7	30.23	3.49	1.16	1.16	0	8.15	18.63	1.16	1.16	0	1.16	4.66
Miscellaneous-Drug&Med	45	55.56	22.22	11.11	2.22	0	2.22	2.22	4.44	0	0	0	0	0
Electrical Devices	90	52.68	8.89	2.24	5.6	0	0	0	0	0	0	0	0	1.12
Electrical Lighting	96	64.58	7.29	2.08	1.04	0	0	1.04	2.08	1.04	0	0	0	0
Measuring & Testing	111	64.86	18.02	2.7	4.5	0.9	1.8	4.5	3.6	0.9	0.9	0	0	0
Nuclears & X-rays	72	59.72	8.33	0	0	0	0	4.17	2.78	0	0	2.78	0	1.39
Power Systems	170	70.87	7.65	1.18	2.36	1.18	0.59	2.36	2.36	0	0	0	0	0.59
Semiconductor Devices	128	65.05	14.84	4.7	0.78	0.78	2.35	3.13	3.13	0.78	0	0	0	0.78
Miscellaneous-Elec.	119	62.45	11.76	5.06	4.22	0	3.38	1.69	0.84	0.84	0	0	0	0
Materials Processing & Handling	98	65.66	11.22	3.13	5.21	0	0	1.04	1.04	1.04	0	0	0	1.04
Metal Working	135	76.57	18.52	2.97	8.92	0	0.74	2.97	1.49	1.49	0	0	0	1.49
Motors, Engines & Parts	144	64.8	9.72	0	6.27	0	0	2.09	0	0.7	0	0	0	1.39
Optics	100	59	7.00	2	0	1	0	2	0	0	0	0	0	2
Transportation	72	54.73	9.72	1.4	8.42	0	0	0	0	0	0	0	0	0
Miscellaneous Mechanical	123	56.39	11.38	3.27	5.72	0	0.82	1.63	0	0	0	0	0	1.63
Agriculture, Husbandry, Food	87	73.56	11.49	4.6	3.45	0	1.15	1.15	2.3	2.3	0	0	0	1.15
Apparel & Textile	76	50.58	5.26	2.66	1.33	0	0	0	0	0	1.33	0	0	1.33
Earth Working & Wells	20	55	35.00	5	20	5	0	5	0	0	0	0	0	5
Furniture, House Fixtures	51	43.14	9.80	3.92	3.92	0	1.96	0	0	0	0	0	0	0
Heating	83	76.14	12.05	2.42	7.25	1.21	0	0	2.42	0	0	0	0	1.21
Pipes & Joints	64	75.7	14.06	0	12.62	0	0	0	0	0	0	0	0	1.58
Receptacles	52	68.66	26.92	13.73	9.81	0	0	1.96	0	0	0	0	0	1.96
Miscellaneous-Others	218	74.09	15.14	4.17	6.02	1.39	0.93	1.39	1.39	0.93	0	0	0	0.93
US-JP weighted		67.45	13.09	3.52	3.64	0.41	1.19	1.97	2.45	0.42	0.09	0.1	0.02	1.25
JP weighted		66.95	12.34	3.22	3.77	0.41	1.02	1.82	2.05	0.46	0.08	0.07	0.01	1.23

Note: For example, the incidence of co-invention with suppliers is given by ...
Prob(coinvention with suppliers) = Prob(coinvention with suppliers | coinvention) * Prob(coinventions)

US (1/3)

Question 4-9 Please indicate whether the co-inventor exists, according to the type of the following organizations.
You can check all relevant boxes. (当該発明の共同発明者の類型(複回答あり))

After Adjusting if noinv =1 then A6A? = 0

	A.6A Including yourself, please indicate whether the co-inventor exists as well as its number, according to the type of the following organizations	all	Any external co-inventor	Suppliers for parts, materials, equipments, software etc. (including contract manufactures)	Customers and product users	Competitor	Non-competitor(s) within the same industry	Other firm(s)	University	Government Research Organization	Hospital, Foundation, or Private Research Organization	Missing
NBER	All	1,919	218	95	72	24	22	36	47	11	8	160
11	Agriculture, Food, Textiles	8	0	0	0	0	0	0	0	0	0	0
12	Coating	34	3	2	1	0	0	1	0	0	0	4
13	Gas	11	3	1	1	0	0	2	0	0	0	0
14	Organic Compounds	61	4	1	0	0	1	0	2	1	0	4
15	Resins	84	6	3	5	2	1	0	1	0	0	7
19	Miscellaneous-chemical	233	30	11	10	1	0	6	7	2	0	16
21	Communications	149	15	6	6	4	2	2	1	2	0	13
22	Computer Hardware	42	7	2	2	0	0	2	2	0	0	4
77	Computer Software	93	6	4	2	1	2	1	1	1	1	2
23	Computer Peripherals	33	4	3	0	0	0	1	0	0	0	2
24	Information Storage	42	2	1	1	0	0	0	1	0	0	4
31	Drugs	101	12	3	3	2	1	1	6	0	1	13
32	Surgery & Medical Instruments	123	18	7	7	2	3	2	4	1	2	12
33	Biotechnology	41	9	4	1	0	2	0	5	0	2	6
39	Miscellaneous-Drug&Med	29	5	3	1	0	0	0	2	0	0	1
41	Electrical Devices	45	0	0	0	0	0	0	0	0	0	5
42	Electrical Lighting	33	4	1	1	0	0	2	1	1	0	5
43	Measuring & Testing	62	9	5	6	3	4	3	1	1	1	7
44	Nuclears & X-rays	39	5	3	0	0	0	0	2	0	0	3
45	Power Systems	89	11	4	2	1	0	2	2	2	0	4
46	Semiconductor Devices	55	4	2	1	1	0	1	1	0	0	5
49	Miscellaneous-Elec.	32	5	2	1	0	0	1	1	0	1	3
51	Materials Processing & Handlin	56	11	7	5	1	1	2	3	0	0	5
52	Metal Working	49	5	2	1	0	0	2	1	0	0	5
53	Motors, Engines & Parts	56	2	1	0	0	1	0	0	0	0	5
54	Optics	43	6	2	1	0	0	0	1	0	0	6
55	Transportation	33	1	0	1	1	0	0	0	0	0	1
59	Miscellaneous Mechanical	42	3	1	2	0	0	0	1	0	0	4
61	Agriculture, Husbandry, Food	14	1	1	0	0	0	0	0	0	0	2
63	Apparel & Textile	9	0	0	0	0	0	0	0	0	0	1
64	Earth Working & Wells	5	1	1	1	1	1	0	0	0	0	0
65	Furniture, House Fixtures	9	1	1	0	0	0	0	0	0	0	1
66	Heating	8	0	0	0	0	0	0	0	0	0	3
67	Pipes & Joints	13	5	4	3	2	1	0	0	0	0	0
68	Receptacles	20	6	3	3	1	0	2	0	0	0	1
69	Miscellaneous-Others	123	14	4	4	1	2	3	1	0	0	6

	%	N	Any external co-inventor	Suppliers for parts, materials, equipments, software etc. (including contract manufactures)	Customers and product users	Competitor	Non-competitor(s) within the same industry	Other firm(s)	University and education	Government Research Organization	Hospital, Foundation, or Private Research Organization
NBER	All	1759	12.4	5.4	4.09	1.36	1.25	2.05	2.67	0.63	0.45
11	Agriculture, Food, Textiles	8	0	0	0	0	0	0	0	0	0
12	Coating	30	10	6.67	3.33	0	0	3.33	0	0	0
13	Gas	11	27.27	9.09	9.09	0	0	18.18	0	0	0
14	Organic Compounds	57	7.02	1.75	0	0	1.75	0	3.51	1.75	0
15	Resins	77	7.79	3.9	6.49	2.6	1.3	0	1.3	0	0
19	Miscellaneous-chemical	217	13.82	5.07	4.61	0.46	0	2.76	3.23	0.92	0
21	Communications	136	11.03	4.41	4.41	2.94	1.47	1.47	0.74	1.47	0
22	Computer Hardware	38	18.42	5.26	5.26	0	0	5.26	5.26	0	0
77	Computer Software	91	6.59	4.4	2.2	1.1	2.2	1.1	1.1	1.1	1.1
23	Computer Peripherals	31	12.9	9.68	0	0	0	3.23	0	0	0
24	Information Storage	38	5.26	2.63	2.63	0	0	0	2.63	0	0
31	Drugs	88	13.64	3.41	3.41	2.27	1.14	1.14	6.82	0	1.14
32	Surgery & Medical Instruments	111	16.22	6.31	6.31	1.8	2.7	1.8	3.6	0.9	1.8
33	Biotechnology	35	25.71	11.43	2.86	0	5.71	0	14.29	0	5.71
39	Miscellaneous-Drug&Med	28	17.86	10.71	3.57	0	0	0	7.14	0	0
41	Electrical Devices	40	0	0	0	0	0	0	0	0	0
42	Electrical Lighting	28	14.29	3.57	3.57	0	0	7.14	3.57	3.57	0
43	Measuring & Testing	55	16.36	9.09	10.91	5.45	7.27	5.45	1.82	1.82	1.82
44	Nuclears & X-rays	36	13.89	8.33	0	0	0	0	5.56	0	0
45	Power Systems	85	12.94	4.71	2.35	1.18	0	2.35	2.35	2.35	0
46	Semiconductor Devices	50	8	4	2	2	0	2	2	0	0
49	Miscellaneous-Elec.	29	17.24	6.9	3.45	0	0	3.45	3.45	0	3.45
51	Materials Processing & Handlin	51	21.57	13.73	9.8	1.96	1.96	3.92	5.88	0	0
52	Metal Working	44	11.36	4.55	2.27	0	0	4.55	2.27	0	0
53	Motors, Engines & Parts	51	3.92	1.96	0	0	1.96	0	0	0	0
54	Optics	37	16.22	5.41	2.7	0	0	0	2.7	0	0
55	Transportation	32	3.13	0	3.13	3.13	0	0	0	0	0
59	Miscellaneous Mechanical	38	7.89	2.63	5.26	0	0	0	2.63	0	0
61	Agriculture, Husbandry, Food	12	8.33	8.33	0	0	0	0	0	0	0
63	Apparel & Textile	8	0	0	0	0	0	0	0	0	0
64	Earth Working & Wells	5	20	20	20	20	20	0	0	0	0
65	Furniture, House Fixtures	8	12.5	12.5	0	0	0	0	0	0	0
66	Heating	5	0	0	0	0	0	0	0	0	0
67	Pipes & Joints	13	38.46	30.77	23.08	15.38	7.69	0	0	0	0
68	Receptacles	19	31.58	15.79	15.79	5.26	0	10.53	0	0	0
69	Miscellaneous-Others	117	11.97	3.42	3.42	0.85	1.71	2.56	0.85	0	0
	US-JP weighted		**12.28**	**5.5**	**4.25**	**1.52**	**1.33**	**2.01**	**2.65**	**0.62**	**0.46**

Japan (2/3)

Question 4-9 (2) # of inventors (発明者数)

Number of inventors (from patent bibliographic data)

	All	Mean	S.D.	Median	P90	Interquartile range	N.A.
All	3658	2.76	1.8	2	5	3	0
Agriculture,Food,Textiles	60	3.58	2.28	3	6	2	0
Coating	80	2.98	1.73	3	5.5	2	0
Gas	45	3.04	2.09	2	7	2	0
Organic Compounds	120	2.96	1.27	3	4	2	0
Resins	125	3.39	2.06	3	6	2	0
Miscellaneous chemical	208	3.02	1.77	3	5	2	0
Communications	160	2.59	1.64	2	5	2.5	0
Computer Hardware	59	2.02	1.32	2	4	2	0
Computer Software	123	2.51	1.71	2	5	2	0
Computer Peripherals	76	2.58	1.78	2	5	2.5	0
Information Storage	120	2.39	1.91	2	5	2	0
Drugs	127	3.91	2.39	3	7	3	0
Surgery & Med Inst.	85	2.85	1.71	3	5	3	0
Biotechnology	87	3.4	1.96	3	6	2	0
Miscellaneous-Drug&Med	45	2.4	1.37	2	4	2	0
Electrical Devices	91	2.04	1.35	2	4	2	0
Electrical Lighting	96	2.73	1.94	2	5	3	0
Measuring & Testing	111	2.54	1.56	2	4	2	0
Nuclears & X-rays	72	2.53	1.58	2	5	2	0
Power Systems	172	2.93	1.84	2	5	3	0
Semiconductor Devices	129	2.88	1.99	2	6	3	0
Miscellaneous-Elec.	120	2.77	2.47	2	5	2	0
Materials Processing & Handling	103	2.58	1.54	2	5	3	0
Metal Working	137	3.13	1.83	3	6	2	0
Motors, Engines & Parts	145	2.81	1.92	2	5	3	0
Optics	100	2.37	1.64	2	5	2	0
Transportation	73	2.19	1.41	2	4	2	0
Miscellaneous Mechanical	124	2.41	1.66	2	5	2	0
Agriculture, Husbandry, Food	87	3.03	1.91	3	5	2	0
Apparel & Textile	77	1.83	0.98	2	3	1	0
Earth Working & Wells	20	3	1.78	3	5.5	3	0
Furniture, House Fixtures	51	1.82	1.14	1	4	1	0
Heating	84	2.94	1.54	3	5	2	0
Pipes & Joints	66	2.55	1.3	2	5	1	0
Receptacles	55	2.47	1.17	2	4	2	0
Miscellaneous-Others	225	2.7	1.55	2	5	2	0
US-JP weighted		2.78					
JP weighted		2.73					

US

(2/3)

Question4-9 (2) # of inventors（発明者数）

Number of inventors (from patent data)

	all	Mean	StdDev	Median	P90	QRange	Missing
All	1,919	2.71	1.82	2	5	2	0
Agriculture, Food, Textiles	8	3.38	2.03	3	8	0.5	0
Coating	34	2.76	1.74	2.5	5	2	0
Gas	11	2.82	1.65	2	6	1	0
Organic Compounds	61	3.03	1.85	3	6	2	0
Resins	84	2.95	1.77	2	5	2	0
Miscellaneous-chemical	233	3.08	1.88	3	5	2	0
Communications	149	2.65	1.84	2	5	2	0
Computer Hardware	42	2.14	0.98	2	3	2	0
Computer Software	93	2.47	1.68	2	5	2	0
Computer Peripherals	33	3.18	2.61	2	6	2	0
Information Storage	42	2.64	2.3	2	5	3	0
Drugs	101	3.33	2.58	3	6	2	0
Surgery & Medical Instruments	123	2.37	1.19	2	4	2	0
Biotechnology	41	3.34	1.48	3	5	2	0
Miscellaneous-Drug&Med	29	2.72	1.5	2	5	2	0
Electrical Devices	45	2.69	1.34	2	6	1	0
Electrical Lighting	33	2.67	1.71	2	5	2	0
Measuring & Testing	62	2.56	1.71	2	5	2	0
Nuclears & X-rays	39	2.64	1.61	2	6	3	0
Power Systems	89	2.4	1.23	2	4	2	0
Semiconductor Devices	55	2.95	1.92	2	5	2	0
Miscellaneous-Elec.	32	1.94	1.08	2	3	1	0
Materials Processing & Handling	56	2.8	2.42	2	6	3	0
Metal Working	49	2.22	1.43	2	5	2	0
Motors, Engines & Parts	56	2.09	1.3	2	4	2	0
Optics	43	3.3	3.32	3	5	2	0
Transportation	33	2.52	2.8	2	4	2	0
Miscellaneous Mechanical	42	2.36	1.08	2	4	2	0
Agriculture, Husbandry, Food	14	3.14	3.11	2	8	3	0
Apparel & Textile	9	2	1.31	2	5	1	0
Earth Working & Wells	5	3	2.5	3	6	3	0
Furniture, House Fixtures	9	2.78	1.1	2	5	2	0
Heating	8	1.88	0.71	2	3	0.5	0
Pipes & Joints	13	2.23	1.69	2	4	2	0
Receptacles	20	2.45	1.39	2	5	2.5	0
Miscellaneous-Others	123	2.54	1.24	2	4	2	0
US-JP weighted		2.71	1.83				

Question 4-9 (2) Sole-invention, external co-invention and co-applications
（単独発明、外部共同発明、共同出願）

(for your information) Sole invention, external co-invention and co-applications（参考値、単独発明・自社内共同発明・自社外との共同発明・共同出願）

	All	Sole-inventor	Co-inventor	N.A.	All (co-inventor)	Internal co-invention	External co-invention	No response	All	Single applicant	Co-applicant	N.A.
All	3658	1020	2638	0	2638	2106	477	55	3658	3283	375	0
Agriculture,Food,Textiles	60	8	52	0	52	36	14	2	60	48	12	0
Coating	80	16	64	0	64	46	14	4	80	67	13	0
Gas	45	10	35	0	35	28	7	0	45	39	6	0
Organic Compounds	120	11	109	0	109	90	15	4	120	114	6	0
Resins	125	14	111	0	111	86	19	6	125	111	14	0
Miscellaneous chemical	208	44	164	0	164	127	33	4	208	181	27	0
Communications	160	52	108	0	108	88	19	1	160	143	17	0
Computer Hardware	59	27	32	0	32	31	1	0	59	58	1	0
Computer Software	123	45	78	0	78	67	10	1	123	115	8	0
Computer Peripherals	76	30	46	0	46	42	3	1	76	68	8	0
Information Storage	120	49	71	0	71	63	7	1	120	114	6	0
Drugs	127	10	117	0	117	94	22	1	127	113	14	0
Surgery & Med Inst.	85	24	61	0	61	41	20	0	85	70	15	0
Biotechnology	87	10	77	0	77	50	26	1	87	79	8	0
Miscellaneous-Drug&Med	45	14	31	0	31	21	10	0	45	40	5	0
Electrical Devices	91	40	51	0	51	42	8	1	91	79	12	0
Electrical Lighting	96	32	64	0	64	57	7	0	96	91	5	0
Measuring & Testing	111	30	81	0	81	61	20	0	111	90	21	0
Nuclears & X-rays	72	24	48	0	48	42	6	0	72	65	7	0
Power Systems	172	44	128	0	128	113	13	2	172	164	8	0
Semiconductor Devices	129	37	92	0	92	72	19	1	129	112	17	0
Miscellaneous-Elec.	120	40	80	0	80	65	14	1	120	109	11	0
Materials Processing & Handling	103	30	73	0	73	57	11	5	103	93	10	0
Metal Working	137	27	110	0	110	83	25	2	137	114	23	0
Motors, Engines & Parts	145	47	98	0	98	83	14	1	145	131	14	0
Optics	100	39	61	0	61	54	7	0	100	92	8	0
Transportation	73	31	42	0	42	34	7	1	73	70	3	0
Miscellaneous Mechanical	124	48	76	0	76	61	14	1	124	113	11	0
Agriculture, Husbandry, Food	87	20	67	0	67	57	10	0	87	80	7	0
Apparel & Textile	77	36	41	0	41	36	4	1	77	77	0	0
Earth Working & Wells	20	6	14	0	14	7	7	0	20	15	5	0
Furniture, House Fixtures	51	28	23	0	23	18	5	0	51	49	2	0
Heating	84	17	67	0	67	56	10	1	84	74	10	0
Pipes & Joints	66	15	51	0	51	40	9	2	66	58	8	0
Receptacles	55	14	41	0	41	24	14	3	55	45	10	0
Miscellaneous-Others	225	51	174	0	174	134	33	7	225	202	23	0
	Note: from patent bibliographic data					Note: from survey data			Note: from patent bibliographic data			

%	N	Sole-inventor	Co-inventor	Total	N	Internal co-invention	External co-invention	Total	All	Single applicant	Co-applicant	Total
All	3658	27.88	72.12	100	2583	81.53	18.47	100	3658	89.75	10.25	100
Agriculture, Food, Textiles	60	13.33	86.67	100	50	72	28	100	60	80	20	100
Coating	80	20	80	100	60	76.67	23.33	100	80	83.75	16.25	100
Gas	45	22.22	77.78	100	35	80	20	100	45	86.67	13.33	100
Organic Compounds	120	9.17	90.83	100	105	85.71	14.29	100	120	95	5	100
Resins	125	11.2	88.8	100	105	81.9	18.1	100	125	88.8	11.2	100
Miscellaneous-chemical	208	21.15	78.85	100	160	79.38	20.63	100	208	87.02	12.98	100
Communications	160	32.5	67.5	100	107	82.24	17.76	100	160	89.38	10.63	100
Computer Hardware	59	45.76	54.24	100	32	96.88	3.13	100	59	98.31	1.69	100
Computer Software	123	36.59	63.41	100	77	87.01	12.99	100	123	93.5	6.5	100
Computer Peripherals	76	39.47	60.53	100	45	93.33	6.67	100	76	89.47	10.53	100
Information Storage	120	40.83	59.17	100	70	90	10	100	120	95	5	100
Drugs	127	7.87	92.13	100	116	81.03	18.97	100	127	88.98	11.02	100
Surgery & Medical Instruments	85	28.24	71.76	100	61	67.21	32.79	100	85	82.35	17.65	100
Biotechnology	87	11.49	88.51	100	76	65.79	34.21	100	87	90.8	9.2	100
Miscellaneous-Drug&Med	45	31.11	68.89	100	31	67.74	32.26	100	45	88.89	11.11	100
Electrical Devices	91	43.96	56.04	100	50	84	16	100	91	86.81	13.19	100
Electrical Lighting	96	33.33	66.67	100	64	89.06	10.94	100	96	94.79	5.21	100
Measuring & Testing	111	27.03	72.97	100	81	75.31	24.69	100	111	81.08	18.92	100
Nuclears & X-rays	72	33.33	66.67	100	48	87.5	12.5	100	72	90.28	9.72	100
Power Systems	172	25.58	74.42	100	126	89.68	10.32	100	172	95.35	4.65	100
Semiconductor Devices	129	28.68	71.32	100	91	79.12	20.88	100	129	86.82	13.18	100
Miscellaneous-Elec.	120	33.33	66.67	100	79	82.28	17.72	100	120	90.83	9.17	100
Materials Processing & Handling	103	29.13	70.87	100	68	83.82	16.18	100	103	90.29	9.71	100
Metal Working	137	19.71	80.29	100	108	76.85	23.15	100	137	83.21	16.79	100
Motors, Engines & Parts	145	32.41	67.59	100	97	85.57	14.43	100	145	90.34	9.66	100
Optics	100	39	61	100	61	88.52	11.48	100	100	92	8	100
Transportation	73	42.47	57.53	100	41	82.93	17.07	100	73	95.89	4.11	100
Miscellaneous Mechanical	124	38.71	61.29	100	75	81.33	18.67	100	124	91.13	8.87	100
Agriculture, Husbandry, Food	87	22.99	77.01	100	67	85.07	14.93	100	87	91.95	8.05	100
Apparel & Textile	77	46.75	53.25	100	40	90	10	100	77	100	0	100
Earth Working & Wells	20	30	70	100	14	50	50	100	20	75	25	100
Furniture, House Fixtures	51	54.9	45.1	100	23	78.26	21.74	100	51	96.08	3.92	100
Heating	84	20.24	79.76	100	66	84.85	15.15	100	84	88.1	11.9	100
Pipes & Joints	66	22.73	77.27	100	49	81.63	18.37	100	66	87.88	12.12	100
Receptacles	55	25.45	74.55	100	38	63.16	36.84	100	55	81.82	18.18	100
Miscellaneous-Others	225	22.67	77.33	100	167	80.24	19.76	100	225	89.78	10.22	100
US-JP weighted		27.86	72.14	100		81.85	18.15	100		89.7	10.3	100
JP weighted		28.73	71.27	100		82.69	17.31	100		90.1	9.9	100

US (3/3)

Question4-9 (2) Sole-invention and multiple-assignee（単独発明、共同出願）

(for your information)co-invention or Sole invention

NBER	A6A(for your information)co-invention or Sole invention	all	sole inventor	Co-Inventor	all	Single Assignee	Co-assignee
	All	1,919	525	1394	1,919	1885	34
11	Agriculture, Food, Textiles	8	0	8	8	8	0
12	Coating	34	9	25	34	33	1
13	Gas	11	2	9	11	11	0
14	Organic Compounds	61	13	48	61	60	1
15	Resins	84	16	68	84	83	1
19	Miscellaneous-chemical	233	55	178	233	229	4
21	Communications	149	42	107	149	148	1
22	Computer Hardware	42	14	28	42	41	1
77	Computer Software	93	34	59	93	92	1
23	Computer Peripherals	33	6	27	33	33	0
24	Information Storage	42	12	30	42	41	1
31	Drugs	101	18	83	101	95	6
32	Surgery & Medical Instruments	123	35	88	123	123	0
33	Biotechnology	41	6	35	41	39	2
39	Miscellaneous-Drug&Med	29	6	23	29	28	1
41	Electrical Devices	45	11	34	45	45	0
42	Electrical Lighting	33	7	26	33	32	1
43	Measuring & Testing	62	18	44	62	62	0
44	Nuclears & X-rays	39	13	26	39	38	1
45	Power Systems	89	25	64	89	88	1
46	Semiconductor Devices	55	13	42	55	52	3
49	Miscellaneous-Elec.	32	11	21	32	30	2
51	Materials Processing & Handling	56	20	36	56	56	0
52	Metal Working	49	19	30	49	48	1
53	Motors, Engines & Parts	56	25	31	56	56	0
54	Optics	43	9	34	43	43	0
55	Transportation	33	13	20	33	33	0
59	Miscellaneous Mechanical	42	13	29	42	40	2
61	Agriculture, Husbandry, Food	14	4	10	14	14	0
63	Apparel & Textile	9	4	5	9	9	0
64	Earth Working & Wells	5	2	3	5	5	0
65	Furniture, House Fixtures	9	1	8	9	9	0
66	Heating	8	2	6	8	7	1
67	Pipes & Joints	13	5	8	13	13	0
68	Receptacles	20	7	13	20	20	0
69	Miscellaneous-Others	123	35	88	123	121	2

NBER	%	all	sole inventor	Co-Inventor	Total	all	Single Assignee	co-assignee	Total
	All	1,919	27.36	72.64	100	1,919	98.23	1.77	100
11	Agriculture, Food, Textiles	8	0	100	100	8	100	0	100
12	Coating	34	26.47	73.53	100	34	97.06	2.94	100
13	Gas	11	18.18	81.82	100	11	100	0	100
14	Organic Compounds	61	21.31	78.69	100	61	98.36	1.64	100
15	Resins	84	19.05	80.95	100	84	98.81	1.19	100
19	Miscellaneous-chemical	233	23.61	76.39	100	233	98.28	1.72	100
21	Communications	149	28.19	71.81	100	149	99.33	0.67	100
22	Computer Hardware	42	33.33	66.67	100	42	97.62	2.38	100
77	Computer Software	93	36.56	63.44	100	93	98.92	1.08	100
23	Computer Peripherals	33	18.18	81.82	100	33	100	0	100
24	Information Storage	42	28.57	71.43	100	42	97.62	2.38	100
31	Drugs	101	17.82	82.18	100	101	94.06	5.94	100
32	Surgery & Medical Instruments	123	28.46	71.54	100	123	100	0	100
33	Biotechnology	41	14.63	85.37	100	41	95.12	4.88	100
39	Miscellaneous-Drug&Med	29	20.69	79.31	100	29	96.55	3.45	100
41	Electrical Devices	45	24.44	75.56	100	45	100	0	100
42	Electrical Lighting	33	21.21	78.79	100	33	96.97	3.03	100
43	Measuring & Testing	62	29.03	70.97	100	62	100	0	100
44	Nuclears & X-rays	39	33.33	66.67	100	39	97.44	2.56	100
45	Power Systems	89	28.09	71.91	100	89	98.88	1.12	100
46	Semiconductor Devices	55	23.64	76.36	100	55	94.55	5.45	100
49	Miscellaneous-Elec.	32	34.38	65.63	100	32	93.75	6.25	100
51	Materials Processing & Handling	56	35.71	64.29	100	56	100	0	100
52	Metal Working	49	38.78	61.22	100	49	97.96	2.04	100
53	Motors, Engines & Parts	56	44.64	55.36	100	56	100	0	100
54	Optics	43	20.93	79.07	100	43	100	0	100
55	Transportation	33	39.39	60.61	100	33	100	0	100
59	Miscellaneous Mechanical	42	30.95	69.05	100	42	95.24	4.76	100
61	Agriculture, Husbandry, Food	14	28.57	71.43	100	14	100	0	100
63	Apparel & Textile	9	44.44	55.56	100	9	100	0	100
64	Earth Working & Wells	5	40	60	100	5	100	0	100
65	Furniture, House Fixtures	9	11.11	88.89	100	9	100	0	100
66	Heating	8	25	75	100	8	87.5	12.5	100
67	Pipes & Joints	13	38.46	61.54	100	13	100	0	100
68	Receptacles	20	35	65	100	20	100	0	100
69	Miscellaneous-Others	123	28.46	71.54	100	123	98.37	1.63	100
	US-JP weighted		**27.64**	**72.36**	100		**98.18**	**1.82**	100

Japan (1/2)

Question 4-10 Was there any (formal or informal) collaboration between your employer and other partners (excluding co-inventors)? You can check all relevant boxes. （当該発明につながる研究の外部組織との協力がある場合(但し共同発明者を除く)、協力相手の類型、重複回答あり）

	All	いずれかの外部組織	設備、材料、部品、ソフトウェア等のサプライヤー企業	顧客・製品ユーザー	競争企業	直接競合していないが同じ産業内の他企業	上記以外の企業	大学など高等教育機関（付属研究所を含む）	国立研究機関	地方公共団体の研究機関	財団法人、民間病院、民間非営利研究機関	その他の政府機関	その他	無回答
	All	**any collaboration**	**Supplier(s), which provides parts, materials, or equipments**	**Customers or product users**	**Competitor(s)**	**Non-competitor(s) within the industry**	**Other firm(s)**	**University and education**	**Government Research Organization**	**Local government research organization**	**Hospital, Foundation, or Private Research Organization**	**Other Government Institution**	**others**	**no response**
All	3658	1041	536	289	27	65	72	154	45	14	25	10	38	3
Agriculture, Food, Textiles	60	28	9	9	0	5	3	5	1	1	2	0	0	0
Coating	80	30	18	11	1	1	2	5	2	1	2	1	0	0
Gas	45	16	7	7	0	0	1	1	1	0	0	0	2	0
Organic Compounds	120	29	8	9	0	2	2	10	0	0	0	0	2	0
Resins	125	32	15	13	0	1	1	5	1	0	1	0	0	0
Miscellaneous-chemical	208	68	35	17	3	4	9	7	4	0	1	1	2	0
Communications	160	32	15	7	1	3	3	4	1	0	1	2	0	0
Computer Hardware	59	10	5	3	0	0	1	2	0	0	0	0	1	0
Computer Software	123	24	7	6	1	3	6	0	2	0	0	1	4	0
Computer Peripherals	76	18	10	4	0	1	2	1	0	0	0	0	2	0
Information Storage	120	17	8	3	4	1	0	2	1	0	0	0	0	0
Drugs	127	35	10	5	1	5	2	13	3	0	0	0	1	0
Surgery & Medical Instruments	85	23	10	3	2	1	1	5	2	0	5	1	1	0
Biotechnology	87	32	8	3	0	1	4	18	4	1	0	2	2	0
Miscellaneous-Drug&Med	45	14	6	4	0	2	0	2	0	1	0	0	0	1
Electrical Devices	91	18	11	5	0	1	0	1	0	0	1	1	0	0
Electrical Lighting	96	26	15	4	1	0	2	6	0	0	0	0	2	0
Measuring & Testing	111	30	13	15	2	3	1	7	2	2	1	0	1	0
Nuclears & X-rays	72	20	8	1	0	1	2	6	4	0	3	0	1	0
Power Systems	172	43	26	9	1	2	2	4	3	1	1	0	1	0
Semiconductor Devices	129	30	19	8	0	1	4	3	1	0	1	0	0	0
Miscellaneous-Elec.	120	41	24	13	2	4	4	3	0	0	0	0	0	0
Materials Processing & Handling	103	25	14	8	0	1	2	2	0	0	0	0	2	0
Metal Working	137	43	23	13	0	1	3	8	1	1	0	0	2	0
Motors, Engines & Parts	145	44	30	10	1	1	0	5	0	0	3	0	2	0
Optics	100	26	15	7	1	3	0	1	1	1	0	0	1	1
Transportation	73	14	10	3	1	1	0	2	0	0	0	0	0	0
Miscellaneous Mechanical	124	33	18	11	1	1	1	2	1	1	1	0	1	0
Agriculture, Husbandry, Food	87	30	15	6	1	3	3	6	4	3	0	0	1	0
Apparel & Textile	77	23	13	12	0	0	0	1	0	0	0	0	0	0
Earth Working & Wells	20	8	2	1	0	1	1	2	0	0	0	0	1	0
Furniture, House Fixtures	51	21	13	8	0	0	0	3	0	0	0	0	1	0
Heating	84	37	27	8	1	5	1	4	1	0	1	1	2	0
Pipes & Joints	66	20	14	6	0	0	0	0	0	1	0	0	0	1
Receptacles	55	22	18	7	0	0	2	0	0	0	0	0	0	0
Miscellaneous-Others	225	79	37	30	2	6	7	8	5	0	1	0	3	0

Note: For example, the incidence of co-invention with suppliers is given by ...
Prob(coinvention with suppliers) = Prob(coinvention with suppliers | coinvention) * Prob(coinventions)

%	N	any collaboration	Supplier(s), which provides parts, materials, or equipments	Customers or product users	Competitor(s)	Non-competitor(s) within the industry	Other firm(s)	University and education	Government Research Organization	Local government research organization	Hospital, Foundation, or Private Research Organization	Other Government Institution	others
All	3655	29.18	15.07	8.13	0.76	1.83	2.02	4.33	1.27	0.39	0.7	0.28	1.07
Agriculture, Food, Textiles	60	46.67	15	15	0	8.33	5	8.33	1.67	1.67	3.33	0	0
Coating	80	38.96	23.38	14.29	1.3	1.3	2.6	6.49	2.6	1.3	2.6	1.3	0
Gas	45	37.21	16.28	16.28	0	0	2.33	2.33	2.33	0	0	0	4.65
Organic Compounds	120	25.66	7.08	7.96	0	1.77	1.77	8.85	0	0	0	0	1.77
Resins	125	25.81	12.1	10.48	0	0.81	0.81	4.03	0.81	0	0.81	0	0
Miscellaneous-chemical	208	33.5	17.24	8.37	1.48	1.97	4.43	3.45	1.97	0	0.49	0.49	0.99
Communications	160	20.38	9.55	4.46	0.64	1.91	1.91	2.55	0.64	0	0.64	1.27	0
Computer Hardware	59	17.24	8.62	5.17	0	0	1.72	3.45	0	0	0	0	1.72
Computer Software	123	19.83	5.79	4.96	0.83	2.48	4.96	0	1.65	0	0	0.83	3.31
Computer Peripherals	76	24.32	13.51	5.41	0	1.35	2.7	1.35	0	0	0	0	2.7
Information Storage	120	14.41	6.78	2.54	3.39	0.85	0	1.69	0.85	0	0	0	0
Drugs	127	27.78	7.94	3.97	0.79	3.97	1.59	10.32	2.38	0	0	0	0.79
Surgery & Medical Instruments	85	27.38	11.9	3.57	2.38	1.19	1.19	5.95	2.38	0	5.95	1.19	1.19
Biotechnology	87	37.21	9.3	3.49	0	1.16	4.65	20.93	4.65	1.16	0	2.33	2.33
Miscellaneous-Drug&Med	44	31.11	14.36	9.57	0	4.79	0	4.79	0	2.39	0	0	0
Electrical Devices	91	19.78	12.09	5.49	0	1.1	0	1.1	0	0	1.1	1.1	0
Electrical Lighting	96	27.08	15.63	4.17	1.04	0	2.08	6.25	0	0	0	0	2.08
Measuring & Testing	111	27.52	11.93	13.76	1.83	2.75	0.92	6.42	1.83	1.83	0.92	0	0.92
Nuclears & X-rays	72	28.57	11.43	1.43	0	1.43	2.86	8.57	5.71	0	4.29	0	1.43
Power Systems	172	25.15	15.2	5.26	0.58	1.17	1.17	2.34	1.75	0.58	0.58	0	0.58
Semiconductor Devices	129	23.44	14.84	6.25	0	0.78	3.13	2.34	0.78	0	0.78	0	0
Miscellaneous-Elec.	120	34.75	20.34	11.02	1.69	3.39	3.39	2.54	0	0	0	0	0
Materials Processing & Handling	103	26.04	14.58	8.33	0	1.04	2.08	2.08	0	0	0	0	2.08
Metal Working	137	32.09	17.16	9.7	0	0.75	2.24	5.97	0.75	0.75	0	0	1.49
Motors, Engines & Parts	145	31.21	21.28	7.09	0.71	0.71	0	3.55	0	0	2.13	0	1.42
Optics	99	26.53	15.92	7.43	1.06	3.18	0	1.06	1.06	1.06	0	0	1.06
Transportation	73	20.29	14.49	4.35	1.45	1.45	0	2.9	0	0	0	0	0
Miscellaneous Mechanical	124	27.73	15.13	9.24	0.84	0.84	0.84	1.68	0.84	0.84	0.84	0	0.84
Agriculture, Husbandry, Food	87	37.97	18.99	7.59	1.27	3.8	3.8	7.59	5.06	3.8	0	0	1.27
Apparel & Textile	77	30.67	17.33	16	0	0	0	1.33	0	0	0	0	0
Earth Working & Wells	20	40	10	5	0	5	5	10	0	0	0	0	5
Furniture, House Fixtures	51	42	26	16	0	0	0	6	0	0	0	0	2
Heating	84	46.84	34.18	10.13	1.27	6.33	1.27	5.06	1.27	0	1.27	1.27	2.53
Pipes & Joints	65	30.77	22.67	9.72	0	0	0	0	0	1.62	0	0	0
Receptacles	55	43.14	35.29	13.73	0	0	3.92	0	0	0	0	0	0
Miscellaneous-Others	225	36.07	16.89	13.7	0.91	2.74	3.2	3.65	2.28	0	0.46	0	1.37
US-JP weighted		27.55	13.77	7.38	0.81	1.78	2.14	4.04	1.27	0.25	0.73	0.35	1.05
JP weighted		27.53	14.25	7.52	0.76	1.73	2.07	3.57	1.12	0.26	0.66	0.33	0.99

US

Question 4-10 Was there any (formal or informal) collaboration between your employer and other partners (excluding co-inventors)? You can check all relevant boxes. (当該発明につながる研究の外部組織との協力がある場合(但し共同発明者を除く)、協力相手の類型、重複回答あり)

Excluding those with the co-inventor (s) to this patent, was there a formal or informal collaboration between your employer/organization and other partners for the research leading to this patent

	A.6B Excluding those with the co-inventor (s) to this patent, was there a formal or informal collaboration between your employer/organization and other partners for the research leading to this patent	all	Any collab	Supplier(s), which provides parts, materials, or equipments	Customers or product users	Competitor(s)	Non-competitor(s) within the industry	Other firm(s)	University and education	Government Research Organization	Hospital, Foundation, or Private Research Organization	Missing
NBER	All	1,919	390	191	160	12	20	54	72	30	18	202
11	Agriculture, Food, Textiles	8	2	1	2	0	0	0	0	0	0	0
12	Coating	34	11	7	5	1	1	3	1	0	0	3
13	Gas	11	2	1	0	0	0	1	0	0	0	0
14	Organic Compounds	61	11	4	3	0	0	2	4	0	0	5
15	Resins	84	15	4	11	1	1	1	1	0	0	6
19	Miscellaneous-chemical	233	50	22	22	2	1	16	7	4	0	23
21	Communications	149	22	13	2	1	1	1	4	2	0	21
22	Computer Hardware	42	6	2	4	0	0	0	1	0	0	4
77	Computer Software	93	14	6	9	0	1	2	3	1	1	5
23	Computer Peripherals	33	1	1	0	0	0	0	0	0	0	4
24	Information Storage	42	5	2	1	1	0	2	2	0	0	3
31	Drugs	101	22	5	4	0	3	1	9	4	4	14
32	Surgery & Medical Instruments	123	36	18	15	0	1	2	8	0	7	16
33	Biotechnology	41	11	6	1	0	1	3	3	0	1	7
39	Miscellaneous-Drug&Med	29	6	2	4	0	0	1	3	2	1	2
41	Electrical Devices	45	9	6	6	1	0	0	0	0	0	4
42	Electrical Lighting	33	7	1	3	0	0	1	2	1	0	5
43	Measuring & Testing	62	15	5	8	1	3	2	1	1	1	9
44	Nuclears & X-rays	39	8	5	3	0	0	0	1	2	0	4
45	Power Systems	89	17	10	4	1	2	3	2	5	1	7
46	Semiconductor Devices	55	7	4	4	1	0	1	1	1	0	7
49	Miscellaneous-Elec.	32	6	3	1	0	1	2	1	1	1	5
51	Materials Processing & Handling	56	11	8	5	0	1	3	2	0	0	5
52	Metal Working	49	10	7	3	0	1	1	1	0	0	4
53	Motors, Engines & Parts	56	15	9	8	0	0	0	2	2	0	6
54	Optics	43	6	2	2	0	1	0	2	1	0	7
55	Transportation	33	9	7	4	0	0	0	2	0	0	3
59	Miscellaneous Mechanical	42	7	2	6	1	0	0	1	1	0	4
61	Agriculture, Husbandry, Food	14	4	3	3	0	0	2	4	0	0	3
63	Apparel & Textile	9	1	0	1	0	0	0	0	0	0	1
64	Earth Working & Wells	5	1	1	0	0	0	0	0	0	0	1
65	Furniture, House Fixtures	9	4	2	3	0	0	1	0	0	1	1
66	Heating	8	3	1	1	0	0	0	1	0	0	2
67	Pipes & Joints	13	4	2	2	0	0	0	0	0	0	1
68	Receptacles	20	5	3	0	0	0	1	0	0	0	1
69	Miscellaneous-Others	123	27	16	10	1	1	2	3	2	0	9

	%	N	Any collab	Supplier(s), which provides parts, materials, or equipments	Customers or product users	Competitor(s)	Non-competitor(s) within the industry	Other firm(s)	University and education	Government Research Organization	Hospital, Foundation, or Private Research Organization
NBER	All	1717	**22.71**	**11.12**	**9.32**	**0.7**	**1.16**	**3.15**	**4.19**	**1.75**	**1.05**
11	Agriculture, Food, Textiles	8	25	12.5	25	0	0	0	0	0	0
12	Coating	31	35.48	22.58	16.13	3.23	3.23	9.68	3.23	0	0
13	Gas	11	18.18	9.09	0	0	0	9.09	0	0	0
14	Organic Compounds	56	19.64	7.14	5.36	0	0	3.57	7.14	0	0
15	Resins	78	19.23	5.13	14.1	1.28	1.28	1.28	1.28	0	0
19	Miscellaneous-chemical	210	23.81	10.48	10.48	0.95	0.48	7.62	3.33	1.9	0
21	Communications	128	17.19	10.16	1.56	0.78	0.78	0.78	3.13	1.56	0
22	Computer Hardware	38	15.79	5.26	10.53	0	0	0	2.63	0	0
77	Computer Software	88	15.91	6.82	10.23	0	1.14	2.27	3.41	1.14	1.14
23	Computer Peripherals	29	3.45	3.45	0	0	0	0	0	0	0
24	Information Storage	39	12.82	5.13	2.56	2.56	0	5.13	5.13	0	0
31	Drugs	87	25.29	5.75	4.6	0	3.45	1.15	10.34	4.6	4.6
32	Surgery & Medical Instruments	107	33.64	16.82	14.02	0	0.93	1.87	7.48	0	6.54
33	Biotechnology	34	32.35	17.65	2.94	0	2.94	8.82	8.82	0	2.94
39	Miscellaneous-Drug&Med	27	22.22	7.41	14.81	0	0	3.7	11.11	7.41	3.7
41	Electrical Devices	41	21.95	14.63	14.63	2.44	0	0	0	0	0
42	Electrical Lighting	28	25	3.57	10.71	0	0	3.57	7.14	3.57	0
43	Measuring & Testing	53	28.3	9.43	15.09	1.89	5.66	3.77	1.89	1.89	1.89
44	Nuclears & X-rays	35	22.86	14.29	8.57	0	0	0	2.86	5.71	0
45	Power Systems	82	20.73	12.2	4.88	1.22	2.44	3.66	2.44	6.1	1.22
46	Semiconductor Devices	48	14.58	8.33	8.33	2.08	0	2.08	2.08	2.08	0
49	Miscellaneous-Elec.	27	22.22	11.11	3.7	0	3.7	7.41	3.7	3.7	3.7
51	Materials Processing & Handling	51	21.57	15.69	9.8	0	1.96	5.88	3.92	0	0
52	Metal Working	45	22.22	15.56	6.67	0	2.22	2.22	2.22	0	0
53	Motors, Engines & Parts	50	30	18	16	0	0	0	4	4	0
54	Optics	36	16.67	5.56	5.56	0	2.78	0	5.56	2.78	0
55	Transportation	30	30	23.33	13.33	0	0	0	6.67	0	0
59	Miscellaneous Mechanical	38	18.42	5.26	15.79	2.63	0	0	2.63	2.63	0
61	Agriculture, Husbandry, Food	11	36.36	27.27	27.27	0	0	18.18	36.36	0	0
63	Apparel & Textile	8	12.5	0	12.5	0	0	0	0	0	0
64	Earth Working & Wells	4	25	25	0	0	0	0	0	0	0
65	Furniture, House Fixtures	8	50	25	37.5	0	0	12.5	0	0	12.5
66	Heating	6	50	16.67	16.67	0	0	0	16.67	0	0
67	Pipes & Joints	12	33.33	16.67	16.67	0	0	0	0	0	0
68	Receptacles	19	26.32	15.79	0	0	0	5.26	0	0	0
69	Miscellaneous-Others	114	23.68	14.04	8.77	0.88	0.88	1.75	2.63	1.75	0
	US-JP weighted		**22.47**	**10.83**	**9.13**	**0.69**	**1.26**	**3.05**	**4.43**	**1.7**	**1.08**

Japan (2/2)

Question 4-10 Was there any (formal or informal) collaboration between your employer and other partners (excluding co-inventors)? You can check all relevant boxes. (当該発明につながる研究の外部組織との協力がある場合(但し共同発明者を除く)、協力相手の類型、重複回答あり)

any collaboration	All	Yes	No	no response
All	3658	1041	2526	91
Agriculture, Food, Textiles	60	28	32	0
Coating	80	30	47	3
Gas	45	16	27	2
Organic Compounds	120	29	84	7
Resins	125	32	92	1
Miscellaneous-chemical	208	68	135	5
Communications	160	32	125	3
Computer Hardware	59	10	48	1
Computer Software	123	24	97	2
Computer Peripherals	76	18	56	2
Information Storage	120	17	101	2
Drugs	127	35	91	1
Surgery & Medical Instruments	85	23	61	1
Biotechnology	87	32	54	1
Miscellaneous-Drug&Med	45	14	31	0
Electrical Devices	91	18	73	0
Electrical Lighting	96	26	70	0
Measuring & Testing	111	30	79	2
Nuclears & X-rays	72	20	50	2
Power Systems	172	43	128	1
Semiconductor Devices	129	30	98	1
Miscellaneous-Elec.	120	41	77	2
Materials Processing & Handling	103	25	71	7
Metal Working	137	43	91	3
Motors, Engines & Parts	145	44	97	4
Optics	100	26	72	2
Transportation	73	14	55	[illegible]
Miscellaneous Mechanical	124	33	86	5
Agriculture, Husbandry, Food	87	30	49	8
Apparel & Textile	77	23	52	2
Earth Working & Wells	20	8	12	0
Furniture, House Fixtures	51	21	29	1
Heating	84	37	42	5
Pipes & Joints	66	20	45	1
Receptacles	55	22	29	4
Miscellaneous-Others	225	79	140	6

any collaboration(%)	N	Yes	No
All	3567	29.18	70.82
Agriculture, Food, Textiles	60	46.67	53.33
Coating	77	38.96	61.04
Gas	43	37.21	62.79
Organic Compounds	113	25.66	74.34
Resins	124	25.81	74.19
Miscellaneous-chemical	203	33.5	66.5
Communications	157	20.38	79.62
Computer Hardware	58	17.24	82.76
Computer Software	121	19.83	80.17
Computer Peripherals	74	24.32	75.68
Information Storage	118	14.41	85.59
Drugs	126	27.78	72.22
Surgery & Medical Instruments	84	27.38	72.62
Biotechnology	86	37.21	62.79
Miscellaneous-Drug&Med	45	31.11	68.89
Electrical Devices	91	19.78	80.22
Electrical Lighting	96	27.08	72.92
Measuring & Testing	109	27.52	72.48
Nuclears & X-rays	70	28.57	71.43
Power Systems	171	25.15	74.85
Semiconductor Devices	128	23.44	76.56
Miscellaneous-Elec.	118	34.75	65.25
Materials Processing & Handling	96	26.04	73.96
Metal Working	134	32.09	67.91
Motors, Engines & Parts	141	31.21	68.79
Optics	98	26.53	73.47
Transportation	69	20.29	79.71
Miscellaneous Mechanical	119	27.73	72.27
Agriculture, Husbandry, Food	79	37.97	62.03
Apparel & Textile	75	30.67	69.33
Earth Working & Wells	20	40	60
Furniture, House Fixtures	50	42	58
Heating	79	46.84	53.16
Pipes & Joints	65	30.77	69.23
Receptacles	51	43.14	56.86
Miscellaneous-Others	219	36.07	63.93
US-JP weighted		27.55	72.45
JP weighted		27.53	72.47

Japan

Question 4-11 Were the interactions (discussions, meetings, sources of ideas, etc.) with the following types of people (apart from co-inventors) important during the research that led to the patented invention? (1 = not important, 5 = very important)(交流先重要性の評価)

people belong to the same firm(including affiliates),typically took less than one hour to reach his/her office or location
（同一組織内で移動時間が1時間以内）

	All	交流なし	全く重要ではない	重要ではない	どちらでもない	重要である	非常に重要である	無回答
	All	**no interaction**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	693	127	138	325	969	933	473
Agriculture, Food, Textiles	60	7	2	2	4	17	18	10
Coating	80	15	3	3	4	21	22	12
Gas	45	6	3	2	3	14	10	7
Organic Compounds	120	30	6	8	5	34	22	15
Resins	125	20	4	2	17	27	36	19
Miscellaneous-chemical	208	35	11	7	23	50	51	31
Communications	160	38	1	2	14	45	48	12
Computer Hardware	59	11	3	2	3	15	14	11
Computer Software	123	31	3	0	12	36	33	8
Computer Peripherals	76	17	1	2	4	25	22	5
Information Storage	120	14	5	7	13	40	35	6
Drugs	127	20	3	5	6	22	46	25
Surgery & Medical Instruments	85	22	3	6	9	18	16	11
Biotechnology	87	25	4	0	6	18	16	18
Miscellaneous-Drug&Med	45	10	2	3	3	9	10	8
Electrical Devices	91	8	6	3	11	36	19	8
Electrical Lighting	96	21	5	2	8	27	22	11
Measuring & Testing	111	25	5	3	9	22	33	14
Nuclears & X-rays	72	11	3	5	8	20	20	5
Power Systems	172	38	4	8	13	48	42	19
Semiconductor Devices	129	21	2	3	15	36	41	11
Miscellaneous-Elec.	120	22	7	4	14	35	30	8
Materials Processing & Handling	103	24	0	6	13	26	19	15
Metal Working	137	20	6	9	13	33	37	19
Motors, Engines & Parts	145	29	4	7	10	37	40	18
Optics	100	15	4	4	4	36	26	11
Transportation	73	10	2	1	5	20	21	14
Miscellaneous Mechanical	124	23	0	8	19	29	25	20
Agriculture, Husbandry, Food	87	19	3	3	7	25	17	13
Apparel & Textile	77	19	2	1	8	27	11	9
Earth Working & Wells	20	1	0	0	1	2	8	8
Furniture, House Fixtures	51	6	4	1	7	15	12	6
Heating	84	14	1	2	6	27	26	8
Pipes & Joints	66	10	2	6	3	17	14	14
Receptacles	55	11	5	3	4	9	14	9
Miscellaneous-Others	225	45	8	8	21	51	57	35

%	N	no interaction	1	2	3	4	5	Total
All	3185	21.76	3.99	4.33	10.2	30.42	29.29	100
Agriculture, Food, Textiles	50	14	4	4	8	34	36	100
Coating	68	22.06	4.41	4.41	5.88	30.88	32.35	100
Gas	38	15.79	7.89	5.26	7.89	36.84	26.32	100
Organic Compounds	105	28.57	5.71	7.62	4.76	32.38	20.95	100
Resins	106	18.87	3.77	1.89	16.04	25.47	33.96	100
Miscellaneous-chemical	177	19.77	6.21	3.95	12.99	28.25	28.81	100
Communications	148	25.68	0.68	1.35	9.46	30.41	32.43	100
Computer Hardware	48	22.92	6.25	4.17	6.25	31.25	29.17	100
Computer Software	115	26.96	2.61	0	10.43	31.3	28.7	100
Computer Peripherals	71	23.94	1.41	2.82	5.63	35.21	30.99	100
Information Storage	114	12.28	4.39	6.14	11.4	35.09	30.7	100
Drugs	102	19.61	2.94	4.9	5.88	21.57	45.1	100
Surgery & Medical Instruments	74	29.73	4.05	8.11	12.16	24.32	21.62	100
Biotechnology	69	36.23	5.8	0	8.7	26.09	23.19	100
Miscellaneous-Drug&Med	37	27.03	5.41	8.11	8.11	24.32	27.03	100
Electrical Devices	83	9.64	7.23	3.61	13.25	43.37	22.89	100
Electrical Lighting	85	24.71	5.88	2.35	9.41	31.76	25.88	100
Measuring & Testing	97	25.77	5.15	3.09	9.28	22.68	34.02	100
Nuclears & X-rays	67	16.42	4.48	7.46	11.94	29.85	29.85	100
Power Systems	153	24.84	2.61	5.23	8.5	31.37	27.45	100
Semiconductor Devices	118	17.8	1.69	2.54	12.71	30.51	34.75	100
Miscellaneous-Elec.	112	19.64	6.25	3.57	12.5	31.25	26.79	100
Materials Processing & Handling	88	27.27	0	6.82	14.77	29.55	21.59	100
Metal Working	118	16.95	5.08	7.63	11.02	27.97	31.36	100
Motors, Engines & Parts	127	22.83	3.15	5.51	7.87	29.13	31.5	100
Optics	89	16.85	4.49	4.49	4.49	40.45	29.21	100
Transportation	59	16.95	3.39	1.69	8.47	33.9	35.59	100
Miscellaneous Mechanical	104	22.12	0	7.69	18.27	27.88	24.04	100
Agriculture, Husbandry, Food	74	25.68	4.05	4.05	9.46	33.78	22.97	100
Apparel & Textile	68	27.94	2.94	1.47	11.76	39.71	16.18	100
Earth Working & Wells	12	8.33	0	0	8.33	16.67	66.67	100
Furniture, House Fixtures	45	13.33	8.89	2.22	15.56	33.33	26.67	100
Heating	76	18.42	1.32	2.63	7.89	35.53	34.21	100
Pipes & Joints	52	19.23	3.85	11.54	5.77	32.69	26.92	100
Receptacles	46	23.91	10.87	6.52	8.7	19.57	30.43	100
Miscellaneous-Others	190	23.68	4.21	4.21	11.05	26.84	30	100
JP weighted		21.87	3.74	3.95	10.38	30.54	29.52	100

people belong to the same firm(including affiliates),typically took more than one hour to reach his/her office or location（同一組織内で移動時間が1時間超）

	All	交流なし	全く重要ではない	重要ではない	どちらでもない	重要である	非常に重要である	無回答
	All	**no interaction**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1105	196	236	507	709	279	626
Agriculture, Food, Textiles	60	15	7	3	7	13	5	10
Coating	80	18	6	6	12	17	8	13
Gas	45	6	2	2	5	13	2	15
Organic Compounds	120	37	10	11	12	26	4	20
Resins	125	32	6	9	21	18	12	27
Miscellaneous-chemical	208	63	14	14	25	39	18	35
Communications	160	57	3	6	18	40	23	13
Computer Hardware	59	22	3	3	8	10	7	6
Computer Software	123	50	3	6	15	29	8	12
Computer Peripherals	76	32	3	4	8	11	9	9
Information Storage	120	34	10	13	19	26	8	10
Drugs	127	33	4	6	14	23	18	29
Surgery & Medical Instruments	85	27	4	6	12	13	5	18
Biotechnology	87	26	5	5	14	15	5	17
Miscellaneous-Drug&Med	45	16	4	2	5	7	3	8
Electrical Devices	91	24	7	6	17	17	9	11
Electrical Lighting	96	36	8	3	17	14	6	12
Measuring & Testing	111	43	7	6	18	12	10	15
Nuclears & X-rays	72	18	5	5	8	19	7	10
Power Systems	172	54	7	13	27	38	10	23
Semiconductor Devices	129	36	3	5	21	31	14	19
Miscellaneous-Elec.	120	35	9	6	24	20	9	17
Materials Processing & Handling	103	30	1	9	16	21	6	20
Metal Working	137	39	11	8	18	31	3	27
Motors, Engines & Parts	145	44	7	11	21	29	10	23
Optics	100	32	7	6	8	27	6	14
Transportation	73	24	4	1	9	10	2	23
Miscellaneous Mechanical	124	32	6	11	21	22	5	27
Agriculture, Husbandry, Food	87	26	6	8	7	13	7	20
Apparel & Textile	77	29	2	4	10	10	2	20
Earth Working & Wells	20	6	0	0	2	4	1	7
Furniture, House Fixtures	51	12	3	3	13	7	2	11
Heating	84	20	5	8	11	20	7	13
Pipes & Joints	66	11	1	9	5	16	5	19
Receptacles	55	12	3	5	6	9	8	12
Miscellaneous-Others	225	74	10	13	33	39	15	41

	N	no interaction	1	2	3	4	5	Total
All	3032	36.44	6.46	7.78	16.72	23.38	9.2	100
Agriculture, Food, Textiles	50	30	14	6	14	26	10	100
Coating	67	26.87	8.96	8.96	17.91	25.37	11.94	100
Gas	30	20	6.67	6.67	16.67	43.33	6.67	100
Organic Compounds	100	37	10	11	12	26	4	100
Resins	98	32.65	6.12	9.18	21.43	18.37	12.24	100
Miscellaneous-chemical	173	36.42	8.09	8.09	14.45	22.54	10.4	100
Communications	147	38.78	2.04	4.08	12.24	27.21	15.65	100
Computer Hardware	53	41.51	5.66	5.66	15.09	18.87	13.21	100
Computer Software	111	45.05	2.7	5.41	13.51	26.13	7.21	100
Computer Peripherals	67	47.76	4.48	5.97	11.94	16.42	13.43	100
Information Storage	110	30.91	9.09	11.82	17.27	23.64	7.27	100
Drugs	98	33.67	4.08	6.12	14.29	23.47	18.37	100
Surgery & Medical Instruments	67	40.3	5.97	8.96	17.91	19.4	7.46	100
Biotechnology	70	37.14	7.14	7.14	20	21.43	7.14	100
Miscellaneous-Drug&Med	37	43.24	10.81	5.41	13.51	18.92	8.11	100
Electrical Devices	80	30	8.75	7.5	21.25	21.25	11.25	100
Electrical Lighting	84	42.86	9.52	3.57	20.24	16.67	7.14	100
Measuring & Testing	96	44.79	7.29	6.25	18.75	12.5	10.42	100
Nuclears & X-rays	62	29.03	8.06	8.06	12.9	30.65	11.29	100
Power Systems	149	36.24	4.7	8.72	18.12	25.5	6.71	100
Semiconductor Devices	110	32.73	2.73	4.55	19.09	28.18	12.73	100
Miscellaneous-Elec.	103	33.98	8.74	5.83	23.3	19.42	8.74	100
Materials Processing & Handling	83	36.14	1.2	10.84	19.28	25.3	7.23	100
Metal Working	110	35.45	10	7.27	16.36	28.18	2.73	100
Motors, Engines & Parts	122	36.07	5.74	9.02	17.21	23.77	8.2	100
Optics	86	37.21	8.14	6.98	9.3	31.4	6.98	100
Transportation	50	48	8	2	18	20	4	100
Miscellaneous Mechanical	97	32.99	6.19	11.34	21.65	22.68	5.15	100
Agriculture, Husbandry, Food	67	38.81	8.96	11.94	10.45	19.4	10.45	100
Apparel & Textile	57	50.88	3.51	7.02	17.54	17.54	3.51	100
Earth Working & Wells	13	46.15	0	0	15.38	30.77	7.69	100
Furniture, House Fixtures	40	30	7.5	7.5	32.5	17.5	5	100
Heating	71	28.17	7.04	11.27	15.49	28.17	9.86	100
Pipes & Joints	47	23.4	2.13	19.15	10.64	34.04	10.64	100
Receptacles	43	27.91	6.98	11.63	13.95	20.93	18.6	100
Miscellaneous-Others	184	40.22	5.43	7.07	17.93	21.2	8.15	100
		36.95	6.11	7.2	16.28	23.68	9.78	100

Japan

Question 4-11 Were the interactions (discussions, meetings, sources of ideas, etc.) with the following types of people (apart from co-inventors) important during the research that led to the patented invention? (1 = not important, 5 = very important)(交流先重要性の評価)

people belong to other organization(unaffiliated),typically took less than one hour to reach his/her office or location
（組織外で移動時間が1時間以内）

	All	交流なし	全く重要ではない	重要ではない	どちらでもない	重要である	非常に重要である	無回答
	All	**no interaction**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1385	196	245	501	493	178	660
Agriculture, Food, Textiles	60	26	3	4	4	6	4	13
Coating	80	29	1	7	13	10	5	15
Gas	45	12	3	4	6	4	1	15
Organic Compounds	120	58	8	10	9	9	4	22
Resins	125	39	9	9	22	12	6	28
Miscellaneous-chemical	208	78	20	14	26	22	8	40
Communications	160	73	1	10	29	27	5	15
Computer Hardware	59	25	3	4	9	7	1	10
Computer Software	123	62	7	6	14	16	7	11
Computer Peripherals	76	35	3	3	12	8	5	10
Information Storage	120	55	10	12	17	11	3	12
Drugs	127	44	5	5	21	19	5	28
Surgery & Medical Instruments	85	32	4	6	14	10	4	15
Biotechnology	87	32	4	5	14	6	3	23
Miscellaneous-Drug&Med	45	20	3	1	5	6	4	6
Electrical Devices	91	31	7	7	15	15	2	14
Electrical Lighting	96	40	7	3	13	13	5	15
Measuring & Testing	111	43	4	8	15	15	8	18
Nuclears & X-rays	72	29	7	5	7	10	2	12
Power Systems	172	62	9	13	24	25	10	29
Semiconductor Devices	129	54	6	7	18	14	11	19
Miscellaneous-Elec.	120	49	10	6	16	17	5	17
Materials Processing & Handling	103	36	4	9	11	18	5	20
Metal Working	137	40	9	7	18	26	13	24
Motors, Engines & Parts	145	60	7	10	20	16	8	24
Optics	100	36	9	8	19	10	2	16
Transportation	73	25	3	2	5	16	3	19
Miscellaneous Mechanical	124	38	3	13	20	21	4	25
Agriculture, Husbandry, Food	87	27	3	8	13	13	3	20
Apparel & Textile	77	32	1	6	11	6	3	18
Earth Working & Wells	20	7	0	0	3	3	0	7
Furniture, House Fixtures	51	14	2	2	11	8	2	12
Heating	84	26	6	7	5	20	7	13
Pipes & Joints	66	17	2	7	9	6	6	19
Receptacles	55	19	3	4	5	9	3	12
Miscellaneous-Others	225	80	10	13	28	39	11	44

%	N	no interaction	1	2	3	4	5	Total
All	2998	46.2	6.54	8.17	16.71	16.44	5.94	100
Agriculture, Food, Textiles	47	55.32	6.38	8.51	8.51	12.77	8.51	100
Coating	65	44.62	1.54	10.77	20	15.38	7.69	100
Gas	30	40	10	13.33	20	13.33	3.33	100
Organic Compounds	98	59.18	8.16	10.2	9.18	9.18	4.08	100
Resins	97	40.21	9.28	9.28	22.68	12.37	6.19	100
Miscellaneous-chemical	168	46.43	11.9	8.33	15.48	13.1	4.76	100
Communications	145	50.34	0.69	6.9	20	18.62	3.45	100
Computer Hardware	49	51.02	6.12	8.16	18.37	14.29	2.04	100
Computer Software	112	55.36	6.25	5.36	12.5	14.29	6.25	100
Computer Peripherals	66	53.03	4.55	4.55	18.18	12.12	7.58	100
Information Storage	108	50.93	9.26	11.11	15.74	10.19	2.78	100
Drugs	99	44.44	5.05	5.05	21.21	19.19	5.05	100
Surgery & Medical Instruments	70	45.71	5.71	8.57	20	14.29	5.71	100
Biotechnology	64	50	6.25	7.81	21.88	9.38	4.69	100
Miscellaneous-Drug&Med	39	51.28	7.69	2.56	12.82	15.38	10.26	100
Electrical Devices	77	40.26	9.09	9.09	19.48	19.48	2.6	100
Electrical Lighting	81	49.38	8.64	3.7	16.05	16.05	6.17	100
Measuring & Testing	93	46.24	4.3	8.6	16.13	16.13	8.6	100
Nuclears & X-rays	60	48.33	11.67	8.33	11.67	16.67	3.33	100
Power Systems	143	43.36	6.29	9.09	16.78	17.48	6.99	100
Semiconductor Devices	110	49.09	5.45	6.36	16.36	12.73	10	100
Miscellaneous-Elec.	103	47.57	9.71	5.83	15.53	16.5	4.85	100
Materials Processing & Handling	83	43.37	4.82	10.84	13.25	21.69	6.02	100
Metal Working	113	35.4	7.96	6.19	15.93	23.01	11.5	100
Motors, Engines & Parts	121	49.59	5.79	8.26	16.53	13.22	6.61	100
Optics	84	42.86	10.71	9.52	22.62	11.9	2.38	100
Transportation	54	46.3	5.56	3.7	9.26	29.63	5.56	100
Miscellaneous Mechanical	99	38.38	3.03	13.13	20.2	21.21	4.04	100
Agriculture, Husbandry, Food	67	40.3	4.48	11.94	19.4	19.4	4.48	100
Apparel & Textile	59	54.24	1.69	10.17	18.64	10.17	5.08	100
Earth Working & Wells	13	53.85	0	0	23.08	23.08	0	100
Furniture, House Fixtures	39	35.9	5.13	5.13	28.21	20.51	5.13	100
Heating	71	36.62	8.45	9.86	7.04	28.17	9.86	100
Pipes & Joints	47	36.17	4.26	14.89	19.15	12.77	12.77	100
Receptacles	43	44.19	6.98	9.3	11.63	20.93	6.98	100
Miscellaneous-Others	181	44.2	5.52	7.18	15.47	21.55	6.08	100
JP weighted		46.3	6.62	7.79	16.88	16.66	5.76	100

people belong to other organization(unaffiliated),typically took more than one hour to reach his/her office or location（組織外で移動時間が1時間超）

	All	交流なし	全く重要ではない	重要ではない	どちらでもない	重要である	非常に重要である	無回答
	All	**no interaction**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1150	188	277	541	665	340	497
Agriculture, Food, Textiles	60	17	2	2	5	16	10	8
Coating	80	21	3	5	9	25	7	10
Gas	45	10	3	4	6	7	5	10
Organic Compounds	120	52	6	11	10	17	9	15
Resins	125	33	11	8	19	22	16	16
Miscellaneous-chemical	208	54	15	21	23	40	28	27
Communications	160	57	3	13	33	27	15	12
Computer Hardware	59	24	4	6	8	6	1	10
Computer Software	123	52	6	7	16	23	11	8
Computer Peripherals	76	30	2	6	16	9	7	6
Information Storage	120	46	11	10	22	15	7	9
Drugs	127	38	3	10	23	19	12	22
Surgery & Medical Instruments	85	27	3	7	16	13	8	11
Biotechnology	87	19	3	6	12	21	12	14
Miscellaneous-Drug&Med	45	20	4	1	6	4	5	5
Electrical Devices	91	23	7	10	16	16	10	9
Electrical Lighting	96	29	7	4	13	25	9	9
Measuring & Testing	111	37	4	12	13	23	9	13
Nuclears & X-rays	72	27	6	3	11	15	3	7
Power Systems	172	64	9	14	30	25	11	19
Semiconductor Devices	129	48	6	8	19	23	16	9
Miscellaneous-Elec.	120	34	8	6	18	29	11	14
Materials Processing & Handling	103	35	4	10	18	13	4	19
Metal Working	137	37	6	9	21	27	13	24
Motors, Engines & Parts	145	51	7	11	23	26	7	20
Optics	100	26	9	8	11	24	8	14
Transportation	73	26	5	3	12	3	4	20
Miscellaneous Mechanical	124	36	5	13	19	24	5	22
Agriculture, Husbandry, Food	87	20	4	7	12	17	8	19
Apparel & Textile	77	29	1	5	12	7	9	14
Earth Working & Wells	20	6	0	0	1	5	3	5
Furniture, House Fixtures	51	13	3	3	12	8	3	9
Heating	84	23	5	7	12	18	10	9
Pipes & Joints	66	10	2	10	9	13	8	14
Receptacles	55	12	4	3	7	13	5	11
Miscellaneous-Others	225	64	7	14	28	47	31	34

	N	no interaction	1	2	3	4	5	Total
All	3161	36.38	5.95	8.76	17.11	21.04	10.76	100
Agriculture, Food, Textiles	52	32.69	3.85	3.85	9.62	30.77	19.23	100
Coating	70	30	4.29	7.14	12.86	35.71	10	100
Gas	35	28.57	8.57	11.43	17.14	20	14.29	100
Organic Compounds	105	49.52	5.71	10.48	9.52	16.19	8.57	100
Resins	109	30.28	10.09	7.34	17.43	20.18	14.68	100
Miscellaneous-chemical	181	29.83	8.29	11.6	12.71	22.1	15.47	100
Communications	148	38.51	2.03	8.78	22.3	18.24	10.14	100
Computer Hardware	49	48.98	8.16	12.24	16.33	12.24	2.04	100
Computer Software	115	45.22	5.22	6.09	13.91	20	9.57	100
Computer Peripherals	70	42.86	2.86	8.57	22.86	12.86	10	100
Information Storage	111	41.44	9.91	9.01	19.82	13.51	6.31	100
Drugs	105	36.19	2.86	9.52	21.9	18.1	11.43	100
Surgery & Medical Instruments	74	36.49	4.05	9.46	21.62	17.57	10.81	100
Biotechnology	73	26.03	4.11	8.22	16.44	28.77	16.44	100
Miscellaneous-Drug&Med	40	50	10	2.5	15	10	12.5	100
Electrical Devices	82	28.05	8.54	12.2	19.51	19.51	12.2	100
Electrical Lighting	87	33.33	8.05	4.6	14.94	28.74	10.34	100
Measuring & Testing	98	37.76	4.08	12.24	13.27	23.47	9.18	100
Nuclears & X-rays	65	41.54	9.23	4.62	16.92	23.08	4.62	100
Power Systems	153	41.83	5.88	9.15	19.61	16.34	7.19	100
Semiconductor Devices	120	40	5	6.67	15.83	19.17	13.33	100
Miscellaneous-Elec.	106	32.08	7.55	5.66	16.98	27.36	10.38	100
Materials Processing & Handling	84	41.67	4.76	11.9	21.43	15.48	4.76	100
Metal Working	113	32.74	5.31	7.96	18.58	23.89	11.5	100
Motors, Engines & Parts	125	40.8	5.6	8.8	18.4	20.8	5.6	100
Optics	86	30.23	10.47	9.3	12.79	27.91	9.3	100
Transportation	53	49.06	9.43	5.66	22.64	5.66	7.55	100
Miscellaneous Mechanical	102	35.29	4.9	12.75	18.63	23.53	4.9	100
Agriculture, Husbandry, Food	68	29.41	5.88	10.29	17.65	25	11.76	100
Apparel & Textile	63	46.03	1.59	7.94	19.05	11.11	14.29	100
Earth Working & Wells	15	40	0	0	6.67	33.33	20	100
Furniture, House Fixtures	42	30.95	7.14	7.14	28.57	19.05	7.14	100
Heating	75	30.67	6.67	9.33	16	24	13.33	100
Pipes & Joints	52	19.23	3.85	19.23	17.31	25	15.38	100
Receptacles	44	27.27	9.09	6.82	15.91	29.55	11.36	100
Miscellaneous-Others	191	33.51	3.66	7.33	14.66	24.61	16.23	100
		36.54	5.92	8.73	17.31	20.89	10.6	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

Scientific and Technical Literature（科学技術文献 ）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	653	126	260	484	1378	618	139
Agriculture, Food, Textiles	60	6	3	4	5	31	10	1
Coating	80	11	2	5	13	25	21	3
Gas	45	7	2	3	5	18	8	2
Organic Compounds	120	9	2	4	12	51	35	7
Resins	125	10	3	10	16	57	22	7
Miscellaneous-chemical	208	26	8	11	20	103	30	10
Communications	160	28	1	8	21	64	36	2
Computer Hardware	59	9	0	1	8	27	10	4
Computer Software	123	39	4	8	15	36	20	1
Computer Peripherals	76	13	4	6	10	30	12	1
Information Storage	120	25	2	10	21	42	19	1
Drugs	127	4	1	2	5	49	63	3
Surgery & Medical Instruments	85	14	4	9	13	30	12	3
Biotechnology	87	3	3	3	2	34	40	2
Miscellaneous-Drug&Med	45	9	3	3	10	12	7	1
Electrical Devices	91	26	4	9	18	19	15	0
Electrical Lighting	96	22	2	11	14	29	16	2
Measuring & Testing	111	23	2	6	10	35	32	3
Nuclears & X-rays	72	12	5	2	11	25	17	0
Power Systems	172	18	8	11	20	90	20	5
Semiconductor Devices	129	18	5	6	14	56	26	4
Miscellaneous-Elec.	120	25	4	10	23	42	14	2
Materials Processing & Handling	103	30	1	9	21	26	5	11
Metal Working	137	22	6	11	21	52	25	0
Motors, Engines & Parts	145	25	5	16	20	55	21	3
Optics	100	22	1	9	19	34	11	4
Transportation	73	19	3	9	15	17	3	7
Miscellaneous Mechanical	124	32	6	7	20	46	7	6
Agriculture, Husbandry, Food	87	17	3	7	8	38	11	3
Apparel & Textile	77	23	1	10	18	15	1	9
Earth Working & Wells	20	3	1	1	1	6	2	6
Furniture, House Fixtures	51	14	4	5	7	15	0	6
Heating	84	9	3	11	7	42	9	3
Pipes & Joints	66	15	5	5	10	18	6	7
Receptacles	55	19	3	3	7	16	4	3
Miscellaneous-Others	225	46	12	15	24	93	28	7

%	N	I did not use	1	2	3	4	5	Total
All	3519	18.56	3.58	7.39	13.75	39.16	17.56	100
Agriculture, Food, Textiles	59	10.17	5.08	6.78	8.47	52.54	16.95	100
Coating	77	14.29	2.6	6.49	16.88	32.47	27.27	100
Gas	43	16.28	4.65	6.98	11.63	41.86	18.6	100
Organic Compounds	113	7.96	1.77	3.54	10.62	45.13	30.97	100
Resins	118	8.47	2.54	8.47	13.56	48.31	18.64	100
Miscellaneous-chemical	198	13.13	4.04	5.56	10.1	52.02	15.15	100
Communications	158	17.72	0.63	5.06	13.29	40.51	22.78	100
Computer Hardware	55	16.36	0	1.82	14.55	49.09	18.18	100
Computer Software	122	31.97	3.28	6.56	12.3	29.51	16.39	100
Computer Peripherals	75	17.33	5.33	8	13.33	40	16	100
Information Storage	119	21.01	1.68	8.4	17.65	35.29	15.97	100
Drugs	124	3.23	0.81	1.61	4.03	39.52	50.81	100
Surgery & Medical Instruments	82	17.07	4.88	10.98	15.85	36.59	14.63	100
Biotechnology	85	3.53	3.53	3.53	2.35	40	47.06	100
Miscellaneous-Drug&Med	44	20.45	6.82	6.82	22.73	27.27	15.91	100
Electrical Devices	91	28.57	4.4	9.89	19.78	20.88	16.48	100
Electrical Lighting	94	23.4	2.13	11.7	14.89	30.85	17.02	100
Measuring & Testing	108	21.3	1.85	5.56	9.26	32.41	29.63	100
Nuclears & X-rays	72	16.67	6.94	2.78	15.28	34.72	23.61	100
Power Systems	167	10.78	4.79	6.59	11.98	53.89	11.98	100
Semiconductor Devices	125	14.4	4	4.8	11.2	44.8	20.8	100
Miscellaneous-Elec.	118	21.19	3.39	8.47	19.49	35.59	11.86	100
Materials Processing & Handling	92	32.61	1.09	9.78	22.83	28.26	5.43	100
Metal Working	137	16.06	4.38	8.03	15.33	37.96	18.25	100
Motors, Engines & Parts	142	17.61	3.52	11.27	14.08	38.73	14.79	100
Optics	96	22.92	1.04	9.38	19.79	35.42	11.46	100
Transportation	66	28.79	4.55	13.64	22.73	25.76	4.55	100
Miscellaneous Mechanical	118	27.12	5.08	5.93	16.95	38.98	5.93	100
Agriculture, Husbandry, Food	84	20.24	3.57	8.33	9.52	45.24	13.1	100
Apparel & Textile	68	33.82	1.47	14.71	26.47	22.06	1.47	100
Earth Working & Wells	14	21.43	7.14	7.14	7.14	42.86	14.29	100
Furniture, House Fixtures	45	31.11	8.89	11.11	15.56	33.33	0	100
Heating	81	11.11	3.7	13.58	8.64	51.85	11.11	100
Pipes & Joints	59	25.42	8.47	8.47	16.95	30.51	10.17	100
Receptacles	52	36.54	5.77	5.77	13.46	30.77	7.69	100
Miscellaneous-Others	218	21.1	5.5	6.88	11.01	42.66	12.84	100
US-JP weighted		18.13	3.33	6.98	13.43	39.58	18.55	100
JP weighted		18.89	3.43	7.36	13.9	39.14	17.27	100

Patent Literature（特許文献）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	504	116	210	451	1460	796	121
Agriculture, Food, Textiles	60	4	3	3	4	24	21	1
Coating	80	7	4	3	6	33	24	3
Gas	45	7	1	1	7	16	10	3
Organic Compounds	120	10	3	5	17	41	35	9
Resins	125	7	2	9	8	47	43	9
Miscellaneous-chemical	208	22	5	11	24	90	49	7
Communications	160	23	4	7	26	65	31	4
Computer Hardware	59	14	0	2	3	26	12	2
Computer Software	123	38	4	7	17	44	12	1
Computer Peripherals	76	12	2	12	4	25	20	1
Information Storage	120	17	4	7	15	57	19	1
Drugs	127	9	3	5	19	48	40	3
Surgery & Medical Instruments	85	16	2	5	11	31	18	2
Biotechnology	87	9	4	4	15	26	25	4
Miscellaneous-Drug&Med	45	7	4	2	3	16	12	1
Electrical Devices	91	14	1	4	9	43	20	0
Electrical Lighting	96	14	3	7	10	41	20	1
Measuring & Testing	111	22	2	3	18	46	18	2
Nuclears & X-rays	72	15	5	1	11	26	13	1
Power Systems	172	15	9	9	15	85	35	4
Semiconductor Devices	129	17	3	14	26	47	21	1
Miscellaneous-Elec.	120	23	3	11	18	40	22	3
Materials Processing & Handling	103	17	1	7	13	36	20	9
Metal Working	137	20	7	12	20	47	29	2
Motors, Engines & Parts	145	13	4	12	17	58	39	2
Optics	100	14	1	5	15	46	16	3
Transportation	73	13	6	4	8	20	18	4
Miscellaneous Mechanical	124	18	5	4	18	45	29	5
Agriculture, Husbandry, Food	87	12	3	6	7	40	17	2
Apparel & Textile	77	12	1	5	12	35	6	6
Earth Working & Wells	20	1	1	1	1	7	3	6
Furniture, House Fixtures	51	6	2	4	5	20	11	3
Heating	84	9	2	2	11	43	16	1
Pipes & Joints	66	8	4	0	9	26	12	7
Receptacles	55	8	1	2	5	29	8	2
Miscellaneous-Others	225	31	7	14	24	91	52	6

	N	I did not use	1	2	3	4	5	Total
All	3537	14.25	3.28	5.94	12.75	41.28	22.5	100
Agriculture, Food, Textiles	59	6.78	5.08	5.08	6.78	40.68	35.59	100
Coating	77	9.09	5.19	3.9	7.79	42.86	31.17	100
Gas	42	16.67	2.38	2.38	16.67	38.1	23.81	100
Organic Compounds	111	9.01	2.7	4.5	15.32	36.94	31.53	100
Resins	116	6.03	1.72	7.76	6.9	40.52	37.07	100
Miscellaneous-chemical	201	10.95	2.49	5.47	11.94	44.78	24.38	100
Communications	156	14.74	2.56	4.49	16.67	41.67	19.87	100
Computer Hardware	57	24.56	0	3.51	5.26	45.61	21.05	100
Computer Software	122	31.15	3.28	5.74	13.93	36.07	9.84	100
Computer Peripherals	75	16	2.67	16	5.33	33.33	26.67	100
Information Storage	119	14.29	3.36	5.88	12.61	47.9	15.97	100
Drugs	124	7.26	2.42	4.03	15.32	38.71	32.26	100
Surgery & Medical Instruments	83	19.28	2.41	6.02	13.25	37.35	21.69	100
Biotechnology	83	10.84	4.82	4.82	18.07	31.33	30.12	100
Miscellaneous-Drug&Med	44	15.91	9.09	4.55	6.82	36.36	27.27	100
Electrical Devices	91	15.38	1.1	4.4	9.89	47.25	21.98	100
Electrical Lighting	95	14.74	3.16	7.37	10.53	43.16	21.05	100
Measuring & Testing	109	20.18	1.83	2.75	16.51	42.2	16.51	100
Nuclears & X-rays	71	21.13	7.04	1.41	15.49	36.62	18.31	100
Power Systems	168	8.93	5.36	5.36	8.93	50.6	20.83	100
Semiconductor Devices	128	13.28	2.34	10.94	20.31	36.72	16.41	100
Miscellaneous-Elec.	117	19.66	2.56	9.4	15.38	34.19	18.8	100
Materials Processing & Handling	94	18.09	1.06	7.45	13.83	38.3	21.28	100
Metal Working	135	14.81	5.19	8.89	14.81	34.81	21.48	100
Motors, Engines & Parts	143	9.09	2.8	8.39	11.89	40.56	27.27	100
Optics	97	14.43	1.03	5.15	15.46	47.42	16.49	100
Transportation	69	18.84	8.7	5.8	11.59	28.99	26.09	100
Miscellaneous Mechanical	119	15.13	4.2	3.36	15.13	37.82	24.37	100
Agriculture, Husbandry, Food	85	14.12	3.53	7.06	8.24	47.06	20	100
Apparel & Textile	71	16.9	1.41	7.04	16.9	49.3	8.45	100
Earth Working & Wells	14	7.14	7.14	7.14	7.14	50	21.43	100
Furniture, House Fixtures	48	12.5	4.17	8.33	10.42	41.67	22.92	100
Heating	83	10.84	2.41	2.41	13.25	51.81	19.28	100
Pipes & Joints	59	13.56	6.78	0	15.25	44.07	20.34	100
Receptacles	53	15.09	1.89	3.77	9.43	54.72	15.09	100
Miscellaneous-Others	219	14.16	3.2	6.39	10.96	41.55	23.74	100
US-JP weighted		14.52	3.03	6.1	12.81	40.93	22.61	100
JP weighted		14.46	3.05	6.32	12.68	40.99	22.5	100

US (1/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

	A7_a Scientific and Technical Literature	all	I did not use	1	2	3	4	5	Missing	A7_b patent literature	all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	460	110	182	331	330	355	151		1,919	615	179	198	263	241	258	165
11	Agriculture, Food, Textiles	8	0	1	1	2	1	2	1		8	0	1	0	1	0	5	1
12	Coating	34	5	2	6	4	7	7	3		34	4	1	7	8	5	6	3
13	Gas	11	3	0	2	2	3	1	0		11	3	3	0	3	1	0	1
14	Organic Compounds	61	10	1	4	11	15	19	1		61	10	8	6	13	15	8	1
15	Resins	84	10	5	6	23	16	21	3		84	11	4	8	17	15	26	3
19	Miscellaneous-chemical	233	50	13	23	45	36	49	17		233	53	18	28	38	31	49	16
21	Communications	149	41	8	20	23	24	21	12		149	65	18	17	7	19	10	13
22	Computer Hardware	42	13	3	2	9	9	5	1		42	21	6	4	3	2	3	3
77	Computer Software	93	25	9	17	10	15	12	5		93	53	10	8	8	7	1	6
23	Computer Peripherals	33	8	2	5	6	4	5	3		33	8	4	5	5	3	5	3
24	Information Storage	42	5	4	3	8	11	7	4		42	13	4	7	6	5	2	5
31	Drugs	101	3	2	7	12	21	47	9		101	20	5	10	9	18	30	9
32	Surgery & Medical Instruments	123	23	8	7	20	23	28	14		123	34	6	12	17	13	26	15
33	Biotechnology	41	2	1	5	4	5	20	4		41	11	7	5	6	4	3	5
39	Miscellaneous-Drug&Med	29	5	1	3	5	8	4	3		29	6	3	4	5	4	5	2
41	Electrical Devices	45	13	5	7	2	7	7	4		45	15	4	3	9	5	5	4
42	Electrical Lighting	33	5	2	2	6	6	9	3		33	10	4	5	3	4	4	3
43	Measuring & Testing	62	14	0	4	13	14	9	8		62	22	4	7	8	8	4	9
44	Nuclears & X-rays	39	9	1	6	5	10	2	6		39	17	4	4	3	3	3	5
45	Power Systems	89	27	5	6	17	12	17	5		89	37	8	12	8	7	10	7
46	Semiconductor Devices	55	6	3	4	14	11	12	5		55	17	5	5	11	5	7	5
49	Miscellaneous-Elec.	32	10	0	4	6	6	3	3		32	13	5	2	3	3	2	4
51	Materials Processing & Handling	56	25	5	6	7	8	2	3		56	24	1	6	8	4	8	5
52	Metal Working	49	14	3	2	14	10	3	3		49	17	3	5	4	14	1	5
53	Motors, Engines & Parts	56	21	2	6	10	7	5	5		56	27	6	8	7	1	2	5
54	Optics	43	10	3	3	8	7	8	4		43	13	5	5	7	6	3	4
55	Transportation	33	14	3	4	1	2	5	4		33	17	3	2	1	3	3	4
59	Miscellaneous Mechanical	42	17	3	2	12	5	0	3		42	15	7	1	4	7	5	3
61	Agriculture, Husbandry, Food	14	4	2	1	2	1	2	2		14	3	1	1	3	2	3	1
63	Apparel & Textile	9	5	2	0	1	0	0	1		9	4	0	1	1	1	1	1
64	Earth Working & Wells	5	1	1	0	0	0	2	1		XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	1	1	2	0	0	0		9	4	2	0	2	1	0	0
66	Heating	8	1	0	1	1	2	1	2		8	0	2	0	1	2	1	2
67	Pipes & Joints	13	8	0	0	1	3	1	0		13	7	1	0	2	1	2	0
68	Receptacles	20	12	1	1	3	0	2	1		20	7	2	2	4	3	1	1
69	Miscellaneous-Others	123	36	8	11	22	21	17	8		XX	XX	XX	XX	XX	XX	XX	XX
											1919	615	179	198	263	241	258	165

	%	N	I did not use	1	2	3	4	5	Total	N	I did not use	1	2	3	4	5	Total
NBER	All	1768	26.02	6.22	10.29	18.72	18.67	20.08	100	1754	35.06	10.21	11.29	14.99	13.74	14.71	100
11	Agriculture, Food, Textiles	7	0	14.29	14.29	28.57	14.29	28.57	100	7	0.00	14.29	0.00	14.29	0.00	71.43	100
12	Coating	31	16.13	6.45	19.35	12.9	22.58	22.58	100	31	12.90	3.23	22.58	25.81	16.13	19.35	100
13	Gas	11	27.27	0	18.18	18.18	27.27	9.09	100	10	30.00	30.00	0.00	30.00	10.00	0.00	100
14	Organic Compounds	60	16.67	1.67	6.67	18.33	25	31.67	100	60	16.67	13.33	10.00	21.67	25.00	13.33	100
15	Resins	81	12.35	6.17	7.41	28.4	19.75	25.93	100	81	13.58	4.94	9.88	20.99	18.52	32.10	100
19	Miscellaneous-chemical	216	23.15	6.02	10.65	20.83	16.67	22.69	100	217	24.42	8.29	12.90	17.51	14.29	22.58	100
21	Communications	137	29.93	5.84	14.6	16.79	17.52	15.33	100	136	47.79	13.24	12.50	5.15	13.97	7.35	100
22	Computer Hardware	41	31.71	7.32	4.88	21.95	21.95	12.2	100	39	53.85	15.38	10.26	7.69	5.13	7.69	100
77	Computer Software	88	28.41	10.23	19.32	11.36	17.05	13.64	100	87	60.92	11.49	9.20	9.20	8.05	1.15	100
23	Computer Peripherals	30	26.67	6.67	16.67	20	13.33	16.67	100	30	26.67	13.33	16.67	16.67	10.00	16.67	100
24	Information Storage	38	13.16	10.53	7.89	21.05	28.95	18.42	100	37	35.14	10.81	18.92	16.22	13.51	5.41	100
31	Drugs	92	3.26	2.17	7.61	13.04	22.83	51.09	100	92	21.74	5.43	10.87	9.78	19.57	32.61	100
32	Surgery & Medical Instruments	109	21.1	7.34	6.42	18.35	21.1	25.69	100	108	31.48	5.56	11.11	15.74	12.04	24.07	100
33	Biotechnology	37	5.41	2.7	13.51	10.81	13.51	54.05	100	36	30.56	19.44	13.89	16.67	11.11	8.33	100
39	Miscellaneous-Drug&Med	26	19.23	3.85	11.54	19.23	30.77	15.38	100	27	22.22	11.11	14.81	18.52	14.81	18.52	100
41	Electrical Devices	41	31.71	12.2	17.07	4.88	17.07	17.07	100	41	36.59	9.76	7.32	21.95	12.20	12.20	100
42	Electrical Lighting	30	16.67	6.67	6.67	20	20	30	100	30	33.33	13.33	16.67	10.00	13.33	13.33	100
43	Measuring & Testing	54	25.93	0	7.41	24.07	25.93	16.67	100	53	41.51	7.55	13.21	15.09	15.09	7.55	100
44	Nuclears & X-rays	33	27.27	3.03	18.18	15.15	30.3	6.06	100	34	50.00	11.76	11.76	8.82	8.82	8.82	100
45	Power Systems	84	32.14	5.95	7.14	20.24	14.29	20.24	100	82	45.12	9.76	14.63	9.76	8.54	12.20	100
46	Semiconductor Devices	50	12	6	8	28	22	24	100	50	34.00	10.00	10.00	22.00	10.00	14.00	100
49	Miscellaneous-Elec.	29	34.48	0	13.79	20.69	20.69	10.34	100	28	46.43	17.86	7.14	10.71	10.71	7.14	100
51	Materials Processing & Handling	53	47.17	9.43	11.32	13.21	15.09	3.77	100	51	47.06	1.96	11.76	15.69	7.84	15.69	100
52	Metal Working	46	30.43	6.52	4.35	30.43	21.74	6.52	100	44	38.64	6.82	11.36	9.09	31.82	2.27	100
53	Motors, Engines & Parts	51	41.18	3.92	11.76	19.61	13.73	9.8	100	51	52.94	11.76	15.69	13.73	1.96	3.92	100
54	Optics	39	25.64	7.69	7.69	20.51	17.95	20.51	100	39	33.33	12.82	12.82	17.95	15.38	7.69	100
55	Transportation	29	48.28	10.34	13.79	3.45	6.9	17.24	100	29	58.62	10.34	6.90	3.45	10.34	10.34	100
59	Miscellaneous Mechanical	39	43.59	7.69	5.13	30.77	12.82	0	100	39	38.46	17.95	2.56	10.26	17.95	12.82	100
61	Agriculture, Husbandry, Food	12	33.33	16.67	8.33	16.67	8.33	16.67	100	13	23.08	7.69	7.69	23.08	15.38	23.08	100
63	Apparel & Textile	8	62.5	25	0	12.5	0	0	100	8	50.00	0.00	12.50	12.50	12.50	12.50	100
64	Earth Working & Wells	4	25	25	0	0	0	50	100	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	55.56	11.11	11.11	22.22	0	0	100	9	44.44	22.22	0.00	22.22	11.11	0.00	100
66	Heating	6	16.67	0	16.67	16.67	33.33	16.67	100	6	0.00	33.33	0.00	16.67	33.33	16.67	100
67	Pipes & Joints	13	61.54	0	0	7.69	23.08	7.69	100	13	53.85	7.69	0.00	15.38	7.69	15.38	100
68	Receptacles	19	63.16	5.26	5.26	15.79	0	10.53	100	19	36.84	10.53	10.53	21.05	15.79	5.26	100
69	Miscellaneous-Others	115	31.3	6.96	9.57	19.13	18.26	14.78	100	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**25.77**	**6.27**	**10.21**	**18.63**	**19.02**	**20.10**	100		**35.69**	**9.97**	**11.44**	**14.53**	**13.80**	**14.56**	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

Trade Fair or Exhibition（見本市、展示会）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1160	355	472	729	658	104	180
Agriculture, Food, Textiles	60	16	8	9	16	9	0	2
Coating	80	19	6	10	18	15	5	7
Gas	45	14	3	7	10	7	1	3
Organic Compounds	120	51	21	15	13	7	1	12
Resins	125	45	14	17	22	15	2	10
Miscellaneous-chemical	208	64	32	27	32	34	3	16
Communications	160	60	7	17	42	28	1	5
Computer Hardware	59	21	3	7	11	10	1	6
Computer Software	123	46	6	16	22	28	3	2
Computer Peripherals	76	20	9	8	21	14	2	2
Information Storage	120	50	9	14	23	20	1	3
Drugs	127	46	21	23	19	11	1	6
Surgery & Medical Instruments	85	28	7	11	18	12	5	4
Biotechnology	87	24	17	11	17	9	0	9
Miscellaneous-Drug&Med	45	17	4	3	7	10	3	1
Electrical Devices	91	36	7	8	22	17	1	0
Electrical Lighting	96	30	10	11	22	19	2	2
Measuring & Testing	111	40	6	12	29	20	2	2
Nuclears & X-rays	72	26	11	13	12	9	0	1
Power Systems	172	44	22	33	31	31	3	8
Semiconductor Devices	129	52	16	19	23	15	2	2
Miscellaneous-Elec.	120	37	9	12	29	28	2	3
Materials Processing & Handling	103	22	4	10	16	33	9	9
Metal Working	137	44	19	18	29	19	5	3
Motors, Engines & Parts	145	41	13	25	28	29	6	3
Optics	100	25	4	22	29	15	2	3
Transportation	73	22	6	11	13	14	1	6
Miscellaneous Mechanical	124	40	8	14	21	31	4	6
Agriculture, Husbandry, Food	87	24	11	11	20	15	3	3
Apparel & Textile	77	18	6	8	11	19	6	9
Earth Working & Wells	20	4	1	3	1	4	1	6
Furniture, House Fixtures	51	12	4	3	9	13	6	4
Heating	84	28	5	15	19	13	2	2
Pipes & Joints	66	16	4	5	12	18	4	7
Receptacles	55	13	4	4	13	16	3	2
Miscellaneous-Others	225	65	18	20	49	51	11	11

%	N	I did not use	1	2	3	4	5	Total
All	3478	33.35	10.21	13.57	20.96	18.92	2.99	100
Agriculture, Food, Textiles	58	27.59	13.79	15.52	27.59	15.52	0	100
Coating	73	26.03	8.22	13.7	24.66	20.55	6.85	100
Gas	42	33.33	7.14	16.67	23.81	16.67	2.38	100
Organic Compounds	108	47.22	19.44	13.89	12.04	6.48	0.93	100
Resins	115	39.13	12.17	14.78	19.13	13.04	1.74	100
Miscellaneous-chemical	192	33.33	16.67	14.06	16.67	17.71	1.56	100
Communications	155	38.71	4.52	10.97	27.1	18.06	0.65	100
Computer Hardware	53	39.62	5.66	13.21	20.75	18.87	1.89	100
Computer Software	121	38.02	4.96	13.22	18.18	23.14	2.48	100
Computer Peripherals	74	27.03	12.16	10.81	28.38	18.92	2.7	100
Information Storage	117	42.74	7.69	11.97	19.66	17.09	0.85	100
Drugs	121	38.02	17.36	19.01	15.7	9.09	0.83	100
Surgery & Medical Instruments	81	34.57	8.64	13.58	22.22	14.81	6.17	100
Biotechnology	78	30.77	21.79	14.1	21.79	11.54	0	100
Miscellaneous-Drug&Med	44	38.64	9.09	6.82	15.91	22.73	6.82	100
Electrical Devices	91	39.56	7.69	8.79	24.18	18.68	1.1	100
Electrical Lighting	94	31.91	10.64	11.7	23.4	20.21	2.13	100
Measuring & Testing	109	36.7	5.5	11.01	26.61	18.35	1.83	100
Nuclears & X-rays	71	36.62	15.49	18.31	16.9	12.68	0	100
Power Systems	164	26.83	13.41	20.12	18.9	18.9	1.83	100
Semiconductor Devices	127	40.94	12.6	14.96	18.11	11.81	1.57	100
Miscellaneous-Elec.	117	31.62	7.69	10.26	24.79	23.93	1.71	100
Materials Processing & Handling	94	23.4	4.26	10.64	17.02	35.11	9.57	100
Metal Working	134	32.84	14.18	13.43	21.64	14.18	3.73	100
Motors, Engines & Parts	142	28.87	9.15	17.61	19.72	20.42	4.23	100
Optics	97	25.77	4.12	22.68	29.9	15.46	2.06	100
Transportation	67	32.84	8.96	16.42	19.4	20.9	1.49	100
Miscellaneous Mechanical	118	33.9	6.78	11.86	17.8	26.27	3.39	100
Agriculture, Husbandry, Food	84	28.57	13.1	13.1	23.81	17.86	3.57	100
Apparel & Textile	68	26.47	8.82	11.76	16.18	27.94	8.82	100
Earth Working & Wells	14	28.57	7.14	21.43	7.14	28.57	7.14	100
Furniture, House Fixtures	47	25.53	8.51	6.38	19.15	27.66	12.77	100
Heating	82	34.15	6.1	18.29	23.17	15.85	2.44	100
Pipes & Joints	59	27.12	6.78	8.47	20.34	30.51	6.78	100
Receptacles	53	24.53	7.55	7.55	24.53	30.19	5.66	100
Miscellaneous-Others	214	30.37	8.41	9.35	22.9	23.83	5.14	100
US-JP weighted		34.07	10.18	13.58	20.97	18.51	2.68	100
JP weighted		33.69	9.91	13.37	21.28	19.05	2.7	100

Technical conferences and workshops（技術的なコンファレンス・ワークショップ）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1187	278	364	800	717	117	195
Agriculture, Food, Textiles	60	16	7	8	18	10	0	1
Coating	80	21	2	13	24	15	0	5
Gas	45	15	4	5	6	11	1	3
Organic Compounds	120	41	18	9	19	15	7	11
Resins	125	44	11	18	26	13	3	10
Miscellaneous-chemical	208	67	29	17	44	33	5	13
Communications	160	57	6	10	31	39	15	2
Computer Hardware	59	21	2	6	11	9	2	8
Computer Software	123	46	5	12	22	30	6	2
Computer Peripherals	76	19	9	8	21	16	2	1
Information Storage	120	42	6	9	23	32	5	3
Drugs	127	41	13	14	19	29	5	6
Surgery & Medical Instruments	85	31	6	10	19	16	0	3
Biotechnology	87	22	12	9	13	20	2	9
Miscellaneous-Drug&Med	45	19	3	3	12	4	2	2
Electrical Devices	91	37	3	8	28	14	1	0
Electrical Lighting	96	26	6	6	23	23	9	3
Measuring & Testing	111	43	5	9	25	21	5	3
Nuclears & X-rays	72	25	8	8	12	17	0	2
Power Systems	172	51	21	10	40	42	1	7
Semiconductor Devices	129	34	10	4	31	42	6	2
Miscellaneous-Elec.	120	38	8	12	29	23	6	4
Materials Processing & Handling	103	28	2	14	21	24	3	11
Metal Working	137	39	14	14	27	31	6	6
Motors, Engines & Parts	145	46	8	13	41	26	6	5
Optics	100	26	3	14	27	24	2	4
Transportation	73	25	6	11	15	8	1	7
Miscellaneous Mechanical	124	44	9	21	27	15	2	6
Agriculture, Husbandry, Food	87	25	7	12	25	13	0	5
Apparel & Textile	77	27	6	7	10	10	3	14
Earth Working & Wells	20	6	0	1	2	4	1	6
Furniture, House Fixtures	51	14	5	2	14	9	0	7
Heating	84	34	4	9	18	17	0	2
Pipes & Joints	66	20	3	10	15	9	2	7
Receptacles	55	23	5	3	8	12	2	2
Miscellaneous-Others	225	74	12	25	54	41	6	13

%	N	I did not use	1	2	3	4	5	Total
All	3463	34.28	8.03	10.51	23.1	20.7	3.38	100
Agriculture, Food, Textiles	59	27.12	11.86	13.56	30.51	16.95	0	100
Coating	75	28	2.67	17.33	32	20	0	100
Gas	42	35.71	9.52	11.9	14.29	26.19	2.38	100
Organic Compounds	109	37.61	16.51	8.26	17.43	13.76	6.42	100
Resins	115	38.26	9.57	15.65	22.61	11.3	2.61	100
Miscellaneous-chemical	195	34.36	14.87	8.72	22.56	16.92	2.56	100
Communications	158	36.08	3.8	6.33	19.62	24.68	9.49	100
Computer Hardware	51	41.18	3.92	11.76	21.57	17.65	3.92	100
Computer Software	121	38.02	4.13	9.92	18.18	24.79	4.96	100
Computer Peripherals	75	25.33	12	10.67	28	21.33	2.67	100
Information Storage	117	35.9	5.13	7.69	19.66	27.35	4.27	100
Drugs	121	33.88	10.74	11.57	15.7	23.97	4.13	100
Surgery & Medical Instruments	82	37.8	7.32	12.2	23.17	19.51	0	100
Biotechnology	78	28.21	15.38	11.54	16.67	25.64	2.56	100
Miscellaneous-Drug&Med	43	44.19	6.98	6.98	27.91	9.3	4.65	100
Electrical Devices	91	40.66	3.3	8.79	30.77	15.38	1.1	100
Electrical Lighting	93	27.96	6.45	6.45	24.73	24.73	9.68	100
Measuring & Testing	108	39.81	4.63	8.33	23.15	19.44	4.63	100
Nuclears & X-rays	70	35.71	11.43	11.43	17.14	24.29	0	100
Power Systems	165	30.91	12.73	6.06	24.24	25.45	0.61	100
Semiconductor Devices	127	26.77	7.87	3.15	24.41	33.07	4.72	100
Miscellaneous-Elec.	116	32.76	6.9	10.34	25	19.83	5.17	100
Materials Processing & Handling	92	30.43	2.17	15.22	22.83	26.09	3.26	100
Metal Working	131	29.77	10.69	10.69	20.61	23.66	4.58	100
Motors, Engines & Parts	140	32.86	5.71	9.29	29.29	18.57	4.29	100
Optics	96	27.08	3.13	14.58	28.13	25	2.08	100
Transportation	66	37.88	9.09	16.67	22.73	12.12	1.52	100
Miscellaneous Mechanical	118	37.29	7.63	17.8	22.88	12.71	1.69	100
Agriculture, Husbandry, Food	82	30.49	8.54	14.63	30.49	15.85	0	100
Apparel & Textile	63	42.86	9.52	11.11	15.87	15.87	4.76	100
Earth Working & Wells	14	42.86	0	7.14	14.29	28.57	7.14	100
Furniture, House Fixtures	44	31.82	11.36	4.55	31.82	20.45	0	100
Heating	82	41.46	4.88	10.98	21.95	20.73	0	100
Pipes & Joints	59	33.9	5.08	16.95	25.42	15.25	3.39	100
Receptacles	53	43.4	9.43	5.66	15.09	22.64	3.77	100
Miscellaneous-Others	212	34.91	5.66	11.79	25.47	19.34	2.83	100
		34.27	7.98	10.17	22.85	21.04	3.69	100
		33.92	7.76	10.11	22.9	21.48	3.83	100

US (2/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)
(研究の着想に有用であった知識源の重要度)

A7_c Fair or exhibition

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,269	228	108	78	26	16	194
11	Agriculture, Food, Textiles	8	2	2	2	1	0	0	1
12	Coating	34	26	0	2	0	1	1	4
13	Gas	11	8	0	1	1	0	0	1
14	Organic Compounds	61	47	7	2	3	0	0	2
15	Resins	84	54	12	10	1	2	0	5
19	Miscellaneous-chemical	233	159	23	12	13	3	1	22
21	Communications	149	107	14	9	5	0	0	14
22	Computer Hardware	42	28	4	3	1	1	2	3
77	Computer Software	93	70	10	1	6	0	0	6
23	Computer Peripherals	33	20	6	2	1	0	0	4
24	Information Storage	42	27	6	1	0	2	0	6
31	Drugs	101	66	9	9	4	2	0	11
32	Surgery & Medical Instruments	123	72	16	9	4	2	1	19
33	Biotechnology	41	26	8	1	1	0	0	5
39	Miscellaneous-Drug&Med	29	14	7	2	2	0	1	3
41	Electrical Devices	45	30	5	2	2	1	0	5
42	Electrical Lighting	33	19	4	0	2	1	1	6
43	Measuring & Testing	62	38	6	5	3	1	0	9
44	Nuclears & X-rays	39	24	3	2	1	1	3	5
45	Power Systems	89	69	9	0	0	3	0	8
46	Semiconductor Devices	55	32	10	4	2	1	0	6
49	Miscellaneous-Elec.	32	19	5	2	2	0	0	4
51	Materials Processing & Handlin	56	41	6	1	2	0	1	5
52	Metal Working	49	31	5	2	4	1	0	6
53	Motors, Engines & Parts	56	44	4	1	1	1	0	5
54	Optics	43	28	3	2	4	2	0	4
55	Transportation	33	24	1	2	2	0	0	4
59	Miscellaneous Mechanical	42	27	7	1	3	0	1	3
61	Agriculture, Husbandry, Food	14	5	3	3	1	0	0	2
63	Apparel & Textile	9	7	0	1	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	6	1	1	0	0	1	0
66	Heating	8	4	1	0	0	0	1	2
67	Pipes & Joints	13	10	2	1	0	0	0	0
68	Receptacles	20	12	3	1	1	1	0	2
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

A7_d Technical conferences and workshops

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	948	201	204	211	126	56	173
11	Agriculture, Food, Textiles	8	2	2	2	1	0	0	1
12	Coating	34	18	3	5	3	0	1	4
13	Gas	11	6	2	0	1	1	0	1
14	Organic Compounds	61	39	9	3	5	2	1	2
15	Resins	84	39	14	11	7	6	4	3
19	Miscellaneous-chemical	233	120	27	22	26	14	7	17
21	Communications	149	76	10	18	17	10	5	13
22	Computer Hardware	42	22	4	3	3	5	1	4
77	Computer Software	93	42	12	15	9	7	2	6
23	Computer Peripherals	33	13	5	2	7	2	1	3
24	Information Storage	42	11	4	6	5	6	3	7
31	Drugs	101	41	8	12	11	11	7	11
32	Surgery & Medical Instruments	123	55	17	9	14	11	1	16
33	Biotechnology	41	14	11	5	5	1	0	5
39	Miscellaneous-Drug&Med	29	11	4	4	3	3	2	2
41	Electrical Devices	45	27	3	2	4	1	4	4
42	Electrical Lighting	33	11	1	8	7	1	1	4
43	Measuring & Testing	62	27	7	5	6	5	3	9
44	Nuclears & X-rays	39	18	1	5	7	2	1	5
45	Power Systems	89	55	4	8	11	5	1	5
46	Semiconductor Devices	55	13	6	5	16	7	3	5
49	Miscellaneous-Elec.	32	16	1	4	3	1	3	4
51	Materials Processing & Handlin	56	36	5	4	4	2	0	5
52	Metal Working	49	25	2	4	8	4	1	5
53	Motors, Engines & Parts	56	34	3	4	7	2	1	5
54	Optics	43	20	3	3	7	5	1	4
55	Transportation	33	22	2	2	2	1	1	3
59	Miscellaneous Mechanical	42	23	6	5	1	3	1	3
61	Agriculture, Husbandry, Food	14	5	4	2	0	1	0	2
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	6	0	3	0	0	0	0
66	Heating	8	4	1	1	0	0	0	2
67	Pipes & Joints	13	11	0	1	0	1	0	0
68	Receptacles	20	14	1	4	0	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1725	73.57	13.22	6.26	4.52	1.51	0.93	100
11	Agriculture, Food, Textiles	7	28.57	28.57	28.57	14.29	0.00	0.00	100
12	Coating	30	86.67	0.00	6.67	0.00	3.33	3.33	100
13	Gas	10	80.00	0.00	10.00	10.00	0.00	0.00	100
14	Organic Compounds	59	79.66	11.86	3.39	5.08	0.00	0.00	100
15	Resins	79	68.35	15.19	12.66	1.27	2.53	0.00	100
19	Miscellaneous-chemical	211	75.36	10.90	5.69	6.16	1.42	0.47	100
21	Communications	135	79.26	10.37	6.67	3.70	0.00	0.00	100
22	Computer Hardware	39	71.79	10.26	7.69	2.56	2.56	5.13	100
77	Computer Software	87	80.46	11.49	1.15	6.90	0.00	0.00	100
23	Computer Peripherals	29	68.97	20.69	6.90	3.45	0.00	0.00	100
24	Information Storage	36	75.00	16.67	2.78	0.00	5.56	0.00	100
31	Drugs	90	73.33	10.00	10.00	4.44	2.22	0.00	100
32	Surgery & Medical Instruments	104	69.23	15.38	8.65	3.85	1.92	0.96	100
33	Biotechnology	36	72.22	22.22	2.78	2.78	0.00	0.00	100
39	Miscellaneous-Drug&Med	26	53.85	26.92	7.69	7.69	0.00	3.85	100
41	Electrical Devices	40	75.00	12.50	5.00	5.00	2.50	0.00	100
42	Electrical Lighting	27	70.37	14.81	0.00	7.41	3.70	3.70	100
43	Measuring & Testing	53	71.70	11.32	9.43	5.66	1.89	0.00	100
44	Nuclears & X-rays	34	70.59	8.82	5.88	2.94	2.94	8.82	100
45	Power Systems	81	85.19	11.11	0.00	0.00	3.70	0.00	100
46	Semiconductor Devices	49	65.31	20.41	8.16	4.08	2.04	0.00	100
49	Miscellaneous-Elec.	28	67.86	17.86	7.14	7.14	0.00	0.00	100
51	Materials Processing & Handlin	51	80.39	11.76	1.96	3.92	0.00	1.96	100
52	Metal Working	43	72.09	11.63	4.65	9.30	2.33	0.00	100
53	Motors, Engines & Parts	51	86.27	7.84	1.96	1.96	1.96	0.00	100
54	Optics	39	71.79	7.69	5.13	10.26	5.13	0.00	100
55	Transportation	29	82.76	3.45	6.90	6.90	0.00	0.00	100
59	Miscellaneous Mechanical	39	69.23	17.95	2.56	7.69	0.00	2.56	100
61	Agriculture, Husbandry, Food	12	41.67	25.00	25.00	8.33	0.00	0.00	100
63	Apparel & Textile	8	87.50	0.00	12.50	0.00	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	66.67	11.11	11.11	0.00	0.00	11.11	100
66	Heating	6	66.67	16.67	0.00	0.00	0.00	16.67	100
67	Pipes & Joints	13	76.92	15.38	7.69	0.00	0.00	0.00	100
68	Receptacles	18	66.67	16.67	5.56	5.56	5.56	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**73.63**	**13.04**	**6.31**	**4.57**	**1.56**	**0.84**	100

	N	I did not use	1	2	3	4	5	Total
NBER	1746	54.30	11.51	11.68	12.08	7.22	3.21	154
11	7	28.57	28.57	28.57	14.29	0.00	0.00	100
12	30	60.00	10.00	16.67	10.00	0.00	3.33	100
13	10	60.00	20.00	0.00	10.00	10.00	0.00	100
14	59	66.10	15.25	5.08	8.47	3.39	1.69	100
15	81	48.15	17.28	13.58	8.64	7.41	4.94	100
19	216	55.56	12.50	10.19	12.04	6.48	3.24	100
21	136	55.88	7.35	13.24	12.50	7.35	3.68	100
22	38	57.89	10.53	7.89	7.89	13.16	2.63	100
77	87	48.28	13.79	17.24	10.34	8.05	2.30	100
23	30	43.33	16.67	6.67	23.33	6.67	3.33	100
24	35	31.43	11.43	17.14	14.29	17.14	8.57	100
31	90	45.56	8.89	13.33	12.22	12.22	7.78	100
32	107	51.40	15.89	8.41	13.08	10.28	0.93	100
33	36	38.89	30.56	13.89	13.89	2.78	0.00	100
39	27	40.74	14.81	14.81	11.11	11.11	7.41	100
41	41	65.85	7.32	4.88	9.76	2.44	9.76	100
42	29	37.93	3.45	27.59	24.14	3.45	3.45	100
43	53	50.94	13.21	9.43	11.32	9.43	5.66	100
44	34	52.94	2.94	14.71	20.59	5.88	2.94	100
45	84	65.48	4.76	9.52	13.10	5.95	1.19	100
46	50	26.00	12.00	10.00	32.00	14.00	6.00	100
49	28	57.14	3.57	14.29	10.71	3.57	10.71	100
51	51	70.59	9.80	7.84	7.84	3.92	0.00	100
52	44	56.82	4.55	9.09	18.18	9.09	2.27	100
53	51	66.67	5.88	7.84	13.73	3.92	1.96	100
54	39	51.28	7.69	7.69	17.95	12.82	2.56	100
55	30	73.33	6.67	6.67	6.67	3.33	3.33	100
59	39	58.97	15.38	12.82	2.56	7.69	2.56	100
61	12	41.67	33.33	16.67	0.00	8.33	0.00	100
63	8	100.00	0.00	0.00	0.00	0.00	0.00	100
64	XX	XX	XX	XX	XX	XX	XX	XX
65	9	66.67	0.00	33.33	0.00	0.00	0.00	100
66	6	66.67	16.67	16.67	0.00	0.00	0.00	100
67	13	84.62	0.00	7.69	0.00	7.69	0.00	100
68	19	73.68	5.26	21.05	0.00	0.00	0.00	100
69	XX	XX	XX	XX	XX	XX	XX	XX
US-JP weighted		**53.64**	**11.18**	**11.85**	**12.26**	**7.61**	**3.47**	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)
(研究の着想に有用であった知識源の重要度)

Standard documents, such as those from ISO (standards, contributions)(ISOなどの標準関連文書)

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1411	582	573	592	246	56	198
Agriculture, Food, Textiles	60	18	10	12	14	4	0	2
Coating	80	25	10	22	15	3	0	5
Gas	45	16	8	8	7	3	0	3
Organic Compounds	120	51	26	17	11	3	0	12
Resins	125	42	25	20	21	7	1	9
Miscellaneous-chemical	208	84	51	29	24	6	0	14
Communications	160	63	10	17	26	28	13	3
Computer Hardware	59	25	6	8	7	3	2	8
Computer Software	123	48	14	15	18	19	7	2
Computer Peripherals	76	32	12	17	10	2	2	1
Information Storage	120	46	9	21	23	17	3	1
Drugs	127	52	28	15	17	7	0	8
Surgery & Medical Instruments	85	34	16	12	9	10	0	4
Biotechnology	87	29	26	12	8	1	0	11
Miscellaneous-Drug&Med	45	21	9	3	9	2	0	1
Electrical Devices	91	40	10	15	14	12	0	0
Electrical Lighting	96	39	17	18	14	3	2	3
Measuring & Testing	111	59	14	10	19	6	1	2
Nuclears & X-rays	72	29	18	7	10	5	1	2
Power Systems	172	63	35	25	31	7	2	9
Semiconductor Devices	129	63	24	15	20	5	0	2
Miscellaneous-Elec.	120	50	17	17	11	17	4	4
Materials Processing & Handling	103	37	10	19	21	5	0	11
Metal Working	137	56	29	18	24	6	2	2
Motors, Engines & Parts	145	48	17	33	37	5	1	4
Optics	100	37	14	17	23	5	0	4
Transportation	73	28	8	12	10	7	0	8
Miscellaneous Mechanical	124	46	16	23	21	7	5	6
Agriculture, Husbandry, Food	87	32	16	14	13	6	2	4
Apparel & Textile	77	25	9	14	12	4	1	12
Earth Working & Wells	20	5	2	2	3	2	0	6
Furniture, House Fixtures	51	15	7	5	11	3	1	9
Heating	84	33	9	20	11	9	0	2
Pipes & Joints	66	17	8	13	14	3	4	7
Receptacles	55	19	10	8	14	2	0	2
Miscellaneous-Others	225	84	32	40	40	12	2	15

%	N	I did not use	1	2	3	4	5	Total
All	3460	40.78	16.82	16.56	17.11	7.11	1.62	100
Agriculture, Food, Textiles	58	31.03	17.24	20.69	24.14	6.9	0	100
Coating	75	33.33	13.33	29.33	20	4	0	100
Gas	42	38.1	19.05	19.05	16.67	7.14	0	100
Organic Compounds	108	47.22	24.07	15.74	10.19	2.78	0	100
Resins	116	36.21	21.55	17.24	18.1	6.03	0.86	100
Miscellaneous-chemical	194	43.3	26.29	14.95	12.37	3.09	0	100
Communications	157	40.13	6.37	10.83	16.56	17.83	8.28	100
Computer Hardware	51	49.02	11.76	15.69	13.73	5.88	3.92	100
Computer Software	121	39.67	11.57	12.4	14.88	15.7	5.79	100
Computer Peripherals	75	42.67	16	22.67	13.33	2.67	2.67	100
Information Storage	119	38.66	7.56	17.65	19.33	14.29	2.52	100
Drugs	119	43.7	23.53	12.61	14.29	5.88	0	100
Surgery & Medical Instruments	81	41.98	19.75	14.81	11.11	12.35	0	100
Biotechnology	76	38.16	34.21	15.79	10.53	1.32	0	100
Miscellaneous-Drug&Med	44	47.73	20.45	6.82	20.45	4.55	0	100
Electrical Devices	91	43.96	10.99	16.48	15.38	13.19	0	100
Electrical Lighting	93	41.94	18.28	19.35	15.05	3.23	2.15	100
Measuring & Testing	109	54.13	12.84	9.17	17.43	5.5	0.92	100
Nuclears & X-rays	70	41.43	25.71	10	14.29	7.14	1.43	100
Power Systems	163	38.65	21.47	15.34	19.02	4.29	1.23	100
Semiconductor Devices	127	49.61	18.9	11.81	15.75	3.94	0	100
Miscellaneous-Elec.	116	43.1	14.66	14.66	9.48	14.66	3.45	100
Materials Processing & Handling	92	40.22	10.87	20.65	22.83	5.43	0	100
Metal Working	135	41.48	21.48	13.33	17.78	4.44	1.48	100
Motors, Engines & Parts	141	34.04	12.06	23.4	26.24	3.55	0.71	100
Optics	96	38.54	14.58	17.71	23.96	5.21	0	100
Transportation	65	43.08	12.31	18.46	15.38	10.77	0	100
Miscellaneous Mechanical	118	38.98	13.56	19.49	17.8	5.93	4.24	100
Agriculture, Husbandry, Food	83	38.55	19.28	16.87	15.66	7.23	2.41	100
Apparel & Textile	65	38.46	13.85	21.54	18.46	6.15	1.54	100
Earth Working & Wells	14	35.71	14.29	14.29	21.43	14.29	0	100
Furniture, House Fixtures	42	35.71	16.67	11.9	26.19	7.14	2.38	100
Heating	82	40.24	10.98	24.39	13.41	10.98	0	100
Pipes & Joints	59	28.81	13.56	22.03	23.73	5.08	6.78	100
Receptacles	53	35.85	18.87	15.09	26.42	3.77	0	100
Miscellaneous-Others	210	40	15.24	19.05	19.05	5.71	0.95	100
US-JP weighted		41.28	16.75	15.93	16.58	7.61	1.86	100
JP weighted		40.97	16.22	16.27	16.9	7.64	2.01	100

Your firm excluding co-inventors(組織内)

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	388	148	208	593	1530	630	161
Agriculture, Food, Textiles	60	3	4	1	10	28	13	1
Coating	80	4	1	4	14	38	15	4
Gas	45	5	2	4	7	15	9	3
Organic Compounds	120	12	7	5	23	45	15	13
Resins	125	6	4	6	21	58	20	10
Miscellaneous-chemical	208	17	13	15	33	70	46	14
Communications	160	21	4	11	25	72	24	3
Computer Hardware	59	6	3	2	9	26	6	7
Computer Software	123	17	3	6	20	53	22	2
Computer Peripherals	76	5	5	2	9	37	17	1
Information Storage	120	8	2	10	22	54	21	3
Drugs	127	11	4	7	20	56	23	6
Surgery & Medical Instruments	85	16	4	4	16	26	17	2
Biotechnology	87	8	7	5	13	32	16	6
Miscellaneous-Drug&Med	45	10	1	3	10	15	5	1
Electrical Devices	91	10	1	4	18	42	16	0
Electrical Lighting	96	11	2	8	12	45	16	2
Measuring & Testing	111	19	4	8	21	36	22	1
Nuclears & X-rays	72	12	3	5	8	35	8	1
Power Systems	172	21	11	6	22	71	35	6
Semiconductor Devices	129	19	6	8	16	58	18	4
Miscellaneous-Elec.	120	13	3	9	21	52	19	3
Materials Processing & Handling	103	13	1	3	20	39	18	9
Metal Working	137	11	7	9	26	61	21	2
Motors, Engines & Parts	145	7	7	9	28	59	32	3
Optics	100	8	4	5	20	43	17	3
Transportation	73	4	4	3	8	31	17	6
Miscellaneous Mechanical	124	15	8	5	22	51	18	5
Agriculture, Husbandry, Food	87	9	7	5	11	30	20	5
Apparel & Textile	77	7	1	2	12	41	7	7
Earth Working & Wells	20	2	1	1	3	5	4	4
Furniture, House Fixtures	51	8	2	1	1	26	6	7
Heating	84	6	2	6	5	47	16	2
Pipes & Joints	66	8	2	5	14	20	13	4
Receptacles	55	5	2	3	13	22	8	2
Miscellaneous-Others	225	31	6	18	40	91	30	9

%	N	I did not use	1	2	3	4	5	Total
All	3497	11.1	4.23	5.95	16.96	43.75	18.02	100
Agriculture, Food, Textiles	59	5.08	6.78	1.69	16.95	47.46	22.03	100
Coating	76	5.26	1.32	5.26	18.42	50	19.74	100
Gas	42	11.9	4.76	9.52	16.67	35.71	21.43	100
Organic Compounds	107	11.21	6.54	4.67	21.5	42.06	14.02	100
Resins	115	5.22	3.48	5.22	18.26	50.43	17.39	100
Miscellaneous-chemical	194	8.76	6.7	7.73	17.01	36.08	23.71	100
Communications	157	13.38	2.55	7.01	15.92	45.86	15.29	100
Computer Hardware	52	11.54	5.77	3.85	17.31	50	11.54	100
Computer Software	121	14.05	2.48	4.96	16.53	43.8	18.18	100
Computer Peripherals	75	6.67	6.67	2.67	12	49.33	22.67	100
Information Storage	117	6.84	1.71	8.55	18.8	46.15	17.95	100
Drugs	121	9.09	3.31	5.79	16.53	46.28	19.01	100
Surgery & Medical Instruments	83	19.28	4.82	4.82	19.28	31.33	20.48	100
Biotechnology	81	9.88	8.64	6.17	16.05	39.51	19.75	100
Miscellaneous-Drug&Med	44	22.73	2.27	6.82	22.73	34.09	11.36	100
Electrical Devices	91	10.99	1.1	4.4	19.78	46.15	17.58	100
Electrical Lighting	94	11.7	2.13	8.51	12.77	47.87	17.02	100
Measuring & Testing	110	17.27	3.64	7.27	19.09	32.73	20	100
Nuclears & X-rays	71	16.9	4.23	7.04	11.27	49.3	11.27	100
Power Systems	166	12.65	6.63	3.61	13.25	42.77	21.08	100
Semiconductor Devices	125	15.2	4.8	6.4	12.8	46.4	14.4	100
Miscellaneous-Elec.	117	11.11	2.56	7.69	17.95	44.44	16.24	100
Materials Processing & Handling	94	13.83	1.06	3.19	21.28	41.49	19.15	100
Metal Working	135	8.15	5.19	6.67	19.26	45.19	15.56	100
Motors, Engines & Parts	142	4.93	4.93	6.34	19.72	41.55	22.54	100
Optics	97	8.25	4.12	5.15	20.62	44.33	17.53	100
Transportation	67	5.97	5.97	4.48	11.94	46.27	25.37	100
Miscellaneous Mechanical	119	12.61	6.72	4.2	18.49	42.86	15.13	100
Agriculture, Husbandry, Food	82	10.98	8.54	6.1	13.41	36.59	24.39	100
Apparel & Textile	70	10	1.43	2.86	17.14	58.57	10	100
Earth Working & Wells	16	12.5	6.25	6.25	18.75	31.25	25	100
Furniture, House Fixtures	44	18.18	4.55	2.27	2.27	59.09	13.64	100
Heating	82	7.32	2.44	7.32	6.1	57.32	19.51	100
Pipes & Joints	62	12.9	3.23	8.06	22.58	32.26	20.97	100
Receptacles	53	9.43	3.77	5.66	24.53	41.51	15.09	100
Miscellaneous-Others	216	14.35	2.78	8.33	18.52	42.13	13.89	100
US-JP weighted		11.32	4.16	5.96	17.09	43.32	18.15	100
JP weighted		10.93	4.19	5.98	16.86	43.78	18.26	100

US (3/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important) (研究の着想に有用であった知識源の重要度)

A7_e Standard documents, such as from ISO (standards, contributions)

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,224	222	112	94	48	36	183
11	Agriculture, Food, Textiles	8	2	3	0	2	0	0	1
12	Coating	34	22	3	2	0	1	1	5
13	Gas	11	7	1	1	0	1	0	1
14	Organic Compounds	61	46	8	1	3	1	0	2
15	Resins	84	60	10	8	1	0	1	4
19	Miscellaneous-chemical	233	156	31	8	13	6	1	18
21	Communications	149	82	11	11	15	7	9	14
22	Computer Hardware	42	26	5	1	3	3	0	4
77	Computer Software	93	63	10	5	3	6	0	6
23	Computer Peripherals	33	22	4	2	1	0	0	4
24	Information Storage	42	18	8	3	3	4	1	5
31	Drugs	101	66	8	8	4	2	0	13
32	Surgery & Medical Instruments	123	70	19	10	3	1	2	18
33	Biotechnology	41	24	10	0	1	1	0	5
39	Miscellaneous-Drug&Med	29	15	6	3	1	2	0	2
41	Electrical Devices	45	26	5	3	4	0	3	4
42	Electrical Lighting	33	22	6	0	0	1	0	4
43	Measuring & Testing	62	36	5	4	4	2	1	10
44	Nuclears & X-rays	39	26	4	2	2	0	0	5
45	Power Systems	89	65	5	4	5	3	1	6
46	Semiconductor Devices	55	35	8	5	1	1	0	5
49	Miscellaneous-Elec.	32	21	2	2	0	0	3	4
51	Materials Processing & Handling	56	40	3	3	4	0	1	5
52	Metal Working	49	30	7	3	1	2	0	6
53	Motors, Engines & Parts	56	42	5	2	2	0	0	5
54	Optics	43	32	3	3	0	1	0	4
55	Transportation	33	19	2	4	1	1	2	4
59	Miscellaneous Mechanical	42	24	3	4	5	1	2	3
61	Agriculture, Husbandry, Food	14	8	3	0	1	0	0	2
63	Apparel & Textile	9	5	1	1	1	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	6	1	1	1	0	0	0
66	Heating	8	3	1	1	0	0	1	2
67	Pipes & Joints	13	9	0	0	3	0	1	0
68	Receptacles	20	15	1	1	2	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

A7_F Your firm, excluding co-inventors

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	355	124	233	377	346	321	163
11	Agriculture, Food, Textiles	8	1	1	0	2	2	1	1
12	Coating	34	6	2	5	3	8	8	2
13	Gas	11	0	3	0	2	4	2	0
14	Organic Compounds	61	14	6	7	13	10	10	1
15	Resins	84	12	8	7	19	19	15	4
19	Miscellaneous-chemical	233	31	17	32	49	37	51	16
21	Communications	149	38	5	19	32	27	15	13
22	Computer Hardware	42	10	8	0	9	6	8	1
77	Computer Software	93	13	5	13	16	29	12	5
23	Computer Peripherals	33	2	3	3	8	5	8	4
24	Information Storage	42	6	3	8	9	6	5	5
31	Drugs	101	20	6	7	19	14	21	14
32	Surgery & Medical Instruments	123	32	6	12	18	26	14	15
33	Biotechnology	41	8	4	3	7	5	8	6
39	Miscellaneous-Drug&Med	29	7	0	5	5	7	2	3
41	Electrical Devices	45	7	2	10	11	10	2	3
42	Electrical Lighting	33	4	2	6	5	5	7	4
43	Measuring & Testing	62	11	3	8	12	14	6	8
44	Nuclears & X-rays	39	7	3	2	10	6	6	5
45	Power Systems	89	19	5	11	15	15	18	6
46	Semiconductor Devices	55	7	2	11	19	6	5	5
49	Miscellaneous-Elec.	32	6	0	1	5	6	11	3
51	Materials Processing & Handling	56	15	2	8	12	7	9	3
52	Metal Working	49	11	4	7	6	7	10	4
53	Motors, Engines & Parts	56	8	4	15	9	11	4	5
54	Optics	43	11	2	4	6	7	9	4
55	Transportation	33	6	1	5	7	5	5	4
59	Miscellaneous Mechanical	42	8	3	6	6	5	11	3
61	Agriculture, Husbandry, Food	14	3	1	0	2	5	1	2
63	Apparel & Textile	9	1	0	2	2	0	3	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1	0	0	4	4	0	0
66	Heating	8	0	0	1	2	0	3	2
67	Pipes & Joints	13	0	1	1	4	4	3	0
68	Receptacles	20	8	4	1	3	3	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1736	70.51	12.79	6.45	5.41	2.76	2.07	100
11	Agriculture, Food, Textiles	7	28.57	42.86	0.00	28.57	0.00	0.00	100
12	Coating	29	75.86	10.34	6.90	0.00	3.45	3.45	100
13	Gas	10	70.00	10.00	10.00	0.00	10.00	0.00	100
14	Organic Compounds	59	77.97	13.56	1.69	5.08	1.69	0.00	100
15	Resins	80	75.00	12.50	10.00	1.25	0.00	1.25	100
19	Miscellaneous-chemical	215	72.56	14.42	3.72	6.05	2.79	0.47	100
21	Communications	135	60.74	8.15	8.15	11.11	5.19	6.67	100
22	Computer Hardware	38	68.42	13.16	2.63	7.89	7.89	0.00	100
77	Computer Software	87	72.41	11.49	5.75	3.45	6.90	0.00	100
23	Computer Peripherals	29	75.86	13.79	6.90	3.45	0.00	0.00	100
24	Information Storage	37	48.65	21.62	8.11	8.11	10.81	2.70	100
31	Drugs	88	75.00	9.09	9.09	4.55	2.27	0.00	100
32	Surgery & Medical Instruments	105	66.67	18.10	9.52	2.86	0.95	1.90	100
33	Biotechnology	36	66.67	27.78	0.00	2.78	2.78	0.00	100
39	Miscellaneous-Drug&Med	27	55.56	22.22	11.11	3.70	7.41	0.00	100
41	Electrical Devices	41	63.41	12.20	7.32	9.76	0.00	7.32	100
42	Electrical Lighting	29	75.86	20.69	0.00	0.00	3.45	0.00	100
43	Measuring & Testing	52	69.23	9.62	7.69	7.69	3.85	1.92	100
44	Nuclears & X-rays	34	76.47	11.76	5.88	5.88	0.00	0.00	100
45	Power Systems	83	78.31	6.02	4.82	6.02	3.61	1.20	100
46	Semiconductor Devices	50	70.00	16.00	10.00	2.00	2.00	0.00	100
49	Miscellaneous-Elec.	28	75.00	7.14	7.14	0.00	0.00	10.71	100
51	Materials Processing & Handling	51	78.43	5.88	5.88	7.84	0.00	1.96	100
52	Metal Working	43	69.77	16.28	6.98	2.33	4.65	0.00	100
53	Motors, Engines & Parts	51	82.35	9.80	3.92	3.92	0.00	0.00	100
54	Optics	39	82.05	7.69	7.69	0.00	2.56	0.00	100
55	Transportation	29	65.52	6.90	13.79	3.45	3.45	6.90	100
59	Miscellaneous Mechanical	39	61.54	7.69	10.26	12.82	2.56	5.13	100
61	Agriculture, Husbandry, Food	12	66.67	25.00	0.00	8.33	0.00	0.00	100
63	Apparel & Textile	8	62.50	12.50	12.50	12.50	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	66.67	11.11	11.11	11.11	0.00	0.00	100
66	Heating	6	50.00	16.67	16.67	0.00	0.00	16.67	100
67	Pipes & Joints	13	69.23	0.00	0.00	23.08	0.00	7.69	100
68	Receptacles	19	78.95	5.26	5.26	10.53	0.00	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**70.14**	**12.57**	**6.72**	**5.46**	**2.95**	**2.18**	100

	N	I did not use	1	2	3	4	5	100
NBER	1756	20.22	7.06	13.27	21.47	19.70	18.28	100
11	7	14.29	14.29	0.00	28.57	28.57	14.29	100
12	32	18.75	6.25	15.63	9.38	25.00	25.00	100
13	11	0.00	27.27	0.00	18.18	36.36	18.18	100
14	60	23.33	10.00	11.67	21.67	16.67	16.67	100
15	80	15.00	10.00	8.75	23.75	23.75	18.75	100
19	217	14.29	7.83	14.75	22.58	17.05	23.50	100
21	136	27.94	3.68	13.97	23.53	19.85	11.03	100
22	41	24.39	19.51	0.00	21.95	14.63	19.51	100
77	88	14.77	5.68	14.77	18.18	32.95	13.64	100
23	29	6.90	10.34	10.34	27.59	17.24	27.59	100
24	37	16.22	8.11	21.62	24.32	16.22	13.51	100
31	87	22.99	6.90	8.05	21.84	16.09	24.14	100
32	108	29.63	5.56	11.11	16.67	24.07	12.96	100
33	35	22.86	11.43	8.57	20.00	14.29	22.86	100
39	26	26.92	0.00	19.23	19.23	26.92	7.69	100
41	42	16.67	4.76	23.81	26.19	23.81	4.76	100
42	29	13.79	6.90	20.69	17.24	17.24	24.14	100
43	54	20.37	5.56	14.81	22.22	25.93	11.11	100
44	34	20.59	8.82	5.88	29.41	17.65	17.65	100
45	83	22.89	6.02	13.25	18.07	18.07	21.69	100
46	50	14.00	4.00	22.00	38.00	12.00	10.00	100
49	29	20.69	0.00	3.45	17.24	20.69	37.93	100
51	53	28.30	3.77	15.09	22.64	13.21	16.98	100
52	45	24.44	8.89	15.56	13.33	15.56	22.22	100
53	51	15.69	7.84	29.41	17.65	21.57	7.84	100
54	39	28.21	5.13	10.26	15.38	17.95	23.08	100
55	29	20.69	3.45	17.24	24.14	17.24	17.24	100
59	39	20.51	7.69	15.38	15.38	12.82	28.21	100
61	12	25.00	8.33	0.00	16.67	41.67	8.33	100
63	8	12.50	0.00	25.00	25.00	0.00	37.50	#VALUE!
64	XX	XX	XX	XX	XX	XX	XX	XX
65	9	11.11	0.00	0.00	44.44	44.44	0.00	100
66	6	0.00	0.00	16.67	33.33	0.00	50.00	100
67	13	0.00	7.69	7.69	30.77	30.77	23.08	100
68	19	42.11	21.05	5.26	15.79	15.79	0.00	#VALUE!
69	XX	XX	XX	XX	XX	XX	XX	XX
		20.35	**6.79**	**13.47**	**21.49**	**19.70**	**18.20**	

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

University and Education（大学など高等教育機関）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1528	352	415	672	423	95	173
Agriculture, Food, Textiles	60	21	6	7	17	6	2	1
Coating	80	27	5	15	18	7	3	5
Gas	45	16	6	4	9	7	0	3
Organic Compounds	120	43	12	9	16	29	2	9
Resins	125	43	11	17	27	13	5	9
Miscellaneous-chemical	208	79	25	21	41	22	7	13
Communications	160	83	5	12	31	23	3	3
Computer Hardware	59	25	4	7	7	6	1	9
Computer Software	123	62	7	11	23	13	6	1
Computer Peripherals	76	34	9	14	12	6	0	1
Information Storage	120	63	11	15	19	9	1	2
Drugs	127	43	8	13	23	31	3	6
Surgery & Medical Instruments	85	42	6	10	12	10	1	4
Biotechnology	87	17	4	13	11	24	11	7
Miscellaneous-Drug&Med	45	23	5	0	10	5	2	0
Electrical Devices	91	52	13	6	18	2	0	0
Electrical Lighting	96	37	8	11	25	10	4	1
Measuring & Testing	111	50	4	10	24	14	7	2
Nuclears & X-rays	72	31	11	5	14	9	1	1
Power Systems	172	57	19	19	35	29	6	7
Semiconductor Devices	129	57	12	16	23	18	1	2
Miscellaneous-Elec.	120	62	9	16	14	14	1	4
Materials Processing & Handling	103	39	7	9	27	9	1	11
Metal Working	137	47	23	17	24	20	5	1
Motors, Engines & Parts	145	63	12	20	31	11	4	4
Optics	100	37	11	15	23	6	3	5
Transportation	73	32	10	13	8	4	0	6
Miscellaneous Mechanical	124	58	16	12	23	8	1	6
Agriculture, Husbandry, Food	87	29	10	13	13	16	2	4
Apparel & Textile	77	33	7	11	10	3	1	12
Earth Working & Wells	20	9	0	1	3	0	2	5
Furniture, House Fixtures	51	19	7	6	9	1	1	8
Heating	84	40	8	10	15	8	1	2
Pipes & Joints	66	25	10	7	10	5	2	7
Receptacles	55	29	6	5	12	1	0	2
Miscellaneous-Others	225	101	25	25	35	24	5	10

	N	I did not use	1	2	3	4	5	Total
%								
All	3485	43.85	10.1	11.91	19.28	12.14	2.73	100
Agriculture, Food, Textiles	59	35.59	10.17	11.86	28.81	10.17	3.39	100
Coating	75	36	6.67	20	24	9.33	4	100
Gas	42	38.1	14.29	9.52	21.43	16.67	0	100
Organic Compounds	111	38.74	10.81	8.11	14.41	26.13	1.8	100
Resins	116	37.07	9.48	14.66	23.28	11.21	4.31	100
Miscellaneous-chemical	195	40.51	12.82	10.77	21.03	11.28	3.59	100
Communications	157	52.87	3.18	7.64	19.75	14.65	1.91	100
Computer Hardware	50	50	8	14	14	12	2	100
Computer Software	122	50.82	5.74	9.02	18.85	10.66	4.92	100
Computer Peripherals	75	45.33	12	18.67	16	8	0	100
Information Storage	118	53.39	9.32	12.71	16.1	7.63	0.85	100
Drugs	121	35.54	6.61	10.74	19.01	25.62	2.48	100
Surgery & Medical Instruments	81	51.85	7.41	12.35	14.81	12.35	1.23	100
Biotechnology	80	21.25	5	16.25	13.75	30	13.75	100
Miscellaneous-Drug&Med	45	51.11	11.11	0	22.22	11.11	4.44	100
Electrical Devices	91	57.14	14.29	6.59	19.78	2.2	0	100
Electrical Lighting	95	38.95	8.42	11.58	26.32	10.53	4.21	100
Measuring & Testing	109	45.87	3.67	9.17	22.02	12.84	6.42	100
Nuclears & X-rays	71	43.66	15.49	7.04	19.72	12.68	1.41	100
Power Systems	165	34.55	11.52	11.52	21.21	17.58	3.64	100
Semiconductor Devices	127	44.88	9.45	12.6	18.11	14.17	0.79	100
Miscellaneous-Elec.	116	53.45	7.76	13.79	12.07	12.07	0.86	100
Materials Processing & Handling	92	42.39	7.61	9.78	29.35	9.78	1.09	100
Metal Working	136	34.56	16.91	12.5	17.65	14.71	3.68	100
Motors, Engines & Parts	141	44.68	8.51	14.18	21.99	7.8	2.84	100
Optics	95	38.95	11.58	15.79	24.21	6.32	3.16	100
Transportation	67	47.76	14.93	19.4	11.94	5.97	0	100
Miscellaneous Mechanical	118	49.15	13.56	10.17	19.49	6.78	0.85	100
Agriculture, Husbandry, Food	83	34.94	12.05	15.66	15.66	19.28	2.41	100
Apparel & Textile	65	50.77	10.77	16.92	15.38	4.62	1.54	100
Earth Working & Wells	15	60	0	6.67	20	0	13.33	100
Furniture, House Fixtures	43	44.19	16.28	13.95	20.93	2.33	2.33	100
Heating	82	48.78	9.76	12.2	18.29	9.76	1.22	100
Pipes & Joints	59	42.37	16.95	11.86	16.95	8.47	3.39	100
Receptacles	53	54.72	11.32	9.43	22.64	1.89	0	100
Miscellaneous-Others	215	46.98	11.63	11.63	16.28	11.16	2.33	100
US-JP weighted		44.39	9.54	11.56	19.39	12.41	2.71	100
JP weighted		44.7	9.88	11.79	19.13	11.96	2.55	100

Non-University Public Research Organization（大学以外の公的研究機関）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1600	368	425	689	341	49	186
Agriculture, Food, Textiles	60	20	5	8	15	8	3	1
Coating	80	29	5	13	19	8	1	5
Gas	45	18	7	4	6	7	0	3
Organic Compounds	120	49	12	13	18	15	0	13
Resins	125	48	11	15	32	6	3	10
Miscellaneous-chemical	208	80	25	23	44	21	2	13
Communications	160	82	5	16	28	24	2	3
Computer Hardware	59	26	4	8	6	6	0	9
Computer Software	123	62	8	13	22	12	4	2
Computer Peripherals	76	37	10	11	14	3	0	1
Information Storage	120	63	9	16	22	7	1	2
Drugs	127	51	10	17	26	13	2	8
Surgery & Medical Instruments	85	45	8	8	14	7	0	3
Biotechnology	87	24	8	8	18	17	3	9
Miscellaneous-Drug&Med	45	25	5	0	10	4	0	1
Electrical Devices	91	54	12	6	18	1	0	0
Electrical Lighting	96	43	9	12	22	7	1	2
Measuring & Testing	111	55	4	8	26	11	5	2
Nuclears & X-rays	72	31	12	6	14	8	0	1
Power Systems	172	66	21	21	28	27	0	9
Semiconductor Devices	129	59	13	15	25	14	1	2
Miscellaneous-Elec.	120	62	14	13	13	13	1	4
Materials Processing & Handling	103	40	7	10	27	8	0	11
Metal Working	137	51	24	18	25	15	3	1
Motors, Engines & Parts	145	66	12	25	26	9	3	4
Optics	100	40	9	12	24	10	0	5
Transportation	73	33	10	12	10	1	0	7
Miscellaneous Mechanical	124	60	14	12	24	8	0	6
Agriculture, Husbandry, Food	87	29	11	15	15	12	2	3
Apparel & Textile	77	33	7	11	9	4	1	12
Earth Working & Wells	20	9	1	1	3	0	0	6
Furniture, House Fixtures	51	21	8	3	8	4	0	7
Heating	84	39	8	15	14	6	0	2
Pipes & Joints	66	23	10	6	12	6	2	7
Receptacles	55	27	5	6	13	2	0	2
Miscellaneous-Others	225	100	25	25	39	17	9	10

	N	I did not use	1	2	3	4	5	Total
All	3472	46.08	10.6	12.24	19.84	9.82	1.41	100
Agriculture, Food, Textiles	59	33.9	8.47	13.56	25.42	13.56	5.08	100
Coating	75	38.67	6.67	17.33	25.33	10.67	1.33	100
Gas	42	42.86	16.67	9.52	14.29	16.67	0	100
Organic Compounds	107	45.79	11.21	12.15	16.82	14.02	0	100
Resins	115	41.74	9.57	13.04	27.83	5.22	2.61	100
Miscellaneous-chemical	195	41.03	12.82	11.79	22.56	10.77	1.03	100
Communications	157	52.23	3.18	10.19	17.83	15.29	1.27	100
Computer Hardware	50	52	8	16	12	12	0	100
Computer Software	121	51.24	6.61	10.74	18.18	9.92	3.31	100
Computer Peripherals	75	49.33	13.33	14.67	18.67	4	0	100
Information Storage	118	53.39	7.63	13.56	18.64	5.93	0.85	100
Drugs	119	42.86	8.4	14.29	21.85	10.92	1.68	100
Surgery & Medical Instruments	82	54.88	9.76	9.76	17.07	8.54	0	100
Biotechnology	78	30.77	10.26	10.26	23.08	21.79	3.85	100
Miscellaneous-Drug&Med	44	56.82	11.36	0	22.73	9.09	0	100
Electrical Devices	91	59.34	13.19	6.59	19.78	1.1	0	100
Electrical Lighting	94	45.74	9.57	12.77	23.4	7.45	1.06	100
Measuring & Testing	109	50.46	3.67	7.34	23.85	10.09	4.59	100
Nuclears & X-rays	71	43.66	16.9	8.45	19.72	11.27	0	100
Power Systems	163	40.49	12.88	12.88	17.18	16.56	0	100
Semiconductor Devices	127	46.46	10.24	11.81	19.69	11.02	0.79	100
Miscellaneous-Elec.	116	53.45	12.07	11.21	11.21	11.21	0.86	100
Materials Processing & Handling	92	43.48	7.61	10.87	29.35	8.7	0	100
Metal Working	136	37.5	17.65	13.24	18.38	11.03	2.21	100
Motors, Engines & Parts	141	46.81	8.51	17.73	18.44	6.38	2.13	100
Optics	95	42.11	9.47	12.63	25.26	10.53	0	100
Transportation	66	50	15.15	18.18	15.15	1.52	0	100
Miscellaneous Mechanical	118	50.85	11.86	10.17	20.34	6.78	0	100
Agriculture, Husbandry, Food	84	34.52	13.1	17.86	17.86	14.29	2.38	100
Apparel & Textile	65	50.77	10.77	16.92	13.85	6.15	1.54	100
Earth Working & Wells	14	64.29	7.14	7.14	21.43	0	0	100
Furniture, House Fixtures	44	47.73	18.18	6.82	18.18	9.09	0	100
Heating	82	47.56	9.76	18.29	17.07	7.32	0	100
Pipes & Joints	59	38.98	16.95	10.17	20.34	10.17	3.39	100
Receptacles	53	50.94	9.43	11.32	24.53	3.77	0	100
Miscellaneous-Others	215	46.51	11.63	11.63	18.14	7.91	4.19	100
		46.73	10.02	11.93	20.05	9.89	1.38	100
		46.86	10.29	12.08	19.52	9.84	1.41	100

US (4/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

A7_G Universities

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,180	204	122	120	67	38	188
11	Agriculture, Food, Textiles	8	3	2	1	1	0	0	1
12	Coating	34	23	2	1	4	0	0	4
13	Gas	11	6	2	1	1	0	0	1
14	Organic Compounds	61	35	12	5	2	5	0	2
15	Resins	84	50	13	5	8	2	1	5
19	Miscellaneous-chemical	233	155	21	14	12	9	5	17
21	Communications	149	97	12	8	9	7	3	13
22	Computer Hardware	42	29	3	0	3	2	1	4
77	Computer Software	93	60	10	5	7	3	1	7
23	Computer Peripherals	33	22	5	2	0	0	0	4
24	Information Storage	42	17	6	7	2	4	1	5
31	Drugs	101	40	11	9	15	4	9	13
32	Surgery & Medical Instrument	123	69	12	9	5	7	3	18
33	Biotechnology	41	12	11	2	6	3	2	5
39	Miscellaneous-Drug&Med	29	17	4	3	2	0	1	2
41	Electrical Devices	45	34	2	3	1	1	0	4
42	Electrical Lighting	33	12	3	8	3	2	1	4
43	Measuring & Testing	62	35	4	4	6	2	1	10
44	Nuclears & X-rays	39	23	3	4	2	2	0	5
45	Power Systems	89	60	10	5	5	1	1	7
46	Semiconductor Devices	55	30	7	4	3	4	1	6
49	Miscellaneous-Elec.	32	18	3	3	3	0	1	4
51	Materials Processing & Handli	56	37	7	1	3	1	1	6
52	Metal Working	49	33	3	4	2	1	0	6
53	Motors, Engines & Parts	56	41	3	2	2	2	1	5
54	Optics	43	32	2	0	1	2	2	4
55	Transportation	33	22	2	0	2	1	1	5
59	Miscellaneous Mechanical	42	33	3	2	1	0	0	3
61	Agriculture, Husbandry, Food	14	8	2	0	0	1	0	3
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	6	2	1	0	0	0	0
66	Heating	8	3	2	0	0	0	1	2
67	Pipes & Joints	13	11	0	1	1	0	0	0
68	Receptacles	20	16	1	1	1	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

%		N	I did not use	1	2	3	4	5	Total
NBER	All	1731	68.17	11.79	7.05	6.93	3.87	2.20	100
11	Agriculture, Food, Textiles	7	42.86	28.57	14.29	14.29	0.00	0.00	100
12	Coating	30	76.67	6.67	3.33	13.33	0.00	0.00	100
13	Gas	10	60.00	20.00	10.00	10.00	0.00	0.00	100
14	Organic Compounds	59	59.32	20.34	8.47	3.39	8.47	0.00	100
15	Resins	79	63.29	16.46	6.33	10.13	2.53	1.27	100
19	Miscellaneous-chemical	216	71.76	9.72	6.48	5.56	4.17	2.31	100
21	Communications	136	71.32	8.82	5.88	6.62	5.15	2.21	100
22	Computer Hardware	38	76.32	7.89	0.00	7.89	5.26	2.63	100
77	Computer Software	86	69.77	11.63	5.81	8.14	3.49	1.16	100
23	Computer Peripherals	29	75.86	17.24	6.90	0.00	0.00	0.00	100
24	Information Storage	37	45.95	16.22	18.92	5.41	10.81	2.70	100
31	Drugs	88	45.45	12.50	10.23	17.05	4.55	10.23	100
32	Surgery & Medical Instrument	105	65.71	11.43	8.57	4.76	6.67	2.86	100
33	Biotechnology	36	33.33	30.56	5.56	16.67	8.33	5.56	100
39	Miscellaneous-Drug&Med	27	62.96	14.81	11.11	7.41	0.00	3.70	100
41	Electrical Devices	41	82.93	4.88	7.32	2.44	2.44	0.00	100
42	Electrical Lighting	29	41.38	10.34	27.59	10.34	6.90	3.45	100
43	Measuring & Testing	52	67.31	7.69	7.69	11.54	3.85	1.92	100
44	Nuclears & X-rays	34	67.65	8.82	11.76	5.88	5.88	0.00	100
45	Power Systems	82	73.17	12.20	6.10	6.10	1.22	1.22	100
46	Semiconductor Devices	49	61.22	14.29	8.16	6.12	8.16	2.04	100
49	Miscellaneous-Elec.	28	64.29	10.71	10.71	10.71	0.00	3.57	100
51	Materials Processing & Handli	50	74.00	14.00	2.00	6.00	2.00	2.00	100
52	Metal Working	43	76.74	6.98	9.30	4.65	2.33	0.00	100
53	Motors, Engines & Parts	51	80.39	5.88	3.92	3.92	3.92	1.96	100
54	Optics	39	82.05	5.13	0.00	2.56	5.13	5.13	100
55	Transportation	28	78.57	7.14	0.00	7.14	3.57	3.57	100
59	Miscellaneous Mechanical	39	84.62	7.69	5.13	2.56	0.00	0.00	100
61	Agriculture, Husbandry, Food	11	72.73	18.18	0.00	0.00	9.09	0.00	100
63	Apparel & Textile	8	100.00	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	66.67	22.22	11.11	0.00	0.00	0.00	100
66	Heating	6	50.00	33.33	0.00	0.00	0.00	16.67	100
67	Pipes & Joints	13	84.62	0.00	7.69	7.69	0.00	0.00	100
68	Receptacles	19	84.21	5.26	5.26	5.26	0.00	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**67.34**	**11.68**	**7.38**	**7.12**	**4.05**	**2.42**	100

A7_H Governments research organization

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,371	173	91	58	28	15	183
11	Agriculture, Food, Textiles	8	4	1	2	0	0	0	1
12	Coating	34	27	2	0	0	0	0	5
13	Gas	11	7	1	0	1	1	0	1
14	Organic Compounds	61	46	10	0	2	1	0	2
15	Resins	84	62	10	2	5	1	0	4
19	Miscellaneous-chemical	233	171	18	12	8	4	3	17
21	Communications	149	108	12	7	5	2	2	13
22	Computer Hardware	42	32	3	0	2	1	0	4
77	Computer Software	93	74	7	2	3	1	0	6
23	Computer Peripherals	33	24	5	0	0	0	0	4
24	Information Storage	42	26	6	3	1	0	0	6
31	Drugs	101	56	11	11	7	2	1	13
32	Surgery & Medical Instrument	123	84	10	9	1	1	2	16
33	Biotechnology	41	20	9	4	2	0	1	5
39	Miscellaneous-Drug&Med	29	21	4	2	0	0	0	2
41	Electrical Devices	45	36	2	1	2	0	0	4
42	Electrical Lighting	33	19	2	6	1	0	1	4
43	Measuring & Testing	62	41	5	4	1	1	0	10
44	Nuclears & X-rays	39	28	3	2	0	0	1	5
45	Power Systems	89	65	6	3	2	7	1	5
46	Semiconductor Devices	55	34	8	2	4	1	0	6
49	Miscellaneous-Elec.	32	24	0	2	1	0	1	4
51	Materials Processing & Handli	56	44	5	2	0	0	0	5
52	Metal Working	49	34	3	5	0	0	0	7
53	Motors, Engines & Parts	56	42	4	3	2	0	0	5
54	Optics	43	34	3	0	1	1	0	4
55	Transportation	33	25	2	0	2	0	0	4
59	Miscellaneous Mechanical	42	34	3	1	0	1	0	3
61	Agriculture, Husbandry, Food	14	8	3	0	1	0	0	2
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	6	2	1	0	0	0	0
66	Heating	8	4	1	0	0	0	1	2
67	Pipes & Joints	13	11	2	0	0	0	0	0
68	Receptacles	20	16	2	0	0	1	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	

%		N	I did not use	1	2	3	4	5	Total
NBER	All	1736	78.97	9.97	5.24	3.34	1.61	0.86	100
11	Agriculture, Food, Textiles	7	57.14	14.29	28.57	0.00	0.00	0.00	100
12	Coating	29	93.10	6.90	0.00	0.00	0.00	0.00	100
13	Gas	10	70.00	10.00	0.00	10.00	10.00	0.00	100
14	Organic Compounds	59	77.97	16.95	0.00	3.39	1.69	0.00	100
15	Resins	80	77.50	12.50	2.50	6.25	1.25	0.00	100
19	Miscellaneous-chemical	216	79.17	8.33	5.56	3.70	1.85	1.39	100
21	Communications	136	79.41	8.82	5.15	3.68	1.47	1.47	100
22	Computer Hardware	38	84.21	7.89	0.00	5.26	2.63	0.00	100
77	Computer Software	87	85.06	8.05	2.30	3.45	1.15	0.00	100
23	Computer Peripherals	29	82.76	17.24	0.00	0.00	0.00	0.00	100
24	Information Storage	36	72.22	16.67	8.33	2.78	0.00	0.00	100
31	Drugs	88	63.64	12.50	12.50	7.95	2.27	1.14	100
32	Surgery & Medical Instrument	107	78.50	9.35	8.41	0.93	0.93	1.87	100
33	Biotechnology	36	55.56	25.00	11.11	5.56	0.00	2.78	100
39	Miscellaneous-Drug&Med	27	77.78	14.81	7.41	0.00	0.00	0.00	100
41	Electrical Devices	41	87.80	4.88	2.44	4.88	0.00	0.00	100
42	Electrical Lighting	29	65.52	6.90	20.69	3.45	0.00	3.45	100
43	Measuring & Testing	52	78.85	9.62	7.69	1.92	1.92	0.00	100
44	Nuclears & X-rays	34	82.35	8.82	5.88	0.00	0.00	2.94	100
45	Power Systems	84	77.38	7.14	3.57	2.38	8.33	1.19	100
46	Semiconductor Devices	49	69.39	16.33	4.08	8.16	2.04	0.00	100
49	Miscellaneous-Elec.	28	85.71	0.00	7.14	3.57	0.00	3.57	100
51	Materials Processing & Handli	51	86.27	9.80	3.92	0.00	0.00	0.00	100
52	Metal Working	42	80.95	7.14	11.90	0.00	0.00	0.00	100
53	Motors, Engines & Parts	51	82.35	7.84	5.88	3.92	0.00	0.00	100
54	Optics	39	87.18	7.69	0.00	2.56	2.56	0.00	100
55	Transportation	29	86.21	6.90	0.00	6.90	0.00	0.00	100
59	Miscellaneous Mechanical	39	87.18	7.69	2.56	0.00	2.56	0.00	100
61	Agriculture, Husbandry, Food	12	66.67	25.00	0.00	8.33	0.00	0.00	100
63	Apparel & Textile	8	100.00	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	66.67	22.22	11.11	0.00	0.00	0.00	100
66	Heating	6	66.67	16.67	0.00	0.00	0.00	16.67	100
67	Pipes & Joints	13	84.62	15.38	0.00	0.00	0.00	0.00	100
68	Receptacles	19	84.21	10.53	0.00	0.00	5.26	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
			78.73	**10.10**	**5.54**	**3.35**	**1.45**	**0.83**	**100**

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

Customers or Product users（顧客・製品ユーザー）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	830	157	198	433	1199	694	147
Agriculture, Food, Textiles	60	10	5	2	10	20	13	0
Coating	80	16	1	3	8	25	21	6
Gas	45	11	4	1	2	13	13	1
Organic Compounds	120	30	10	5	16	27	19	13
Resins	125	21	3	6	15	53	21	6
Miscellaneous-chemical	208	39	12	14	18	71	42	12
Communications	160	52	3	9	28	48	18	2
Computer Hardware	59	18	2	5	7	13	5	9
Computer Software	123	34	6	4	10	43	25	1
Computer Peripherals	76	21	6	6	9	15	17	2
Information Storage	120	33	2	7	24	35	17	2
Drugs	127	41	8	7	19	34	10	8
Surgery & Medical Instruments	85	20	4	3	5	25	26	2
Biotechnology	87	23	12	8	11	21	3	9
Miscellaneous-Drug&Med	45	12	2	0	9	9	12	1
Electrical Devices	91	17	3	3	15	30	23	0
Electrical Lighting	96	23	5	5	12	33	17	1
Measuring & Testing	111	30	5	6	12	41	15	2
Nuclears & X-rays	72	18	5	4	9	24	11	1
Power Systems	172	35	7	19	19	58	28	6
Semiconductor Devices	129	38	7	8	15	49	11	1
Miscellaneous-Elec.	120	26	5	5	13	43	24	4
Materials Processing & Handling	103	19	0	3	9	37	26	9
Metal Working	137	27	7	9	15	45	32	2
Motors, Engines & Parts	145	33	6	15	22	45	20	4
Optics	100	24	4	6	19	28	16	3
Transportation	73	14	2	4	7	27	14	5
Miscellaneous Mechanical	124	26	4	4	13	48	26	3
Agriculture, Husbandry, Food	87	16	5	2	7	35	20	2
Apparel & Textile	77	15	1	2	5	27	22	5
Earth Working & Wells	20	2	2	0	1	6	4	5
Furniture, House Fixtures	51	8	3	1	3	15	16	5
Heating	84	19	0	8	18	22	17	0
Pipes & Joints	66	11	1	1	4	23	23	3
Receptacles	55	7	1	3	5	18	18	3
Miscellaneous-Others	225	41	4	10	19	93	49	9

%	N	I did not use	1	2	3	4	5	Total
All	3511	23.64	4.47	5.64	12.33	34.15	19.77	100
Agriculture, Food, Textiles	60	16.67	8.33	3.33	16.67	33.33	21.67	100
Coating	74	21.62	1.35	4.05	10.81	33.78	28.38	100
Gas	44	25	9.09	2.27	4.55	29.55	29.55	100
Organic Compounds	107	28.04	9.35	4.67	14.95	25.23	17.76	100
Resins	119	17.65	2.52	5.04	12.61	44.54	17.65	100
Miscellaneous-chemical	196	19.9	6.12	7.14	9.18	36.22	21.43	100
Communications	158	32.91	1.9	5.7	17.72	30.38	11.39	100
Computer Hardware	50	36	4	10	14	26	10	100
Computer Software	122	27.87	4.92	3.28	8.2	35.25	20.49	100
Computer Peripherals	74	28.38	8.11	8.11	12.16	20.27	22.97	100
Information Storage	118	27.97	1.69	5.93	20.34	29.66	14.41	100
Drugs	119	34.45	6.72	5.88	15.97	28.57	8.4	100
Surgery & Medical Instruments	83	24.1	4.82	3.61	6.02	30.12	31.33	100
Biotechnology	78	29.49	15.38	10.26	14.1	26.92	3.85	100
Miscellaneous-Drug&Med	44	27.27	4.55	0	20.45	20.45	27.27	100
Electrical Devices	91	18.68	3.3	3.3	16.48	32.97	25.27	100
Electrical Lighting	95	24.21	5.26	5.26	12.63	34.74	17.89	100
Measuring & Testing	109	27.52	4.59	5.5	11.01	37.61	13.76	100
Nuclears & X-rays	71	25.35	7.04	5.63	12.68	33.8	15.49	100
Power Systems	166	21.08	4.22	11.45	11.45	34.94	16.87	100
Semiconductor Devices	128	29.69	5.47	6.25	11.72	38.28	8.59	100
Miscellaneous-Elec.	116	22.41	4.31	4.31	11.21	37.07	20.69	100
Materials Processing & Handling	94	20.21	0	3.19	9.57	39.36	27.66	100
Metal Working	135	20	5.19	6.67	11.11	33.33	23.7	100
Motors, Engines & Parts	141	23.4	4.26	10.64	15.6	31.91	14.18	100
Optics	97	24.74	4.12	6.19	19.59	28.87	16.49	100
Transportation	68	20.59	2.94	5.88	10.29	39.71	20.59	100
Miscellaneous Mechanical	121	21.49	3.31	3.31	10.74	39.67	21.49	100
Agriculture, Husbandry, Food	85	18.82	5.88	2.35	8.24	41.18	23.53	100
Apparel & Textile	72	20.83	1.39	2.78	6.94	37.5	30.56	100
Earth Working & Wells	15	13.33	13.33	0	6.67	40	26.67	100
Furniture, House Fixtures	46	17.39	6.52	2.17	6.52	32.61	34.78	100
Heating	84	22.62	0	9.52	21.43	26.19	20.24	100
Pipes & Joints	63	17.46	1.59	1.59	6.35	36.51	36.51	100
Receptacles	52	13.46	1.92	5.77	9.62	34.62	34.62	100
Miscellaneous-Others	216	18.98	1.85	4.63	8.8	43.06	22.69	100
US-JP weighted		24.53	4.44	5.81	12.45	33.97	18.8	100
JP weighted		23.91	4.3	5.91	12.39	34.37	19.12	100

Suppliers（サプライヤー）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1108	269	359	742	761	233	186
Agriculture, Food, Textiles	60	12	6	9	17	10	4	2
Coating	80	14	3	8	20	21	9	5
Gas	45	13	2	1	12	11	3	3
Organic Compounds	120	43	10	13	16	20	4	14
Resins	125	29	8	15	24	23	17	9
Miscellaneous-chemical	208	61	19	21	36	46	11	14
Communications	160	71	6	16	34	22	8	3
Computer Hardware	59	25	2	4	14	5	1	8
Computer Software	123	53	8	12	25	20	4	1
Computer Peripherals	76	27	6	6	19	12	5	1
Information Storage	120	47	8	9	26	21	7	2
Drugs	127	46	14	16	24	13	4	10
Surgery & Medical Instruments	85	32	7	6	13	13	13	1
Biotechnology	87	27	17	7	15	13	0	8
Miscellaneous-Drug&Med	45	17	2	2	10	11	2	1
Electrical Devices	91	27	6	7	22	23	6	0
Electrical Lighting	96	31	8	8	18	19	9	3
Measuring & Testing	111	43	8	7	28	17	6	2
Nuclears & X-rays	72	25	12	12	14	6	2	1
Power Systems	172	44	13	24	29	45	10	7
Semiconductor Devices	129	46	14	12	17	32	6	2
Miscellaneous-Elec.	120	42	5	5	24	28	12	4
Materials Processing & Handling	103	27	2	12	21	27	4	10
Metal Working	137	32	15	16	31	31	9	3
Motors, Engines & Parts	145	32	8	19	29	37	17	3
Optics	100	23	7	12	24	23	6	5
Transportation	73	19	1	9	12	22	4	6
Miscellaneous Mechanical	124	31	11	10	30	33	4	5
Agriculture, Husbandry, Food	87	24	6	9	13	23	6	6
Apparel & Textile	77	16	6	8	16	12	6	13
Earth Working & Wells	20	5	2	1	2	4	0	6
Furniture, House Fixtures	51	13	3	4	7	12	6	6
Heating	84	23	4	11	20	18	5	3
Pipes & Joints	66	15	4	4	16	14	6	7
Receptacles	55	12	3	2	14	16	6	2
Miscellaneous-Others	225	61	13	22	50	58	11	10

%	N	I did not use	1	2	3	4	5	Total
All	3472	31.91	7.75	10.34	21.37	21.92	6.71	100
Agriculture, Food, Textiles	58	20.69	10.34	15.52	29.31	17.24	6.9	100
Coating	75	18.67	4	10.67	26.67	28	12	100
Gas	42	30.95	4.76	2.38	28.57	26.19	7.14	100
Organic Compounds	106	40.57	9.43	12.26	15.09	18.87	3.77	100
Resins	116	25	6.9	12.93	20.69	19.83	14.66	100
Miscellaneous-chemical	194	31.44	9.79	10.82	18.56	23.71	5.67	100
Communications	157	45.22	3.82	10.19	21.66	14.01	5.1	100
Computer Hardware	51	49.02	3.92	7.84	27.45	9.8	1.96	100
Computer Software	122	43.44	6.56	9.84	20.49	16.39	3.28	100
Computer Peripherals	75	36	8	8	25.33	16	6.67	100
Information Storage	118	39.83	6.78	7.63	22.03	17.8	5.93	100
Drugs	117	39.32	11.97	13.68	20.51	11.11	3.42	100
Surgery & Medical Instruments	84	38.1	8.33	7.14	15.48	15.48	15.48	100
Biotechnology	79	34.18	21.52	8.86	18.99	16.46	0	100
Miscellaneous-Drug&Med	44	38.64	4.55	4.55	22.73	25	4.55	100
Electrical Devices	91	29.67	6.59	7.69	24.18	25.27	6.59	100
Electrical Lighting	93	33.33	8.6	8.6	19.35	20.43	9.68	100
Measuring & Testing	109	39.45	7.34	6.42	25.69	15.6	5.5	100
Nuclears & X-rays	71	35.21	16.9	16.9	19.72	8.45	2.82	100
Power Systems	165	26.67	7.88	14.55	17.58	27.27	6.06	100
Semiconductor Devices	127	36.22	11.02	9.45	13.39	25.2	4.72	100
Miscellaneous-Elec.	116	36.21	4.31	4.31	20.69	24.14	10.34	100
Materials Processing & Handling	93	29.03	2.15	12.9	22.58	29.03	4.3	100
Metal Working	134	23.88	11.19	11.94	23.13	23.13	6.72	100
Motors, Engines & Parts	142	22.54	5.63	13.38	20.42	26.06	11.97	100
Optics	95	24.21	7.37	12.63	25.26	24.21	6.32	100
Transportation	67	28.36	1.49	13.43	17.91	32.84	5.97	100
Miscellaneous Mechanical	119	26.05	9.24	8.4	25.21	27.73	3.36	100
Agriculture, Husbandry, Food	81	29.63	7.41	11.11	16.05	28.4	7.41	100
Apparel & Textile	64	25	9.38	12.5	25	18.75	9.38	100
Earth Working & Wells	14	35.71	14.29	7.14	14.29	28.57	0	100
Furniture, House Fixtures	45	28.89	6.67	8.89	15.56	26.67	13.33	100
Heating	81	28.4	4.94	13.58	24.69	22.22	6.17	100
Pipes & Joints	59	25.42	6.78	6.78	27.12	23.73	10.17	100
Receptacles	53	22.64	5.66	3.77	26.42	30.19	11.32	100
Miscellaneous-Others	215	28.37	6.05	10.23	23.26	26.98	5.12	100
US-JP weighted		33.39	7.63	10.39	20.99	21.1	6.49	100
JP weighted		32.56	7.34	10.35	21.22	21.86	6.66	100

US (5/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

A7_I Customers or product users

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	756	136	141	244	261	208	173
11	Agriculture, Food, Textiles	8	1	2	0	3	1	0	1
12	Coating	34	9	1	4	3	7	6	4
13	Gas	11	3	1	0	3	1	2	1
14	Organic Compounds	61	30	6	4	10	6	2	3
15	Resins	84	28	6	14	13	7	12	4
19	Miscellaneous-chemical	233	88	11	14	30	38	36	16
21	Communications	149	67	8	10	18	22	12	12
22	Computer Hardware	42	20	6	1	3	5	4	3
77	Computer Software	93	33	5	3	13	22	11	6
23	Computer Peripherals	33	18	5	1	2	3	1	3
24	Information Storage	42	18	7	4	5	1	1	6
31	Drugs	101	58	7	6	6	10	1	13
32	Surgery & Medical Instruments	123	44	10	5	18	16	16	14
33	Biotechnology	41	19	4	4	2	5	2	5
39	Miscellaneous-Drug&Med	29	10	2	5	6	1	3	2
41	Electrical Devices	45	9	4	7	4	12	5	4
42	Electrical Lighting	33	15	1	4	4	2	3	4
43	Measuring & Testing	62	23	4	4	10	9	3	9
44	Nuclears & X-rays	39	16	1	4	5	4	4	5
45	Power Systems	89	39	5	7	13	10	9	6
46	Semiconductor Devices	55	29	5	2	5	5	3	6
49	Miscellaneous-Elec.	32	11	2	2	6	4	3	4
51	Materials Processing & Handling	56	18	4	5	7	7	11	4
52	Metal Working	49	23	0	2	9	7	3	5
53	Motors, Engines & Parts	56	23	7	3	4	11	3	5
54	Optics	43	18	3	1	5	8	4	4
55	Transportation	33	13	1	3	3	4	5	4
59	Miscellaneous Mechanical	42	18	1	3	6	4	7	3
61	Agriculture, Husbandry, Food	14	4	0	1	1	3	3	2
63	Apparel & Textile	9	2	0	1	0	1	4	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	2	1	0	2	1	3	0
66	Heating	8	1	0	0	4	0	1	2
67	Pipes & Joints	13	6	0	2	1	3	1	0
68	Receptacles	20	8	1	3	2	2	3	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

%		N	I did not use	1	2	3	4	5	Total
NBER	All	1746	43.30	7.79	8.08	13.97	14.95	11.91	100
11	Agriculture, Food, Textiles	7	14.29	28.57	0.00	42.86	14.29	0.00	100
12	Coating	30	30.00	3.33	13.33	10.00	23.33	20.00	100
13	Gas	10	30.00	10.00	0.00	30.00	10.00	20.00	100
14	Organic Compounds	58	51.72	10.34	6.90	17.24	10.34	3.45	100
15	Resins	80	35.00	7.50	17.50	16.25	8.75	15.00	100
19	Miscellaneous-chemical	217	40.55	5.07	6.45	13.82	17.51	16.59	100
21	Communications	137	48.91	5.84	7.30	13.14	16.06	8.76	100
22	Computer Hardware	39	51.28	15.38	2.56	7.69	12.82	10.26	100
77	Computer Software	87	37.93	5.75	3.45	14.94	25.29	12.64	100
23	Computer Peripherals	30	60.00	16.67	3.33	6.67	10.00	3.33	100
24	Information Storage	36	50.00	19.44	11.11	13.89	2.78	2.78	100
31	Drugs	88	65.91	7.95	6.82	6.82	11.36	1.14	100
32	Surgery & Medical Instruments	109	40.37	9.17	4.59	16.51	14.68	14.68	100
33	Biotechnology	36	52.78	11.11	11.11	5.56	13.89	5.56	100
39	Miscellaneous-Drug&Med	27	37.04	7.41	18.52	22.22	3.70	11.11	100
41	Electrical Devices	41	21.95	9.76	17.07	9.76	29.27	12.20	100
42	Electrical Lighting	29	51.72	3.45	13.79	13.79	6.90	10.34	100
43	Measuring & Testing	53	43.40	7.55	7.55	18.87	16.98	5.66	100
44	Nuclears & X-rays	34	47.06	2.94	11.76	14.71	11.76	11.76	100
45	Power Systems	83	46.99	6.02	8.43	15.66	12.05	10.84	100
46	Semiconductor Devices	49	59.18	10.20	4.08	10.20	10.20	6.12	100
49	Miscellaneous-Elec.	28	39.29	7.14	7.14	21.43	14.29	10.71	100
51	Materials Processing & Handling	52	34.62	7.69	9.62	13.46	13.46	21.15	100
52	Metal Working	44	52.27	0.00	4.55	20.45	15.91	6.82	100
53	Motors, Engines & Parts	51	45.10	13.73	5.88	7.84	21.57	5.88	100
54	Optics	39	46.15	7.69	2.56	12.82	20.51	10.26	100
55	Transportation	29	44.83	3.45	10.34	10.34	13.79	17.24	100
59	Miscellaneous Mechanical	39	46.15	2.56	7.69	15.38	10.26	17.95	100
61	Agriculture, Husbandry, Food	12	33.33	0.00	8.33	8.33	25.00	25.00	100
63	Apparel & Textile	8	25.00	0.00	12.50	0.00	12.50	50.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	22.22	11.11	0.00	22.22	11.11	33.33	100
66	Heating	6	16.67	0.00	0.00	66.67	0.00	16.67	100
67	Pipes & Joints	13	46.15	0.00	15.38	7.69	23.08	7.69	100
68	Receptacles	19	42.11	5.26	15.79	10.53	10.53	15.79	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**44.19**	**7.82**	**8.02**	**13.97**	**14.62**	**11.38**	100

A7_J Suppliers

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,098	223	141	142	92	42	181
11	Agriculture, Food, Textiles	8	2	3	0	2	0	0	1
12	Coating	34	15	5	5	3	1	2	3
13	Gas	11	5	3	1	1	0	0	1
14	Organic Compounds	61	40	8	5	4	2	0	2
15	Resins	84	44	13	7	9	7	0	4
19	Miscellaneous-chemical	233	126	27	15	20	18	9	18
21	Communications	149	97	11	10	7	9	1	14
22	Computer Hardware	42	27	5	3	4	0	0	3
77	Computer Software	93	70	6	7	1	1	2	6
23	Computer Peripherals	33	17	5	2	2	1	2	4
24	Information Storage	42	26	6	2	0	1	1	6
31	Drugs	101	67	9	6	3	2	1	13
32	Surgery & Medical Instruments	123	70	15	10	5	4	2	17
33	Biotechnology	41	20	7	3	5	0	1	5
39	Miscellaneous-Drug&Med	29	15	6	3	2	1	0	2
41	Electrical Devices	45	24	6	1	4	6	0	4
42	Electrical Lighting	33	18	3	2	3	1	2	4
43	Measuring & Testing	62	35	7	3	3	4	0	10
44	Nuclears & X-rays	39	22	3	4	3	1	1	5
45	Power Systems	89	51	13	5	9	5	0	6
46	Semiconductor Devices	55	32	11	2	0	4	0	6
49	Miscellaneous-Elec.	32	17	1	6	3	0	2	3
51	Materials Processing & Handling	56	30	8	4	4	3	1	6
52	Metal Working	49	24	5	5	4	2	3	6
53	Motors, Engines & Parts	56	33	6	2	7	2	1	5
54	Optics	43	25	3	3	4	2	2	4
55	Transportation	33	18	2	4	3	2	0	4
59	Miscellaneous Mechanical	42	27	2	5	3	0	2	3
61	Agriculture, Husbandry, Food	14	5	1	2	3	0	1	2
63	Apparel & Textile	9	5	2	1	0	0	0	1
64	Earth Working & Wells	5	1	0	1	2	0	0	1
65	Furniture, House Fixtures	9	4	3	0	2	0	0	0
66	Heating	8	3	0	1	1	0	1	2
67	Pipes & Joints	13	6	2	2	1	1	1	0
68	Receptacles	20	10	1	1	3	4	0	1
69	Miscellaneous-Others	123	67	15	8	12	8	4	9

		N	I did not use	1	2	3	4	5	Total
NBER	All	1738	63.18	12.83	8.11	8.17	5.29	2.42	100
11	Agriculture, Food, Textiles	7	28.57	42.86	0.00	28.57	0.00	0.00	100
12	Coating	31	48.39	16.13	16.13	9.68	3.23	6.45	100
13	Gas	10	50.00	30	10.00	10.00	0.00	0.00	100
14	Organic Compounds	59	67.80	13.56	8.47	6.78	3.39	0.00	100
15	Resins	80	55.00	16.25	8.75	11.25	8.75	0.00	100
19	Miscellaneous-chemical	215	58.60	12.56	6.98	9.30	8.37	4.19	100
21	Communications	135	71.85	8.15	7.41	5.19	6.67	0.74	100
22	Computer Hardware	39	69.23	12.82	7.69	10.26	0.00	0.00	100
77	Computer Software	87	80.46	6.9	8.05	1.15	1.15	2.30	100
23	Computer Peripherals	29	58.62	17.24	6.90	6.90	3.45	6.90	100
24	Information Storage	36	72.22	16.67	5.56	0.00	2.78	2.78	100
31	Drugs	88	76.14	10.23	6.82	3.41	2.27	1.14	100
32	Surgery & Medical Instruments	106	66.04	14.15	9.43	4.72	3.77	1.89	100
33	Biotechnology	36	55.56	19.44	8.33	13.89	0.00	2.78	100
39	Miscellaneous-Drug&Med	27	55.56	22.22	11.11	7.41	3.70	0.00	100
41	Electrical Devices	41	58.54	14.63	2.44	9.76	14.63	0.00	100
42	Electrical Lighting	29	62.07	10.34	6.90	10.34	3.45	6.90	100
43	Measuring & Testing	52	67.31	13.46	5.77	5.77	7.69	0.00	100
44	Nuclears & X-rays	34	64.71	8.82	11.76	8.82	2.94	2.94	100
45	Power Systems	83	61.45	15.66	6.02	10.84	6.02	0.00	100
46	Semiconductor Devices	49	65.31	22.45	4.08	0.00	8.16	0.00	100
49	Miscellaneous-Elec.	29	58.62	3.45	20.69	10.34	0.00	6.90	100
51	Materials Processing & Handling	50	60.00	16	8.00	8.00	6.00	2.00	100
52	Metal Working	43	55.81	11.63	11.63	9.30	4.65	6.98	100
53	Motors, Engines & Parts	51	64.71	11.76	3.92	13.73	3.92	1.96	100
54	Optics	39	64.10	7.69	7.69	10.26	5.13	5.13	100
55	Transportation	29	62.07	6.9	13.79	10.34	6.90	0.00	100
59	Miscellaneous Mechanical	39	69.23	5.13	12.82	7.69	0.00	5.13	100
61	Agriculture, Husbandry, Food	12	41.67	8.33	16.67	25.00	0.00	8.33	100
63	Apparel & Textile	8	62.50	25	12.50	0.00	0.00	0.00	100
64	Earth Working & Wells	4	25.00	0	25.00	50.00	0.00	0.00	100
65	Furniture, House Fixtures	9	44.44	33.33	0.00	22.22	0.00	0.00	100
66	Heating	6	50.00	0	16.67	16.67	0.00	16.67	100
67	Pipes & Joints	13	46.15	15.38	15.38	7.69	7.69	7.69	100
68	Receptacles	19	52.63	5.26	5.26	15.79	21.05	0.00	100
69	Miscellaneous-Others	114	58.77	13.16	7.02	10.53	7.02	3.51	100
	US-JP weighted		**63.88**	**12.60**	**8.26**	**7.74**	**5.04**	**2.47**	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

Competitors (e.g. knowledge from its products)（競争相手）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	818	179	175	538	1305	483	160
Agriculture, Food, Textiles	60	7	1	3	14	25	9	1
Coating	80	18	3	7	11	26	10	5
Gas	45	9	1	2	5	17	8	3
Organic Compounds	120	36	7	8	16	33	10	10
Resins	125	23	6	7	22	42	19	6
Miscellaneous-chemical	208	54	9	17	26	70	19	13
Communications	160	43	3	3	31	53	24	3
Computer Hardware	59	17	3	0	5	23	4	7
Computer Software	123	38	6	5	14	46	12	2
Computer Peripherals	76	19	3	7	10	22	14	1
Information Storage	120	26	5	4	15	53	15	2
Drugs	127	30	7	6	20	40	16	8
Surgery & Medical Instruments	85	22	5	8	14	22	11	3
Biotechnology	87	15	9	2	13	34	6	8
Miscellaneous-Drug&Med	45	16	3	1	6	11	7	1
Electrical Devices	91	21	4	3	14	30	19	0
Electrical Lighting	96	26	4	4	13	34	14	1
Measuring & Testing	111	34	4	5	17	41	8	2
Nuclears & X-rays	72	19	6	3	6	32	5	1
Power Systems	172	30	12	9	34	57	22	8
Semiconductor Devices	129	39	7	6	22	31	22	2
Miscellaneous-Elec.	120	27	6	3	17	43	22	2
Materials Processing & Handling	103	22	0	2	12	42	15	10
Metal Working	137	27	13	6	19	54	16	2
Motors, Engines & Parts	145	18	5	11	20	65	23	3
Optics	100	17	6	3	16	45	9	4
Transportation	73	7	2	7	5	35	13	4
Miscellaneous Mechanical	124	26	7	4	22	44	17	4
Agriculture, Husbandry, Food	87	21	7	6	10	29	10	4
Apparel & Textile	77	12	4	4	9	29	8	11
Earth Working & Wells	20	1	1	1	1	6	5	5
Furniture, House Fixtures	51	12	1	2	2	15	13	6
Heating	84	13	1	3	17	36	12	2
Pipes & Joints	66	12	3	3	11	22	11	4
Receptacles	55	14	4	1	9	19	6	2
Miscellaneous-Others	225	47	11	9	40	79	29	10

%	N	I did not use	1	2	3	4	5	Total
All	3498	23.38	5.12	5	15.38	37.31	13.81	100
Agriculture, Food, Textiles	59	11.86	1.69	5.08	23.73	42.37	15.25	100
Coating	75	24	4	9.33	14.67	34.67	13.33	100
Gas	42	21.43	2.38	4.76	11.9	40.48	19.05	100
Organic Compounds	110	32.73	6.36	7.27	14.55	30	9.09	100
Resins	119	19.33	5.04	5.88	18.49	35.29	15.97	100
Miscellaneous-chemical	195	27.69	4.62	8.72	13.33	35.9	9.74	100
Communications	157	27.39	1.91	1.91	19.75	33.76	15.29	100
Computer Hardware	52	32.69	5.77	0	9.62	44.23	7.69	100
Computer Software	121	31.4	4.96	4.13	11.57	38.02	9.92	100
Computer Peripherals	75	25.33	4	9.33	13.33	29.33	18.67	100
Information Storage	118	22.03	4.24	3.39	12.71	44.92	12.71	100
Drugs	119	25.21	5.88	5.04	16.81	33.61	13.45	100
Surgery & Medical Instruments	82	26.83	6.1	9.76	17.07	26.83	13.41	100
Biotechnology	79	18.99	11.39	2.53	16.46	43.04	7.59	100
Miscellaneous-Drug&Med	44	36.36	6.82	2.27	13.64	25	15.91	100
Electrical Devices	91	23.08	4.4	3.3	15.38	32.97	20.88	100
Electrical Lighting	95	27.37	4.21	4.21	13.68	35.79	14.74	100
Measuring & Testing	109	31.19	3.67	4.59	15.6	37.61	7.34	100
Nuclears & X-rays	71	26.76	8.45	4.23	8.45	45.07	7.04	100
Power Systems	164	18.29	7.32	5.49	20.73	34.76	13.41	100
Semiconductor Devices	127	30.71	5.51	4.72	17.32	24.41	17.32	100
Miscellaneous-Elec.	118	22.88	5.08	2.54	14.41	36.44	18.64	100
Materials Processing & Handling	93	23.66	0	2.15	12.9	45.16	16.13	100
Metal Working	135	20	9.63	4.44	14.07	40	11.85	100
Motors, Engines & Parts	142	12.68	3.52	7.75	14.08	45.77	16.2	100
Optics	96	17.71	6.25	3.13	16.67	46.88	9.38	100
Transportation	69	10.14	2.9	10.14	7.25	50.72	18.84	100
Miscellaneous Mechanical	120	21.67	5.83	3.33	18.33	36.67	14.17	100
Agriculture, Husbandry, Food	83	25.3	8.43	7.23	12.05	34.94	12.05	100
Apparel & Textile	66	18.18	6.06	6.06	13.64	43.94	12.12	100
Earth Working & Wells	15	6.67	6.67	6.67	6.67	40	33.33	100
Furniture, House Fixtures	45	26.67	2.22	4.44	4.44	33.33	28.89	100
Heating	82	15.85	1.22	3.66	20.73	43.9	14.63	100
Pipes & Joints	62	19.35	4.84	4.84	17.74	35.48	17.74	100
Receptacles	53	26.42	7.55	1.89	16.98	35.85	11.32	100
Miscellaneous-Others	215	21.86	5.12	4.19	18.6	36.74	13.49	100
US-JP weighted		24.32	4.94	5.09	15.56	36.49	13.59	100
JP weighted		23.64	4.8	4.98	15.74	36.95	13.9	100

Consulting or contract R&D firms（コンサルティング企業・R&D請負企業）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
		I did not use	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1803	526	485	519	108	18	199
Agriculture, Food, Textiles	60	25	12	11	10	1	0	1
Coating	80	36	15	12	11	1	0	5
Gas	45	20	8	7	7	0	0	3
Organic Compounds	120	55	20	14	11	7	0	13
Resins	125	55	13	24	20	3	1	9
Miscellaneous-chemical	208	100	39	24	28	1	0	16
Communications	160	89	12	19	28	6	2	4
Computer Hardware	59	30	7	7	5	1	0	9
Computer Software	123	72	14	12	19	5	0	1
Computer Peripherals	76	41	13	11	9	1	0	1
Information Storage	120	67	12	17	18	4	0	2
Drugs	127	62	26	9	19	3	0	8
Surgery & Medical Instruments	85	44	12	6	14	6	0	3
Biotechnology	87	29	18	13	13	4	1	9
Miscellaneous-Drug&Med	45	26	5	1	12	0	0	1
Electrical Devices	91	53	11	11	15	1	0	0
Electrical Lighting	96	55	11	11	15	2	0	2
Measuring & Testing	111	62	13	12	17	4	0	3
Nuclears & X-rays	72	38	14	6	10	3	1	0
Power Systems	172	78	30	25	20	9	1	9
Semiconductor Devices	129	66	19	15	20	5	1	3
Miscellaneous-Elec.	120	71	14	17	12	2	0	4
Materials Processing & Handling	103	46	7	19	17	2	0	12
Metal Working	137	61	29	24	19	1	0	3
Motors, Engines & Parts	145	69	15	22	25	7	3	4
Optics	100	48	15	14	17	0	1	5
Transportation	73	35	10	12	9	0	0	7
Miscellaneous Mechanical	124	65	19	15	15	2	1	7
Agriculture, Husbandry, Food	87	36	16	14	13	2	0	6
Apparel & Textile	77	32	10	16	5	1	0	13
Earth Working & Wells	20	9	2	1	1	1	0	6
Furniture, House Fixtures	51	21	9	5	7	2	0	7
Heating	84	39	9	18	8	7	1	2
Pipes & Joints	66	26	12	9	7	3	2	7
Receptacles	55	29	6	5	11	2	0	2
Miscellaneous-Others	225	113	29	27	32	9	3	12

	N	I did not use	1	2	3	4	5	Total
All	3459	52.12	15.21	14.02	15	3.12	0.52	100
Agriculture, Food, Textiles	59	42.37	20.34	18.64	16.95	1.69	0	100
Coating	75	48	20	16	14.67	1.33	0	100
Gas	42	47.62	19.05	16.67	16.67	0	0	100
Organic Compounds	107	51.4	18.69	13.08	10.28	6.54	0	100
Resins	116	47.41	11.21	20.69	17.24	2.59	0.86	100
Miscellaneous-chemical	192	52.08	20.31	12.5	14.58	0.52	0	100
Communications	156	57.05	7.69	12.18	17.95	3.85	1.28	100
Computer Hardware	50	60	14	14	10	2	0	100
Computer Software	122	59.02	11.48	9.84	15.57	4.1	0	100
Computer Peripherals	75	54.67	17.33	14.67	12	1.33	0	100
Information Storage	118	56.78	10.17	14.41	15.25	3.39	0	100
Drugs	119	52.1	21.85	7.56	15.97	2.52	0	100
Surgery & Medical Instruments	82	53.66	14.63	7.32	17.07	7.32	0	100
Biotechnology	78	37.18	23.08	16.67	16.67	5.13	1.28	100
Miscellaneous-Drug&Med	44	59.09	11.36	2.27	27.27	0	0	100
Electrical Devices	91	58.24	12.09	12.09	16.48	1.1	0	100
Electrical Lighting	94	58.51	11.7	11.7	15.96	2.13	0	100
Measuring & Testing	108	57.41	12.04	11.11	15.74	3.7	0	100
Nuclears & X-rays	72	52.78	19.44	8.33	13.89	4.17	1.39	100
Power Systems	163	47.85	18.4	15.34	12.27	5.52	0.61	100
Semiconductor Devices	126	52.38	15.08	11.9	15.87	3.97	0.79	100
Miscellaneous-Elec.	116	61.21	12.07	14.66	10.34	1.72	0	100
Materials Processing & Handling	91	50.55	7.69	20.88	18.68	2.2	0	100
Metal Working	134	45.52	21.64	17.91	14.18	0.75	0	100
Motors, Engines & Parts	141	48.94	10.64	15.6	17.73	4.96	2.13	100
Optics	95	50.53	15.79	14.74	17.89	0	1.05	100
Transportation	66	53.03	15.15	18.18	13.64	0	0	100
Miscellaneous Mechanical	117	55.56	16.24	12.82	12.82	1.71	0.85	100
Agriculture, Husbandry, Food	81	44.44	19.75	17.28	16.05	2.47	0	100
Apparel & Textile	64	50	15.63	25	7.81	1.56	0	100
Earth Working & Wells	14	64.29	14.29	7.14	7.14	7.14	0	100
Furniture, House Fixtures	44	47.73	20.45	11.36	15.91	4.55	0	100
Heating	82	47.56	10.98	21.95	9.76	8.54	1.22	100
Pipes & Joints	59	44.07	20.34	15.25	11.86	5.08	3.39	100
Receptacles	53	54.72	11.32	9.43	20.75	3.77	0	100
Miscellaneous-Others	213	53.05	13.62	12.68	15.02	4.23	1.41	100
US-JP weighted		52.99	14.77	13.3	15.36	3.07	0.51	100
JP weighted		52.96	14.56	13.73	15.2	2.97	0.59	100

US (6/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

competitors

		all	I did not use	1	2	3	4	5	Missing
	A7_K competitors								
NBER	All	1,919	41	1154	195	134	135	85	175
11	Agriculture, Food, Textiles	8	0	4	1	0	0	2	1
12	Coating	34	0	16	4	5	4	1	4
13	Gas	11	0	7	1	2	0	0	1
14	Organic Compounds	61	0	44	8	4	1	2	2
15	Resins	84	0	51	11	7	9	2	4
19	Miscellaneous-chemical	233	5	134	21	22	20	13	18
21	Communications	149	3	103	11	7	9	3	13
22	Computer Hardware	42	0	29	4	0	3	1	5
77	Computer Software	93	0	65	8	9	5	0	6
23	Computer Peripherals	33	0	16	9	1	3	1	3
24	Information Storage	42	1	22	6	3	4	3	3
31	Drugs	101	6	56	6	7	7	7	12
32	Surgery & Medical Instruments	123	5	64	10	9	8	10	17
33	Biotechnology	41	1	23	5	4	3	0	5
39	Miscellaneous-Drug&Med	29	0	14	5	4	3	1	2
41	Electrical Devices	45	2	26	3	3	4	3	4
42	Electrical Lighting	33	1	21	2	3	2	1	3
43	Measuring & Testing	62	1	36	6	1	5	4	9
44	Nuclears & X-rays	39	1	24	2	3	2	2	5
45	Power Systems	89	1	60	9	2	5	6	6
46	Semiconductor Devices	55	2	31	6	5	2	3	6
49	Miscellaneous-Elec.	32	0	21	2	2	1	2	4
51	Materials Processing & Handlin	56	4	33	8	3	1	1	6
52	Metal Working	49	1	29	3	3	5	3	5
53	Motors, Engines & Parts	56	0	34	7	6	1	3	5
54	Optics	43	0	25	4	1	6	3	4
55	Transportation	33	0	23	2	0	3	1	4
59	Miscellaneous Mechanical	42	1	27	4	3	3	1	3
61	Agriculture, Husbandry, Food	14	1	7	0	2	2	1	1
63	Apparel & Textile	9	1	5	0	0	2	1	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	0	5	1	1	1	1	0
66	Heating	8	0	4	1	1	0	0	2
67	Pipes & Joints	13	0	8	4	0	1	0	0
68	Receptacles	20	1	11	2	1	2	2	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1744	66.17	11.18	7.68	7.74	4.87	2.35	100
11	Agriculture, Food, Textiles	7	57.14	14.29	0.00	0.00	28.57	0.00	100
12	Coating	30	53.33	13.33	16.67	13.33	3.33	0.00	100
13	Gas	10	70.00	10.00	20.00	0.00	0.00	0.00	100
14	Organic Compounds	59	74.58	13.56	6.78	1.69	3.39	0.00	100
15	Resins	80	63.75	13.75	8.75	11.25	2.50	0.00	100
19	Miscellaneous-chemical	215	62.33	9.77	10.23	9.30	6.05	2.33	100
21	Communications	136	75.74	8.09	5.15	6.62	2.21	2.21	100
22	Computer Hardware	37	78.38	10.81	0.00	8.11	2.70	0.00	100
77	Computer Software	87	74.71	9.20	10.34	5.75	0.00	0.00	100
23	Computer Peripherals	30	53.33	30.00	3.33	10.00	3.33	0.00	100
24	Information Storage	39	56.41	15.38	7.69	10.26	7.69	2.56	100
31	Drugs	89	62.92	6.74	7.87	7.87	7.87	6.74	100
32	Surgery & Medical Instruments	106	60.38	9.43	8.49	7.55	9.43	4.72	100
33	Biotechnology	36	63.89	13.89	11.11	8.33	0.00	2.78	100
39	Miscellaneous-Drug&Med	27	51.85	18.52	14.81	11.11	3.70	0.00	100
41	Electrical Devices	41	63.41	7.32	7.32	9.76	7.32	4.88	100
42	Electrical Lighting	30	70.00	6.67	10.00	6.67	3.33	3.33	100
43	Measuring & Testing	53	67.92	11.32	1.89	9.43	7.55	1.89	100
44	Nuclears & X-rays	34	70.59	5.88	8.82	5.88	5.88	2.94	100
45	Power Systems	83	72.29	10.84	2.41	6.02	7.23	1.20	100
46	Semiconductor Devices	49	63.27	12.24	10.20	4.08	6.12	4.08	100
49	Miscellaneous-Elec.	28	75.00	7.14	7.14	3.57	7.14	0.00	100
51	Materials Processing & Handlin	50	66.00	16.00	6.00	2.00	2.00	8.00	100
52	Metal Working	44	65.91	6.82	6.82	11.36	6.82	2.27	100
53	Motors, Engines & Parts	51	66.67	13.73	11.76	1.96	5.88	0.00	100
54	Optics	39	64.10	10.26	2.56	15.38	7.69	0.00	100
55	Transportation	29	79.31	6.90	0.00	10.34	3.45	0.00	100
59	Miscellaneous Mechanical	39	69.23	10.26	7.69	7.69	2.56	2.56	100
61	Agriculture, Husbandry, Food	13	53.85	0.00	15.38	15.38	7.69	7.69	100
63	Apparel & Textile	9	55.56	0.00	0.00	22.22	11.11	11.11	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	55.56	11.11	11.11	11.11	11.11	0.00	100
66	Heating	6	66.67	16.67	16.67	0.00	0.00	0.00	100
67	Pipes & Joints	13	61.54	30.77	0.00	7.69	0.00	0.00	100
68	Receptacles	19	57.89	10.53	5.26	10.53	10.53	5.26	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**66.20**	**11.15**	**7.46**	**7.75**	**4.97**	**2.45**	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important) (研究の着想に有用であった知識源の重要度)

others

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	3212	142	58	133	26	44	43
Agriculture, Food, Textiles	60	52	2	4	2	0	0	0
Coating	80	73	2	1	2	1	0	1
Gas	45	43	0	0	0	0	2	0
Organic Compounds	120	108	5	1	1	0	0	5
Resins	125	102	6	2	9	1	1	4
Miscellaneous-chemical	208	182	8	1	6	3	4	4
Communications	160	147	2	4	5	1	1	0
Computer Hardware	59	52	2	1	2	2	0	0
Computer Software	123	111	2	1	3	2	3	1
Computer Peripherals	76	66	3	1	5	0	0	1
Information Storage	120	107	2	5	6	0	0	0
Drugs	127	111	7	1	5	0	2	1
Surgery & Medical Instruments	85	74	4	1	2	1	2	1
Biotechnology	87	75	4	0	3	0	3	2
Miscellaneous-Drug&Med	45	40	2	0	2	0	1	0
Electrical Devices	91	80	2	1	6	0	2	0
Electrical Lighting	96	90	2	0	4	0	0	0
Measuring & Testing	111	97	5	2	3	0	3	1
Nuclears & X-rays	72	67	3	1	1	0	0	0
Power Systems	172	147	13	2	6	2	2	0
Semiconductor Devices	129	112	7	3	6	0	0	1
Miscellaneous-Elec.	120	111	3	0	4	0	2	0
Materials Processing & Handling	103	94	3	0	1	0	0	5
Metal Working	137	116	9	4	4	2	2	0
Motors, Engines & Parts	145	122	8	6	5	3	0	1
Optics	100	83	3	2	3	4	2	3
Transportation	73	63	5	2	1	0	0	2
Miscellaneous Mechanical	124	110	6	1	2	1	3	1
Agriculture, Husbandry, Food	87	74	6	1	4	0	1	1
Apparel & Textile	77	69	3	2	1	0	2	0
Earth Working & Wells	20	16	0	1	1	1	0	1
Furniture, House Fixtures	51	46	2	0	2	0	0	1
Heating	84	72	3	2	6	0	1	0
Pipes & Joints	66	55	0	2	5	0	2	2
Receptacles	55	49	2	0	1	1	0	2
Miscellaneous-Others	225	196	6	3	14	1	3	2

%	N	I did not use	1	2	3	4	5	Total
All	3615	88.85	3.93	1.6	3.68	0.72	1.22	100
Agriculture, Food, Textiles	60	86.67	3.33	6.67	3.33	0	0	100
Coating	79	92.41	2.53	1.27	2.53	1.27	0	100
Gas	45	95.56	0	0	0	0	4.44	100
Organic Compounds	115	93.91	4.35	0.87	0.87	0	0	100
Resins	121	84.3	4.96	1.65	7.44	0.83	0.83	100
Miscellaneous-chemical	204	89.22	3.92	0.49	2.94	1.47	1.96	100
Communications	160	91.88	1.25	2.5	3.13	0.63	0.63	100
Computer Hardware	59	88.14	3.39	1.69	3.39	3.39	0	100
Computer Software	122	90.98	1.64	0.82	2.46	1.64	2.46	100
Computer Peripherals	75	88	4	1.33	6.67	0	0	100
Information Storage	120	89.17	1.67	4.17	5	0	0	100
Drugs	126	88.1	5.56	0.79	3.97	0	1.59	100
Surgery & Medical Instruments	84	88.1	4.76	1.19	2.38	1.19	2.38	100
Biotechnology	85	88.24	4.71	0	3.53	0	3.53	100
Miscellaneous-Drug&Med	45	88.89	4.44	0	4.44	0	2.22	100
Electrical Devices	91	87.91	2.2	1.1	6.59	0	2.2	100
Electrical Lighting	96	93.75	2.08	0	4.17	0	0	100
Measuring & Testing	110	88.18	4.55	1.82	2.73	0	2.73	100
Nuclears & X-rays	72	93.06	4.17	1.39	1.39	0	0	100
Power Systems	172	85.47	7.56	1.16	3.49	1.16	1.16	100
Semiconductor Devices	128	87.5	5.47	2.34	4.69	0	0	100
Miscellaneous-Elec.	120	92.5	2.5	0	3.33	0	1.67	100
Materials Processing & Handling	98	95.92	3.06	0	1.02	0	0	100
Metal Working	137	84.67	6.57	2.92	2.92	1.46	1.46	100
Motors, Engines & Parts	144	84.72	5.56	4.17	3.47	2.08	0	100
Optics	97	85.57	3.09	2.06	3.09	4.12	2.06	100
Transportation	71	88.73	7.04	2.82	1.41	0	0	100
Miscellaneous Mechanical	123	89.43	4.88	0.81	1.63	0.81	2.44	100
Agriculture, Husbandry, Food	86	86.05	6.98	1.16	4.65	0	1.16	100
Apparel & Textile	77	89.61	3.9	2.6	1.3	0	2.6	100
Earth Working & Wells	19	84.21	0	5.26	5.26	5.26	0	100
Furniture, House Fixtures	50	92	4	0	4	0	0	100
Heating	84	85.71	3.57	2.38	7.14	0	1.19	100
Pipes & Joints	64	85.94	0	3.13	7.81	0	3.13	100
Receptacles	53	92.45	3.77	0	1.89	1.89	0	100
Miscellaneous-Others	223	87.89	2.69	1.35	6.28	0.45	1.35	100
US-JP weighted		88.98	3.82	1.48	3.69	0.8	1.22	100
JP weighted		88.97	3.81	1.6	3.76	0.78	1.09	100

Japan

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important)（研究の着想に有用であった知識源の重要度）

4 or 5

%	Scientific and Technical Literature	Patent Literature	Trade Fair or Exhibition	technical conferences and workshops	Standard documents, such as those from ISO (standards, contributions)	Your firm excluding co-inventors	University and Education	Non-University Public Research Organization	Customers or Product users	Suppliers	Competitors (e.g. knowledge from its products)	Consulting or contract R&D firms
All	56.72	63.78	21.91	24.08	8.73	61.77	14.86	11.23	53.92	28.63	51.11	3.64
Agriculture, Food, Textiles	69.49	76.27	15.52	16.95	6.90	69.49	13.56	18.64	55.00	24.14	57.63	1.69
Coating	59.74	74.03	27.40	20.00	4.00	69.74	13.33	12.00	62.16	40.00	48.00	1.33
Gas	60.47	61.90	19.05	28.57	7.14	57.14	16.67	16.67	59.09	33.33	59.52	0.00
Organic Compounds	76.11	68.47	7.41	20.18	2.78	56.07	27.93	14.02	42.99	22.64	39.09	6.54
Resins	66.95	77.59	14.78	13.91	6.90	67.83	15.52	7.83	62.18	34.48	51.26	3.45
Miscellaneous-chemical	67.17	69.15	19.27	19.49	3.09	59.79	14.87	11.79	57.65	29.38	45.64	0.52
Communications	63.29	61.54	18.71	34.18	26.11	61.15	16.56	16.56	41.77	19.11	49.04	5.13
Computer Hardware	67.27	66.67	20.75	21.57	9.80	61.54	14.00	12.00	36.00	11.76	51.92	2.00
Computer Software	45.90	45.90	25.62	29.75	21.49	61.98	15.57	13.22	55.74	19.67	47.93	4.10
Computer Peripherals	56.00	60.00	21.62	24.00	5.33	72.00	8.00	4.00	43.24	22.67	48.00	1.33
Information Storage	51.26	63.87	17.95	31.62	16.81	64.10	8.47	6.78	44.07	23.73	57.63	3.39
Drugs	90.32	70.97	9.92	28.10	5.88	65.29	28.10	12.61	36.97	14.53	47.06	2.52
Surgery & Medical Instruments	51.22	59.04	20.99	19.51	12.35	51.81	13.58	8.54	61.45	30.95	40.24	7.32
Biotechnology	87.06	61.45	11.54	28.21	1.32	59.26	43.75	25.64	30.77	16.46	50.63	6.41
Miscellaneous-Drug&Med	43.18	63.64	29.55	13.95	4.55	45.45	15.56	9.09	47.73	29.55	40.91	0.00
Electrical Devices	37.36	69.23	19.78	16.48	13.19	63.74	2.20	1.10	58.24	31.87	53.85	1.10
Electrical Lighting	47.87	64.21	22.34	34.41	5.38	64.89	14.74	8.51	52.63	30.11	50.53	2.13
Measuring & Testing	62.04	58.72	20.18	24.07	6.42	52.73	19.27	14.68	51.38	21.10	44.95	3.70
Nuclears & X-rays	58.33	54.93	12.68	24.29	8.57	60.56	14.08	11.27	49.30	11.27	52.11	5.56
Power Systems	65.87	71.43	20.73	26.06	5.52	63.86	21.21	16.56	51.81	33.33	48.17	6.13
Semiconductor Devices	65.60	53.13	13.39	37.80	3.94	60.80	14.96	11.81	46.88	29.92	41.73	4.76
Miscellaneous-Elec.	47.46	52.99	25.64	25.00	18.10	60.68	12.93	12.07	57.76	34.48	55.08	1.72
Materials Processing & Handling	33.70	59.57	44.68	29.35	5.43	60.64	10.87	8.70	67.02	33.33	61.29	2.20
Metal Working	56.20	56.30	17.91	28.24	5.93	60.74	18.38	13.24	57.04	29.85	51.85	0.75
Motors, Engines & Parts	53.52	67.83	24.65	22.86	4.26	64.08	10.64	8.51	46.10	38.03	61.97	7.09
Optics	46.88	63.92	17.53	27.08	5.21	61.86	9.47	10.53	45.36	30.53	56.25	1.05
Transportation	30.30	55.07	22.39	13.64	10.77	71.64	5.97	1.52	60.29	38.81	69.57	0.00
Miscellaneous Mechanical	44.92	62.18	29.66	14.41	10.17	57.98	7.63	6.78	61.16	31.09	50.83	2.56
Agriculture, Husbandry, Food	58.33	67.06	21.43	15.85	9.64	60.98	21.69	16.67	64.71	35.80	46.99	2.47
Apparel & Textile	23.53	57.75	36.76	20.63	7.69	68.57	6.15	7.69	68.06	28.13	56.06	1.56
Earth Working & Wells	57.14	71.43	35.71	35.71	14.29	56.25	13.33	0.00	66.67	28.57	73.33	7.14
Furniture, House Fixtures	33.33	64.58	40.43	20.45	9.52	72.73	4.65	9.09	67.39	40.00	62.22	4.55
Heating	62.96	71.08	18.29	20.73	10.98	76.83	10.98	7.32	46.43	28.40	58.54	9.76
Pipes & Joints	40.68	64.41	37.29	18.64	11.86	53.23	11.86	13.56	73.02	33.90	53.23	8.47
Receptacles	38.46	69.81	35.85	26.42	3.77	56.60	1.89	3.77	69.23	41.51	47.17	3.77
Miscellaneous-Others	55.50	65.30	28.97	22.17	6.67	56.02	13.49	12.09	65.74	32.09	50.23	5.63
US-JP weighted	58.13	63.54	21.19	24.73	9.47	61.47	15.12	11.27	52.77	27.59	50.08	3.58
JP weighted	56.41	63.49	21.75	25.31	9.65	62.04	14.51	11.25	53.49	28.52	50.85	3.56

US (7/7)

Question 4-12 Excluding co-inventors, how important were the following sources of knowledge for suggesting the research that led to the patented invention? (1 = not important, 5 = very important) (研究の着想に有用であった知識源の重要度)

4 or 5

	A7 (4 or 5) %	a Scientific and Technical Literature	b patent literature	c Fair or exhibition	d Technical conferences and workshops	e Standard documents, such as from ISO (standards, contributions)	F Your firm, excluding co-inventors	G Universities	H Governments research organization	I Customers or product users	J Suppliers	K competitors
NBER	All	38.74	28.45	2.43	10.42	4.84	37.98	6.07	2.48	26.86	7.71	7.22
11	Agriculture, Food, Textiles	42.86	71.43	0.00	0.00	0.00	42.86	0.00	0.00	14.29	0.00	28.57
12	Coating	45.16	35.48	6.67	3.33	6.90	50.00	0.00	0.00	43.33	9.68	3.33
13	Gas	36.36	10.00	0.00	10.00	10.00	54.55	0.00	10.00	30.00	0.00	0.00
14	Organic Compounds	56.67	38.33	0.00	5.08	1.69	33.33	8.47	1.69	13.79	3.39	3.39
15	Resins	45.68	50.62	2.53	12.35	1.25	42.50	3.80	1.25	23.75	8.75	2.50
19	Miscellaneous-chemical	39.35	36.87	1.90	9.72	3.26	40.55	6.48	3.24	34.10	12.56	8.37
21	Communications	32.85	21.32	0.00	11.03	11.85	30.88	7.35	2.94	24.82	7.41	4.41
22	Computer Hardware	34.15	12.82	7.69	15.79	7.89	34.15	7.89	2.63	23.08	0.00	2.70
77	Computer Software	30.68	9.20	0.00	10.34	6.90	46.59	4.65	1.15	37.93	3.45	0.00
23	Computer Peripherals	30.00	26.67	0.00	10.00	0.00	44.83	0.00	0.00	13.33	10.34	3.33
24	Information Storage	47.37	18.92	5.56	25.71	13.51	29.73	13.51	0.00	5.56	5.56	10.26
31	Drugs	73.91	52.17	2.22	20.00	2.27	40.23	14.77	3.41	12.50	3.41	14.61
32	Surgery & Medical Instruments	46.79	36.11	2.88	11.21	2.86	37.04	9.52	2.80	29.36	5.66	14.15
33	Biotechnology	67.57	19.44	0.00	2.78	2.78	37.14	13.89	2.78	19.44	2.78	2.78
39	Miscellaneous-Drug&Med	46.15	33.33	3.85	18.52	7.41	34.62	3.70	0.00	14.81	3.70	3.70
41	Electrical Devices	34.15	24.39	2.50	12.20	7.32	28.57	2.44	0.00	41.46	14.63	12.20
42	Electrical Lighting	50.00	26.67	7.41	6.90	3.45	41.38	10.34	3.45	17.24	10.34	6.67
43	Measuring & Testing	42.59	22.64	1.89	15.09	5.77	37.04	5.77	1.92	22.64	7.69	9.43
44	Nuclears & X-rays	36.36	17.65	11.76	8.82	0.00	35.29	5.88	2.94	23.53	5.88	8.82
45	Power Systems	34.52	20.73	3.70	7.14	4.82	39.76	2.44	9.52	22.89	6.02	8.43
46	Semiconductor Devices	46.00	24.00	2.04	20.00	2.00	22.00	10.20	2.04	16.33	8.16	10.20
49	Miscellaneous-Elec.	31.03	17.86	0.00	14.29	10.71	58.62	3.57	3.57	25.00	6.90	7.14
51	Materials Processing & Handling	18.87	23.53	1.96	3.92	1.96	30.19	4.00	0.00	34.62	8.00	10.00
52	Metal Working	28.26	34.09	2.33	11.36	4.65	37.78	2.33	0.00	22.73	11.63	9.09
53	Motors, Engines & Parts	23.53	5.88	1.96	5.88	0.00	29.41	5.88	0.00	27.45	5.88	5.88
54	Optics	38.46	23.08	5.13	15.38	2.56	41.03	10.26	2.56	30.77	10.26	7.69
55	Transportation	24.14	20.69	0.00	6.67	10.34	34.48	7.14	0.00	31.03	6.90	3.45
59	Miscellaneous Mechanical	12.82	30.77	2.56	10.26	7.69	41.03	0.00	2.56	28.21	5.13	5.13
61	Agriculture, Husbandry, Food	25.00	38.46	0.00	8.33	0.00	50.00	9.09	0.00	50.00	8.33	15.38
63	Apparel & Textile	0.00	25.00	0.00	0.00	0.00	37.50	0.00	0.00	62.50	0.00	22.22
64	Earth Working & Wells	50.00	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	0.00	11.11	11.11	0.00	0.00	44.44	0.00	0.00	44.44	0.00	11.11
66	Heating	50.00	50.00	16.67	0.00	16.67	50.00	16.67	16.67	16.67	16.67	0.00
67	Pipes & Joints	30.77	23.08	0.00	7.69	7.69	53.85	0.00	0.00	30.77	15.38	0.00
68	Receptacles	10.53	21.05	5.56	0.00	0.00	15.79	0.00	5.26	26.32	21.05	15.79
69	Miscellaneous-Others	33.04	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted	**39.12**	**28.37**	**2.40**	**11.08**	**5.12**	**37.89**	**6.48**	**2.28**	**26.01**	**7.52**	**7.42**

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)
（研究を実施するために使用した知識の重要度）

Scientific and Technical Literature（科学技術文献 ）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	794	147	270	543	1190	570	144
Agriculture, Food, Textiles	60	6	3	6	10	20	13	2
Coating	80	11	1	10	16	24	15	3
Gas	45	9	3	0	7	17	6	3
Organic Compounds	120	9	3	4	12	51	33	8
Resins	125	19	3	7	15	54	19	8
Miscellaneous-chemical	208	30	6	17	30	87	30	8
Communications	160	38	3	7	24	55	32	1
Computer Hardware	59	16	0	5	7	18	7	6
Computer Software	123	39	6	9	16	31	20	2
Computer Peripherals	76	16	4	7	15	23	9	2
Information Storage	120	31	2	11	22	36	16	2
Drugs	127	6	3	3	10	43	59	3
Surgery & Medical Instruments	85	24	4	4	16	22	13	2
Biotechnology	87	5	3	2	5	27	43	2
Miscellaneous-Drug&Med	45	11	2	3	11	10	7	1
Electrical Devices	91	29	5	11	18	16	12	0
Electrical Lighting	96	21	4	6	14	34	15	2
Measuring & Testing	111	27	2	6	12	32	28	4
Nuclears & X-rays	72	13	5	3	14	22	14	1
Power Systems	172	31	6	15	21	80	13	6
Semiconductor Devices	129	22	5	7	18	54	22	1
Miscellaneous-Elec.	120	36	5	13	22	34	7	3
Materials Processing & Handling	103	32	3	7	22	21	7	11
Metal Working	137	30	7	9	14	53	22	2
Motors, Engines & Parts	145	34	5	12	29	43	18	4
Optics	100	24	2	9	11	39	10	5
Transportation	73	26	7	6	13	14	2	5
Miscellaneous Mechanical	124	34	9	8	20	40	7	6
Agriculture, Husbandry, Food	87	15	2	5	13	36	12	4
Apparel & Textile	77	24	6	11	13	10	2	11
Earth Working & Wells	20	5	2	1	2	5	1	4
Furniture, House Fixtures	51	15	3	6	7	10	3	7
Heating	84	14	6	13	10	29	10	2
Pipes & Joints	66	16	4	6	9	19	5	7
Receptacles	55	22	4	2	10	13	2	2
Miscellaneous-Others	225	54	9	19	35	68	36	4

%	N	I did not use	1	2	3	4	5	Total
All	3514	22.6	4.18	7.68	15.45	33.86	16.22	100
Agriculture, Food, Textiles	58	10.34	5.17	10.34	17.24	34.48	22.41	100
Coating	77	14.29	1.3	12.99	20.78	31.17	19.48	100
Gas	42	21.43	7.14	0	16.67	40.48	14.29	100
Organic Compounds	112	8.04	2.68	3.57	10.71	45.54	29.46	100
Resins	117	16.24	2.56	5.98	12.82	46.15	16.24	100
Miscellaneous-chemical	200	15	3	8.5	15	43.5	15	100
Communications	159	23.9	1.89	4.4	15.09	34.59	20.13	100
Computer Hardware	53	30.19	0	9.43	13.21	33.96	13.21	100
Computer Software	121	32.23	4.96	7.44	13.22	25.62	16.53	100
Computer Peripherals	74	21.62	5.41	9.46	20.27	31.08	12.16	100
Information Storage	118	26.27	1.69	9.32	18.64	30.51	13.56	100
Drugs	124	4.84	2.42	2.42	8.06	34.68	47.58	100
Surgery & Medical Instruments	83	28.92	4.82	4.82	19.28	26.51	15.66	100
Biotechnology	85	5.88	3.53	2.35	5.88	31.76	50.59	100
Miscellaneous-Drug&Med	44	25	4.55	6.82	25	22.73	15.91	100
Electrical Devices	91	31.87	5.49	12.09	19.78	17.58	13.19	100
Electrical Lighting	94	22.34	4.26	6.38	14.89	36.17	15.96	100
Measuring & Testing	107	25.23	1.87	5.61	11.21	29.91	26.17	100
Nuclears & X-rays	71	18.31	7.04	4.23	19.72	30.99	19.72	100
Power Systems	166	18.67	3.61	9.04	12.65	48.19	7.83	100
Semiconductor Devices	128	17.19	3.91	5.47	14.06	42.19	17.19	100
Miscellaneous-Elec.	117	30.77	4.27	11.11	18.8	29.06	5.98	100
Materials Processing & Handling	92	34.78	3.26	7.61	23.91	22.83	7.61	100
Metal Working	135	22.22	5.19	6.67	10.37	39.26	16.3	100
Motors, Engines & Parts	141	24.11	3.55	8.51	20.57	30.5	12.77	100
Optics	95	25.26	2.11	9.47	11.58	41.05	10.53	100
Transportation	68	38.24	10.29	8.82	19.12	20.59	2.94	100
Miscellaneous Mechanical	118	28.81	7.63	6.78	16.95	33.9	5.93	100
Agriculture, Husbandry, Food	83	18.07	2.41	6.02	15.66	43.37	14.46	100
Apparel & Textile	66	36.36	9.09	16.67	19.7	15.15	3.03	100
Earth Working & Wells	16	31.25	12.5	6.25	12.5	31.25	6.25	100
Furniture, House Fixtures	44	34.09	6.82	13.64	15.91	22.73	6.82	100
Heating	82	17.07	7.32	15.85	12.2	35.37	12.2	100
Pipes & Joints	59	27.12	6.78	10.17	15.25	32.2	8.47	100
Receptacles	53	41.51	7.55	3.77	18.87	24.53	3.77	100
Miscellaneous-Others	221	24.43	4.07	8.6	15.84	30.77	16.29	100
US-JP weighted		22.3	3.79	7.28	15.34	34.18	17.11	100
JP weighted		23.1	3.89	7.63	15.69	33.93	15.76	100

Patent Literature（特許文献）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
		I did not use	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	626	112	234	503	1322	721	140
Agriculture, Food, Textiles	60	3	1	4	6	22	23	1
Coating	80	9	1	4	10	33	20	3
Gas	45	8	2	0	9	15	9	2
Organic Compounds	120	11	4	2	14	48	32	9
Resins	125	10	2	5	14	48	37	9
Miscellaneous-chemical	208	24	6	13	35	77	44	9
Communications	160	33	2	11	23	58	31	2
Computer Hardware	59	16	1	3	3	23	9	4
Computer Software	123	44	6	13	14	32	12	2
Computer Peripherals	76	14	3	6	9	27	15	2
Information Storage	120	24	2	13	14	44	21	2
Drugs	127	6	2	7	17	47	43	5
Surgery & Medical Instruments	85	21	2	3	11	33	13	2
Biotechnology	87	9	4	4	13	30	22	5
Miscellaneous-Drug&Med	45	8	2	3	5	15	11	1
Electrical Devices	91	18	3	7	11	32	20	0
Electrical Lighting	96	17	2	7	13	47	9	1
Measuring & Testing	111	28	4	5	18	33	19	4
Nuclears & X-rays	72	19	6	3	12	22	9	1
Power Systems	172	22	6	15	26	67	28	8
Semiconductor Devices	129	23	5	10	23	45	23	0
Miscellaneous-Elec.	120	24	3	11	22	35	23	2
Materials Processing & Handling	103	19	1	4	18	36	16	9
Metal Working	137	27	7	15	16	48	23	1
Motors, Engines & Parts	145	22	5	7	16	57	34	4
Optics	100	22	1	9	14	36	13	5
Transportation	73	13	5	5	12	17	15	6
Miscellaneous Mechanical	124	24	6	6	18	37	27	6
Agriculture, Husbandry, Food	87	12	2	6	17	37	9	4
Apparel & Textile	77	14	1	5	11	32	6	8
Earth Working & Wells	20	2	2	1	0	7	3	5
Furniture, House Fixtures	51	7	1	3	7	19	10	4
Heating	84	17	3	5	5	32	22	0
Pipes & Joints	66	9	2	2	11	26	10	6
Receptacles	55	13	1	1	6	25	7	2
Miscellaneous-Others	225	34	6	16	30	80	53	6

	N	I did not use	1	2	3	4	5	Total
All	3518	17.79	3.18	6.65	14.3	37.58	20.49	100
Agriculture, Food, Textiles	59	5.08	1.69	6.78	10.17	37.29	38.98	100
Coating	77	11.69	1.3	5.19	12.99	42.86	25.97	100
Gas	43	18.6	4.65	0	20.93	34.88	20.93	100
Organic Compounds	111	9.91	3.6	1.8	12.61	43.24	28.83	100
Resins	116	8.62	1.72	4.31	12.07	41.38	31.9	100
Miscellaneous-chemical	199	12.06	3.02	6.53	17.59	38.69	22.11	100
Communications	158	20.89	1.27	6.96	14.56	36.71	19.62	100
Computer Hardware	55	29.09	1.82	5.45	5.45	41.82	16.36	100
Computer Software	121	36.36	4.96	10.74	11.57	26.45	9.92	100
Computer Peripherals	74	18.92	4.05	8.11	12.16	36.49	20.27	100
Information Storage	118	20.34	1.69	11.02	11.86	37.29	17.8	100
Drugs	122	4.92	1.64	5.74	13.93	38.52	35.25	100
Surgery & Medical Instruments	83	25.3	2.41	3.61	13.25	39.76	15.66	100
Biotechnology	82	10.98	4.88	4.88	15.85	36.59	26.83	100
Miscellaneous-Drug&Med	44	18.18	4.55	6.82	11.36	34.09	25	100
Electrical Devices	91	19.78	3.3	7.69	12.09	35.16	21.98	100
Electrical Lighting	95	17.89	2.11	7.37	13.68	49.47	9.47	100
Measuring & Testing	107	26.17	3.74	4.67	16.82	30.84	17.76	100
Nuclears & X-rays	71	26.76	8.45	4.23	16.9	30.99	12.68	100
Power Systems	164	13.41	3.66	9.15	15.85	40.85	17.07	100
Semiconductor Devices	129	17.83	3.88	7.75	17.83	34.88	17.83	100
Miscellaneous-Elec.	118	20.34	2.54	9.32	18.64	29.66	19.49	100
Materials Processing & Handling	94	20.21	1.06	4.26	19.15	38.3	17.02	100
Metal Working	136	19.85	5.15	11.03	11.76	35.29	16.91	100
Motors, Engines & Parts	141	15.6	3.55	4.96	11.35	40.43	24.11	100
Optics	95	23.16	1.05	9.47	14.74	37.89	13.68	100
Transportation	67	19.4	7.46	7.46	17.91	25.37	22.39	100
Miscellaneous Mechanical	118	20.34	5.08	5.08	15.25	31.36	22.88	100
Agriculture, Husbandry, Food	83	14.46	2.41	7.23	20.48	44.58	10.84	100
Apparel & Textile	69	20.29	1.45	7.25	15.94	46.38	8.7	100
Earth Working & Wells	15	13.33	13.33	6.67	0	46.67	20	100
Furniture, House Fixtures	47	14.89	2.13	6.38	14.89	40.43	21.28	100
Heating	84	20.24	3.57	5.95	5.95	38.1	26.19	100
Pipes & Joints	60	15	3.33	3.33	18.33	43.33	16.67	100
Receptacles	53	24.53	1.89	1.89	11.32	47.17	13.21	100
Miscellaneous-Others	219	15.53	2.74	7.31	13.7	36.53	24.2	100
US-JP weighted		18.07	3.04	6.8	14.34	37.13	20.62	100
JP weighted		18.15	3.06	7.04	14.47	36.88	20.4	100

US (1/7)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

A8_a Scientific and Technical Literature

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	459	138	224	348	281	313	156
11	Agriculture, Food, Textiles	8	0	1	1	2	2	1	1
12	Coating	34	6	2	7	9	3	5	2
13	Gas	11	2	2	1	2	2	2	0
14	Organic Compounds	61	8	2	8	15	10	17	1
15	Resins	84	13	4	6	20	20	17	4
19	Miscellaneous-chemical	233	46	13	29	50	35	45	15
21	Communications	149	38	18	21	19	22	18	13
22	Computer Hardware	42	8	3	6	10	7	7	1
77	Computer Software	93	29	9	15	15	12	8	5
23	Computer Peripherals	33	10	2	1	9	5	3	3
24	Information Storage	42	5	3	6	10	8	7	3
31	Drugs	101	5	2	8	19	19	39	9
32	Surgery & Medical Instruments	123	23	8	9	23	19	27	14
33	Biotechnology	41	2	2	4	4	3	21	5
39	Miscellaneous-Drug&Med	29	7	2	6	2	7	3	2
41	Electrical Devices	45	14	4	6	5	6	6	4
42	Electrical Lighting	33	4	3	2	7	5	9	3
43	Measuring & Testing	62	13	2	5	13	12	9	8
44	Nuclears & X-rays	39	10	4	6	5	6	2	6
45	Power Systems	89	27	5	14	15	7	15	6
46	Semiconductor Devices	55	11	2	7	8	14	8	5
49	Miscellaneous-Elec.	32	6	3	5	9	4	2	3
51	Materials Processing & Handling	56	23	6	5	9	4	2	7
52	Metal Working	49	17	7	4	9	5	2	5
53	Motors, Engines & Parts	56	21	2	4	13	7	5	4
54	Optics	43	17	3	3	4	3	9	4
55	Transportation	33	11	2	6	6	3	2	3
59	Miscellaneous Mechanical	42	15	5	10	3	5	0	4
61	Agriculture, Husbandry, Food	14	3	0	1	2	3	3	2
63	Apparel & Textile	9	6	0	0	2	0	0	1
64	Earth Working & Wells	5	3	0	0	0	0	1	1
65	Furniture, House Fixtures	9	4	1	0	2	1	0	1
66	Heating	8	0	0	1	3	0	2	2
67	Pipes & Joints	13	7	0	0	1	4	1	0
68	Receptacles	20	9	2	3	3	1	1	1
69	Miscellaneous-Others	123	36	14	14	20	17	14	8

A8_b patent literature

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	617	192	221	280	217	218	174
11	Agriculture, Food, Textiles	8	1	1	1	2	0	2	1
12	Coating	34	5	4	5	7	5	4	4
13	Gas	11	2	2	1	4	2	0	0
14	Organic Compounds	61	8	7	11	15	12	7	1
15	Resins	84	11	8	9	17	13	21	5
19	Miscellaneous-chemical	233	52	22	31	34	31	47	16
21	Communications	149	62	14	18	17	15	10	13
22	Computer Hardware	42	16	5	4	7	3	3	4
77	Computer Software	93	51	11	13	6	3	3	6
23	Computer Peripherals	33	12	1	2	6	7	2	3
24	Information Storage	42	11	4	8	9	4	2	4
31	Drugs	101	15	6	15	16	17	23	9
32	Surgery & Medical Instruments	123	39	7	10	20	9	23	15
33	Biotechnology	41	12	6	6	4	5	2	6
39	Miscellaneous-Drug&Med	29	10	2	2	6	4	3	2
41	Electrical Devices	45	13	5	5	6	9	3	4
42	Electrical Lighting	33	7	6	7	3	5	2	3
43	Measuring & Testing	62	23	5	7	11	3	4	9
44	Nuclears & X-rays	39	13	8	4	4	1	3	6
45	Power Systems	89	42	12	8	9	4	8	6
46	Semiconductor Devices	55	19	9	3	4	10	5	5
49	Miscellaneous-Elec.	32	13	4	6	2	1	2	4
51	Materials Processing & Handling	56	24	3	5	7	5	5	7
52	Metal Working	49	17	5	5	6	6	5	5
53	Motors, Engines & Parts	56	27	5	5	10	1	3	5
54	Optics	43	20	3	6	4	5	1	4
55	Transportation	33	16	4	3	1	4	1	4
59	Miscellaneous Mechanical	42	20	2	2	8	4	2	4
61	Agriculture, Husbandry, Food	14	3	2	0	2	2	4	1
63	Apparel & Textile	9	3	0	2	2	0	1	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1	2	2	2	1	0	1
66	Heating	8	1	0	2	2	1	0	2
67	Pipes & Joints	13	8	0	1	0	1	2	1
68	Receptacles	20	6	2	0	4	6	1	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1763	26.04	7.83	12.71	19.74	15.94	17.75	100
11	Agriculture, Food, Textiles	7	0.00	14.29	14.29	28.57	28.57	14.29	100
12	Coating	32	18.75	6.25	21.88	28.13	9.38	15.63	100
13	Gas	11	18.18	18.18	9.09	18.18	18.18	18.18	100
14	Organic Compounds	60	13.33	3.33	13.33	25.00	16.67	28.33	100
15	Resins	80	16.25	5.00	7.50	25.00	25.00	21.25	100
19	Miscellaneous-chemical	218	21.10	5.96	13.30	22.94	16.06	20.64	100
21	Communications	136	27.94	13.24	15.44	13.97	16.18	13.24	100
22	Computer Hardware	41	19.51	7.32	14.63	24.39	17.07	17.07	100
77	Computer Software	88	32.95	10.23	17.05	17.05	13.64	9.09	100
23	Computer Peripherals	30	33.33	6.67	3.33	30.00	16.67	10.00	100
24	Information Storage	39	12.82	7.69	15.38	25.64	20.51	17.95	100
31	Drugs	92	5.43	2.17	8.70	20.65	20.65	42.39	100
32	Surgery & Medical Instruments	109	21.10	7.34	8.26	21.10	17.43	24.77	100
33	Biotechnology	36	5.56	5.56	11.11	11.11	8.33	58.33	100
39	Miscellaneous-Drug&Med	27	25.93	7.41	22.22	7.41	25.93	11.11	100
41	Electrical Devices	41	34.15	9.76	14.63	12.20	14.63	14.63	100
42	Electrical Lighting	30	13.33	10.00	6.67	23.33	16.67	30.00	100
43	Measuring & Testing	54	24.07	3.70	9.26	24.07	22.22	16.67	100
44	Nuclears & X-rays	33	30.30	12.12	18.18	15.15	18.18	6.06	100
45	Power Systems	83	32.53	6.02	16.87	18.07	8.43	18.07	100
46	Semiconductor Devices	50	22.00	4.00	14.00	16.00	28.00	16.00	100
49	Miscellaneous-Elec.	29	20.69	10.34	17.24	31.03	13.79	6.90	100
51	Materials Processing & Handling	49	46.94	12.24	10.20	18.37	8.16	4.08	100
52	Metal Working	44	38.64	15.91	9.09	20.45	11.36	4.55	100
53	Motors, Engines & Parts	52	40.38	3.85	7.69	25.00	13.46	9.62	100
54	Optics	39	43.59	7.69	7.69	10.26	7.69	23.08	100
55	Transportation	30	36.67	6.67	20.00	20.00	10.00	6.67	100
59	Miscellaneous Mechanical	38	39.47	13.16	26.32	7.89	13.16	0.00	100
61	Agriculture, Husbandry, Food	12	25.00	0.00	8.33	16.67	25.00	25.00	100
63	Apparel & Textile	8	75.00	0.00	0.00	25.00	0.00	0.00	100
64	Earth Working & Wells	4	75.00	0.00	0.00	0.00	0.00	25.00	100
65	Furniture, House Fixtures	8	50.00	12.50	0.00	25.00	12.50	0.00	100
66	Heating	6	0.00	0.00	16.67	50.00	0.00	33.33	100
67	Pipes & Joints	13	53.85	0.00	0.00	7.69	30.77	7.69	100
68	Receptacles	19	47.37	10.53	15.79	15.79	5.26	5.26	100
69	Miscellaneous-Others	115	31.30	12.17	12.17	17.39	14.78	12.17	100
	US-JP weighted		**25.93**	**7.76**	**12.51**	**19.96**	**16.21**	**17.63**	100

		N	I did not use	1	2	3	4	5	Total
NBER	All	1745	35.36	11.00	12.66	16.05	12.44	12.49	100
11	Agriculture, Food, Textiles	7	14.29	14.29	14.29	28.57	0.00	28.57	100
12	Coating	30	16.67	13.33	16.67	23.33	16.67	13.33	100
13	Gas	11	18.18	18.18	9.09	36.36	18.18	0.00	100
14	Organic Compounds	60	13.33	11.67	18.33	25.00	20.00	11.67	100
15	Resins	79	13.92	10.13	11.39	21.52	16.46	26.58	100
19	Miscellaneous-chemical	217	23.96	10.14	14.29	15.67	14.29	21.66	100
21	Communications	136	45.59	10.29	13.24	12.50	11.03	7.35	100
22	Computer Hardware	38	42.11	13.16	10.53	18.42	7.89	7.89	100
77	Computer Software	87	58.62	12.64	14.94	6.90	3.45	3.45	100
23	Computer Peripherals	30	40.00	3.33	6.67	20.00	23.33	6.67	100
24	Information Storage	38	28.95	10.53	21.05	23.68	10.53	5.26	100
31	Drugs	92	16.30	6.52	16.30	17.39	18.48	25.00	100
32	Surgery & Medical Instruments	108	36.11	6.48	9.26	18.52	8.33	21.30	100
33	Biotechnology	35	34.29	17.14	17.14	11.43	14.29	5.71	100
39	Miscellaneous-Drug&Med	27	37.04	7.41	7.41	22.22	14.81	11.11	100
41	Electrical Devices	41	31.71	12.20	12.20	14.63	21.95	7.32	100
42	Electrical Lighting	30	23.33	20.00	23.33	10.00	16.67	6.67	100
43	Measuring & Testing	53	43.40	9.43	13.21	20.75	5.66	7.55	100
44	Nuclears & X-rays	33	39.39	24.24	12.12	12.12	3.03	9.09	100
45	Power Systems	83	50.60	14.46	9.64	10.84	4.82	9.64	100
46	Semiconductor Devices	50	38.00	18.00	6.00	8.00	20.00	10.00	100
49	Miscellaneous-Elec.	28	46.43	14.29	21.43	7.14	3.57	7.14	100
51	Materials Processing & Handling	49	48.98	6.12	10.20	14.29	10.20	10.20	100
52	Metal Working	44	38.64	11.36	11.36	13.64	13.64	11.36	100
53	Motors, Engines & Parts	51	52.94	9.80	9.80	19.61	1.96	5.88	100
54	Optics	39	51.28	7.69	15.38	10.26	12.82	2.56	100
55	Transportation	29	55.17	13.79	10.34	3.45	13.79	3.45	100
59	Miscellaneous Mechanical	38	52.63	5.26	5.26	21.05	10.53	5.26	100
61	Agriculture, Husbandry, Food	13	23.08	15.38	0.00	15.38	15.38	30.77	100
63	Apparel & Textile	8	37.50	0.00	25.00	25.00	0.00	12.50	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	8	12.50	25.00	25.00	25.00	12.50	0.00	100
66	Heating	6	16.67	0.00	33.33	33.33	16.67	0.00	100
67	Pipes & Joints	12	66.67	0.00	8.33	0.00	8.33	16.67	100
68	Receptacles	19	31.58	10.53	0.00	21.05	31.58	5.26	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**36.01**	**10.7**	**12.98**	**15.89**	**12.24**	**12.19**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)
（研究を実施するために使用した知識の重要度）

Trade Fair or Exhibition（見本市、展示会）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1305	357	442	686	591	86	191
Agriculture, Food, Textiles	60	18	8	9	11	9	1	4
Coating	80	19	6	12	17	19	3	4
Gas	45	15	3	5	13	6	0	3
Organic Compounds	120	51	20	14	13	8	1	13
Resins	125	54	11	9	27	10	4	10
Miscellaneous-chemical	208	70	25	32	29	32	3	17
Communications	160	70	9	15	35	25	3	3
Computer Hardware	59	24	3	7	6	10	1	8
Computer Software	123	49	8	20	12	25	6	3
Computer Peripherals	76	24	10	8	17	13	2	2
Information Storage	120	54	11	12	18	20	2	3
Drugs	127	54	21	16	17	10	2	7
Surgery & Medical Instruments	85	37	6	10	10	15	4	3
Biotechnology	87	25	14	11	17	9	1	10
Miscellaneous-Drug&Med	45	18	3	6	8	5	4	1
Electrical Devices	91	33	10	12	22	14	0	0
Electrical Lighting	96	30	9	8	27	19	1	2
Measuring & Testing	111	45	2	9	28	22	1	4
Nuclears & X-rays	72	27	13	7	9	12	1	3
Power Systems	172	57	17	24	36	29	0	9
Semiconductor Devices	129	53	20	15	24	16	1	0
Miscellaneous-Elec.	120	46	10	11	30	17	2	4
Materials Processing & Handling	103	27	5	10	13	32	7	9
Metal Working	137	52	19	22	26	13	3	2
Motors, Engines & Parts	145	50	14	19	32	21	4	5
Optics	100	31	11	14	20	18	1	5
Transportation	73	23	10	9	13	11	1	6
Miscellaneous Mechanical	124	41	11	14	25	22	4	7
Agriculture, Husbandry, Food	87	30	8	14	15	13	2	5
Apparel & Textile	77	23	4	6	13	16	3	12
Earth Working & Wells	20	5	2	1	3	3	2	4
Furniture, House Fixtures	51	13	3	3	14	9	4	5
Heating	84	29	7	14	16	15	1	2
Pipes & Joints	66	18	6	9	14	10	2	7
Receptacles	55	19	4	4	9	16	1	2
Miscellaneous-Others	225	71	14	31	47	47	8	7

%	N	I did not use	1	2	3	4	5	Total
All	3467	37.64	10.3	12.75	19.79	17.05	2.48	100
Agriculture, Food, Textiles	56	32.14	14.29	16.07	19.64	16.07	1.79	100
Coating	76	25	7.89	15.79	22.37	25	3.95	100
Gas	42	35.71	7.14	11.9	30.95	14.29	0	100
Organic Compounds	107	47.66	18.69	13.08	12.15	7.48	0.93	100
Resins	115	46.96	9.57	7.83	23.48	8.7	3.48	100
Miscellaneous-chemical	191	36.65	13.09	16.75	15.18	16.75	1.57	100
Communications	157	44.59	5.73	9.55	22.29	15.92	1.91	100
Computer Hardware	51	47.06	5.88	13.73	11.76	19.61	1.96	100
Computer Software	120	40.83	6.67	16.67	10	20.83	5	100
Computer Peripherals	74	32.43	13.51	10.81	22.97	17.57	2.7	100
Information Storage	117	46.15	9.4	10.26	15.38	17.09	1.71	100
Drugs	120	45	17.5	13.33	14.17	8.33	1.67	100
Surgery & Medical Instruments	82	45.12	7.32	12.2	12.2	18.29	4.88	100
Biotechnology	77	32.47	18.18	14.29	22.08	11.69	1.3	100
Miscellaneous-Drug&Med	44	40.91	6.82	13.64	18.18	11.36	9.09	100
Electrical Devices	91	36.26	10.99	13.19	24.18	15.38	0	100
Electrical Lighting	94	31.91	9.57	8.51	28.72	20.21	1.06	100
Measuring & Testing	107	42.06	1.87	8.41	26.17	20.56	0.93	100
Nuclears & X-rays	69	39.13	18.84	10.14	13.04	17.39	1.45	100
Power Systems	163	34.97	10.43	14.72	22.09	17.79	0	100
Semiconductor Devices	129	41.09	15.5	11.63	18.6	12.4	0.78	100
Miscellaneous-Elec.	116	39.66	8.62	9.48	25.86	14.66	1.72	100
Materials Processing & Handling	94	28.72	5.32	10.64	13.83	34.04	7.45	100
Metal Working	135	38.52	14.07	16.3	19.26	9.63	2.22	100
Motors, Engines & Parts	140	35.71	10	13.57	22.86	15	2.86	100
Optics	95	32.63	11.58	14.74	21.05	18.95	1.05	100
Transportation	67	34.33	14.93	13.43	19.4	16.42	1.49	100
Miscellaneous Mechanical	117	35.04	9.4	11.97	21.37	18.8	3.42	100
Agriculture, Husbandry, Food	82	36.59	9.76	17.07	18.29	15.85	2.44	100
Apparel & Textile	65	35.38	6.15	9.23	20	24.62	4.62	100
Earth Working & Wells	16	31.25	12.5	6.25	18.75	18.75	12.5	100
Furniture, House Fixtures	46	28.26	6.52	6.52	30.43	19.57	8.7	100
Heating	82	35.37	8.54	17.07	19.51	18.29	1.22	100
Pipes & Joints	59	30.51	10.17	15.25	23.73	16.95	3.39	100
Receptacles	53	35.85	7.55	7.55	16.98	30.19	1.89	100
Miscellaneous-Others	218	32.57	6.42	14.22	21.56	21.56	3.67	100
US-JP weighted		38.44	10.22	12.75	19.19	16.93	2.46	100
JP weighted		37.91	10.14	12.73	19.63	17.19	2.4	100

Technical conferences and workshops（技術的なコンファレンス・ワークショップ）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1320	303	401	743	601	90	200
Agriculture, Food, Textiles	60	21	6	8	14	7	0	4
Coating	80	22	6	13	24	9	1	5
Gas	45	15	3	6	8	10	0	3
Organic Compounds	120	42	15	10	22	17	1	13
Resins	125	51	8	11	27	12	4	12
Miscellaneous-chemical	208	75	21	26	40	28	4	14
Communications	160	64	9	10	26	42	7	2
Computer Hardware	59	24	3	5	9	7	2	9
Computer Software	123	50	9	18	18	18	8	2
Computer Peripherals	76	24	9	7	23	9	2	2
Information Storage	120	46	7	9	29	22	4	3
Drugs	127	46	13	12	19	26	4	7
Surgery & Medical Instruments	85	38	10	9	11	14	1	2
Biotechnology	87	23	11	7	16	18	3	9
Miscellaneous-Drug&Med	45	20	2	4	13	4	1	1
Electrical Devices	91	38	8	9	20	15	1	0
Electrical Lighting	96	30	7	9	21	21	5	3
Measuring & Testing	111	43	3	8	30	17	5	5
Nuclears & X-rays	72	29	8	6	11	16	0	2
Power Systems	172	51	16	24	35	37	3	6
Semiconductor Devices	129	40	9	17	24	35	3	1
Miscellaneous-Elec.	120	51	9	10	30	12	3	5
Materials Processing & Handling	103	37	3	12	20	18	2	11
Metal Working	137	48	19	13	28	25	3	1
Motors, Engines & Parts	145	53	9	14	33	23	7	6
Optics	100	31	7	12	25	20	1	4
Transportation	73	22	12	11	13	9	0	6
Miscellaneous Mechanical	124	48	11	16	27	14	1	7
Agriculture, Husbandry, Food	87	28	7	15	17	14	0	6
Apparel & Textile	77	30	6	5	10	12	1	13
Earth Working & Wells	20	7	2	0	5	1	0	5
Furniture, House Fixtures	51	14	4	3	12	9	1	8
Heating	84	34	4	15	16	11	1	3
Pipes & Joints	66	21	6	9	13	7	2	8
Receptacles	55	25	4	4	12	6	2	2
Miscellaneous-Others	225	79	17	34	42	36	7	10

	N	I did not use	1	2	3	4	5	Total
All	3458	38.17	8.76	11.6	21.49	17.38	2.6	100
Agriculture, Food, Textiles	56	37.5	10.71	14.29	25	12.5	0	100
Coating	75	29.33	8	17.33	32	12	1.33	100
Gas	42	35.71	7.14	14.29	19.05	23.81	0	100
Organic Compounds	107	39.25	14.02	9.35	20.56	15.89	0.93	100
Resins	113	45.13	7.08	9.73	23.89	10.62	3.54	100
Miscellaneous-chemical	194	38.66	10.82	13.4	20.62	14.43	2.06	100
Communications	158	40.51	5.7	6.33	16.46	26.58	4.43	100
Computer Hardware	50	48	6	10	18	14	4	100
Computer Software	121	41.32	7.44	14.88	14.88	14.88	6.61	100
Computer Peripherals	74	32.43	12.16	9.46	31.08	12.16	2.7	100
Information Storage	117	39.32	5.98	7.69	24.79	18.8	3.42	100
Drugs	120	38.33	10.83	10	15.83	21.67	3.33	100
Surgery & Medical Instruments	83	45.78	12.05	10.84	13.25	16.87	1.2	100
Biotechnology	78	29.49	14.1	8.97	20.51	23.08	3.85	100
Miscellaneous-Drug&Med	44	45.45	4.55	9.09	29.55	9.09	2.27	100
Electrical Devices	91	41.76	8.79	9.89	21.98	16.48	1.1	100
Electrical Lighting	93	32.26	7.53	9.68	22.58	22.58	5.38	100
Measuring & Testing	106	40.57	2.83	7.55	28.3	16.04	4.72	100
Nuclears & X-rays	70	41.43	11.43	8.57	15.71	22.86	0	100
Power Systems	166	30.72	9.64	14.46	21.08	22.29	1.81	100
Semiconductor Devices	128	31.25	7.03	13.28	18.75	27.34	2.34	100
Miscellaneous-Elec.	115	44.35	7.83	8.7	26.09	10.43	2.61	100
Materials Processing & Handling	92	40.22	3.26	13.04	21.74	19.57	2.17	100
Metal Working	136	35.29	13.97	9.56	20.59	18.38	2.21	100
Motors, Engines & Parts	139	38.13	6.47	10.07	23.74	16.55	5.04	100
Optics	96	32.29	7.29	12.5	26.04	20.83	1.04	100
Transportation	67	32.84	17.91	16.42	19.4	13.43	0	100
Miscellaneous Mechanical	117	41.03	9.4	13.68	23.08	11.97	0.85	100
Agriculture, Husbandry, Food	81	34.57	8.64	18.52	20.99	17.28	0	100
Apparel & Textile	64	46.88	9.38	7.81	15.63	18.75	1.56	100
Earth Working & Wells	15	46.67	13.33	0	33.33	6.67	0	100
Furniture, House Fixtures	43	32.56	9.3	6.98	27.91	20.93	2.33	100
Heating	81	41.98	4.94	18.52	19.75	13.58	1.23	100
Pipes & Joints	58	36.21	10.34	15.52	22.41	12.07	3.45	100
Receptacles	53	47.17	7.55	7.55	22.64	11.32	3.77	100
Miscellaneous-Others	215	36.74	7.91	15.81	19.53	16.74	3.26	100
		38.34	8.68	11.37	20.88	17.85	2.87	100
		37.9	8.54	11.34	21.35	17.98	2.89	100

US (2/7)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)
（研究を実施するために使用した知識の重要度）

A8_c Fair or exhibition

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,329	197	106	60	22	12	193
11	Agriculture, Food, Textiles	8	4	1	1	1	0	0	1
12	Coating	34	24	2	2	0	1	1	4
13	Gas	11	5	4	0	1	0	0	1
14	Organic Compounds	61	48	6	3	2	0	0	2
15	Resins	84	60	10	8	1	0	0	5
19	Miscellaneous-chemical	233	168	18	15	10	2	0	20
21	Communications	149	111	13	6	5	1	0	13
22	Computer Hardware	42	27	6	2	0	2	1	4
77	Computer Software	93	73	6	4	1	1	1	7
23	Computer Peripherals	33	23	3	1	1	1	0	4
24	Information Storage	42	25	6	4	1	0	0	6
31	Drugs	101	68	8	7	4	1	1	12
32	Surgery & Medical Instruments	123	74	11	12	6	3	1	16
33	Biotechnology	41	25	8	2	0	0	0	6
39	Miscellaneous-Drug&Med	29	19	5	0	2	1	0	2
41	Electrical Devices	45	31	3	5	1	1	0	4
42	Electrical Lighting	33	18	6	0	0	2	1	6
43	Measuring & Testing	62	38	9	3	2	1	0	9
44	Nuclears & X-rays	39	26	4	1	0	1	1	6
45	Power Systems	89	72	6	1	1	1	1	7
46	Semiconductor Devices	55	33	11	4	2	0	0	5
49	Miscellaneous-Elec.	32	25	2	1	0	0	0	4
51	Materials Processing & Handling	56	40	6	3	0	0	1	6
52	Metal Working	49	32	3	2	5	0	1	6
53	Motors, Engines & Parts	56	47	4	0	0	0	0	5
54	Optics	43	31	2	4	2	0	0	4
55	Transportation	33	22	3	0	3	1	0	4
59	Miscellaneous Mechanical	42	29	5	1	2	0	1	4
61	Agriculture, Husbandry, Food	14	5	3	3	1	0	0	2
63	Apparel & Textile	9	7	0	1	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	2	1	0	0	0	1
66	Heating	8	4	1	0	0	0	1	2
67	Pipes & Joints	13	10	0	2	1	0	0	0
68	Receptacles	20	12	2	3	2	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

A8_d Technical conferences and workshops

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,074	211	169	145	95	40	185
11	Agriculture, Food, Textiles	8	2	3	2	0	0	0	1
12	Coating	34	21	4	1	2	1	1	4
13	Gas	11	6	2	1	0	0	1	1
14	Organic Compounds	61	42	7	1	6	2	1	2
15	Resins	84	41	15	9	8	7	0	4
19	Miscellaneous-chemical	233	136	26	17	22	9	6	17
21	Communications	149	87	19	12	9	6	3	13
22	Computer Hardware	42	21	5	4	3	3	1	5
77	Computer Software	93	51	10	12	7	5	2	6
23	Computer Peripherals	33	16	4	3	3	2	0	5
24	Information Storage	42	14	6	10	3	3	1	5
31	Drugs	101	44	13	13	8	7	5	11
32	Surgery & Medical Instruments	123	64	12	10	12	8	1	16
33	Biotechnology	41	17	7	3	7	1	0	6
39	Miscellaneous-Drug&Med	29	17	4	1	2	2	1	2
41	Electrical Devices	45	27	3	5	2	1	3	4
42	Electrical Lighting	33	15	5	3	5	1	0	4
43	Measuring & Testing	62	32	5	6	5	3	2	9
44	Nuclears & X-rays	39	22	2	3	2	3	1	6
45	Power Systems	89	64	2	6	4	5	2	6
46	Semiconductor Devices	55	19	6	3	11	8	2	6
49	Miscellaneous-Elec.	32	16	2	5	1	2	2	4
51	Materials Processing & Handling	56	37	5	5	2	1	0	6
52	Metal Working	49	29	2	4	7	0	1	6
53	Motors, Engines & Parts	56	37	7	3	2	2	0	5
54	Optics	43	27	2	5	2	2	1	4
55	Transportation	33	24	3	0	1	2	0	3
59	Miscellaneous Mechanical	42	25	4	6	0	3	0	4
61	Agriculture, Husbandry, Food	14	4	4	1	3	0	0	2
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	0	3	0	0	0	1
66	Heating	8	5	1	0	0	0	0	2
67	Pipes & Joints	13	11	0	1	0	1	0	0
68	Receptacles	20	12	4	1	1	0	0	2
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

		%	N	I did not use	1	2	3	4	5	Total
NBER	All		1726	77.00	11.41	6.14	3.48	1.27	0.70	100
11	Agriculture, Food, Textiles		7	57.14	14.29	14.29	14.29	0.00	0.00	100
12	Coating		30	80.00	6.67	6.67	0.00	3.33	3.33	100
13	Gas		10	50.00	40.00	0.00	10.00	0.00	0.00	100
14	Organic Compounds		59	81.36	10.17	5.08	3.39	0.00	0.00	100
15	Resins		79	75.95	12.66	10.13	1.27	0.00	0.00	100
19	Miscellaneous-chemical		213	78.87	8.45	7.04	4.69	0.94	0.00	100
21	Communications		136	81.62	9.56	4.41	3.68	0.74	0.00	100
22	Computer Hardware		38	71.05	15.79	5.26	0.00	5.26	2.63	100
77	Computer Software		86	84.88	6.98	4.65	1.16	1.16	1.16	100
23	Computer Peripherals		29	79.31	10.34	3.45	3.45	3.45	0.00	100
24	Information Storage		36	69.44	16.67	11.11	2.78	0.00	0.00	100
31	Drugs		89	76.40	8.99	7.87	4.49	1.12	1.12	100
32	Surgery & Medical Instruments		107	69.16	10.28	11.21	5.61	2.80	0.93	100
33	Biotechnology		35	71.43	22.86	5.71	0.00	0.00	0.00	100
39	Miscellaneous-Drug&Med		27	70.37	18.52	0.00	7.41	3.70	0.00	100
41	Electrical Devices		41	75.61	7.32	12.20	2.44	2.44	0.00	100
42	Electrical Lighting		27	66.67	22.22	0.00	0.00	7.41	3.70	100
43	Measuring & Testing		53	71.70	16.98	5.66	3.77	1.89	0.00	100
44	Nuclears & X-rays		33	78.79	12.12	3.03	0.00	3.03	3.03	100
45	Power Systems		82	87.80	7.32	1.22	1.22	1.22	1.22	100
46	Semiconductor Devices		50	66.00	22.00	8.00	4.00	0.00	0.00	100
49	Miscellaneous-Elec.		28	89.29	7.14	3.57	0.00	0.00	0.00	100
51	Materials Processing & Handling		50	80.00	12.00	6.00	0.00	0.00	2.00	100
52	Metal Working		43	74.42	6.98	4.65	11.63	0.00	2.33	100
53	Motors, Engines & Parts		51	92.16	7.84	0.00	0.00	0.00	0.00	100
54	Optics		39	79.49	5.13	10.26	5.13	0.00	0.00	100
55	Transportation		29	75.86	10.34	0.00	10.34	3.45	0.00	100
59	Miscellaneous Mechanical		38	76.32	13.16	2.63	5.26	0.00	2.63	100
61	Agriculture, Husbandry, Food		12	41.67	25.00	25.00	8.33	0.00	0.00	100
63	Apparel & Textile		8	87.50	0.00	12.50	0.00	0.00	0.00	100
64	Earth Working & Wells		XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures		8	62.50	25.00	12.50	0.00	0.00	0.00	100
66	Heating		6	66.67	16.67	0.00	0.00	0.00	16.67	100
67	Pipes & Joints		13	76.92	0.00	15.38	7.69	0.00	0.00	100
68	Receptacles		19	63.16	10.53	15.79	10.53	0.00	0.00	100
69	Miscellaneous-Others		XX	XX	XX	XX	XX	XX	XX	XX
	US~JP weighted			**76.82**	**11.41**	**6.25**	**3.55**	**1.24**	**0.73**	100

		%	N	I did not use	1	2	3	4	5	Total
NBER	All		1734	61.94	12.17	9.75	8.36	5.48	2.31	100
11	Agriculture, Food, Textiles		7	28.57	42.86	28.57	0.00	0.00	0.00	100
12	Coating		30	70.00	13.33	3.33	6.67	3.33	3.33	100
13	Gas		10	60.00	20.00	10.00	0.00	0.00	10.00	100
14	Organic Compounds		59	71.19	11.86	1.69	10.17	3.39	1.69	100
15	Resins		80	51.25	18.75	11.25	10.00	8.75	0.00	100
19	Miscellaneous-chemical		216	62.96	12.04	7.87	10.19	4.17	2.78	100
21	Communications		136	63.97	13.97	8.82	6.62	4.41	2.21	100
22	Computer Hardware		37	56.76	13.51	10.81	8.11	8.11	2.70	100
77	Computer Software		87	58.62	11.49	13.79	8.05	5.75	2.30	100
23	Computer Peripherals		28	57.14	14.29	10.71	10.71	7.14	0.00	100
24	Information Storage		37	37.84	16.22	27.03	8.11	8.11	2.70	100
31	Drugs		90	48.89	14.44	14.44	8.89	7.78	5.56	100
32	Surgery & Medical Instruments		107	59.81	11.21	9.35	11.21	7.48	0.93	100
33	Biotechnology		35	48.57	20.00	8.57	20.00	2.86	0.00	100
39	Miscellaneous-Drug&Med		27	62.96	14.81	3.70	7.41	7.41	3.70	100
41	Electrical Devices		41	65.85	7.32	12.20	4.88	2.44	7.32	100
42	Electrical Lighting		29	51.72	17.24	10.34	17.24	3.45	0.00	100
43	Measuring & Testing		53	60.38	9.43	11.32	9.43	5.66	3.77	100
44	Nuclears & X-rays		33	66.67	6.06	9.09	6.06	9.09	3.03	100
45	Power Systems		83	77.11	2.41	7.23	4.82	6.02	2.41	100
46	Semiconductor Devices		49	38.78	12.24	6.12	22.45	16.33	4.08	100
49	Miscellaneous-Elec.		28	57.14	7.14	17.86	3.57	7.14	7.14	100
51	Materials Processing & Handling		50	74.00	10.00	10.00	4.00	2.00	0.00	100
52	Metal Working		43	67.44	4.65	9.30	16.28	0.00	2.33	100
53	Motors, Engines & Parts		51	72.55	13.73	5.88	3.92	3.92	0.00	100
54	Optics		39	69.23	5.13	12.82	5.13	5.13	2.56	100
55	Transportation		30	80.00	10.00	0.00	3.33	6.67	0.00	100
59	Miscellaneous Mechanical		38	65.79	10.53	15.79	0.00	7.89	0.00	100
61	Agriculture, Husbandry, Food		12	33.33	33.33	8.33	25.00	0.00	0.00	100
63	Apparel & Textile		8	100.00	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells		XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures		8	62.50	0.00	37.50	0.00	0.00	0.00	100
66	Heating		6	83.33	16.67	0.00	0.00	0.00	0.00	100
67	Pipes & Joints		13	84.62	0.00	7.69	0.00	7.69	0.00	100
68	Receptacles		18	66.67	22.22	5.56	5.56	0.00	0.00	100
69	Miscellaneous-Others		XX	XX	XX	XX	XX	XX	XX	XX
	US~JP weighted			**61.16**	**12.23**	**10.28**	**8.39**	**5.61**	**2.33**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)
（研究を実施するために使用した知識の重要度）

Standard documents, such as those from ISO (standards, contributions)（ISOなどの標準関連文書）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1478	511	463	625	293	81	207
Agriculture, Food, Textiles	60	18	12	9	11	5	1	4
Coating	80	22	11	15	16	8	3	5
Gas	45	17	7	6	7	5	0	3
Organic Compounds	120	54	26	12	11	3	1	13
Resins	125	47	15	20	21	9	2	11
Miscellaneous-chemical	208	86	36	36	23	7	3	17
Communications	160	62	10	11	21	38	15	3
Computer Hardware	59	28	4	3	8	5	2	9
Computer Software	123	43	15	18	15	23	7	2
Computer Peripherals	76	34	11	14	10	3	2	2
Information Storage	120	53	8	19	18	16	3	3
Drugs	127	58	26	14	15	5	1	8
Surgery & Medical Instruments	85	41	14	6	10	10	1	3
Biotechnology	87	31	21	13	10	3	0	9
Miscellaneous-Drug&Med	45	24	7	2	7	2	1	2
Electrical Devices	91	40	12	9	20	7	3	0
Electrical Lighting	96	44	16	13	17	4	0	2
Measuring & Testing	111	51	10	11	22	10	3	4
Nuclears & X-rays	72	30	17	6	6	12	0	1
Power Systems	172	67	23	19	41	12	1	9
Semiconductor Devices	129	64	21	12	24	5	1	2
Miscellaneous-Elec.	120	57	10	14	20	10	4	5
Materials Processing & Handling	103	39	11	12	22	10	0	9
Metal Working	137	61	27	11	26	9	1	2
Motors, Engines & Parts	145	53	13	22	42	5	4	6
Optics	100	36	17	11	24	5	2	5
Transportation	73	25	14	8	13	6	0	7
Miscellaneous Mechanical	124	46	15	18	24	8	7	6
Agriculture, Husbandry, Food	87	35	14	12	15	4	0	7
Apparel & Textile	77	27	10	11	10	3	2	14
Earth Working & Wells	20	5	3	2	2	3	0	5
Furniture, House Fixtures	51	17	7	6	11	2	2	6
Heating	84	35	8	16	16	7	0	2
Pipes & Joints	66	17	6	13	12	7	3	8
Receptacles	55	23	8	5	13	2	1	3
Miscellaneous-Others	225	88	26	34	42	20	5	10

%	N	I did not use	1	2	3	4	5	Total
All	3451	42.83	14.81	13.42	18.11	8.49	2.35	100
Agriculture, Food, Textiles	56	32.14	21.43	16.07	19.64	8.93	1.79	100
Coating	75	29.33	14.67	20	21.33	10.67	4	100
Gas	42	40.48	16.67	14.29	16.67	11.9	0	100
Organic Compounds	107	50.47	24.3	11.21	10.28	2.8	0.93	100
Resins	114	41.23	13.16	17.54	18.42	7.89	1.75	100
Miscellaneous-chemical	191	45.03	18.85	18.85	12.04	3.66	1.57	100
Communications	157	39.49	6.37	7.01	13.38	24.2	9.55	100
Computer Hardware	50	56	8	6	16	10	4	100
Computer Software	121	35.54	12.4	14.88	12.4	19.01	5.79	100
Computer Peripherals	74	45.95	14.86	18.92	13.51	4.05	2.7	100
Information Storage	117	45.3	6.84	16.24	15.38	13.68	2.56	100
Drugs	119	48.74	21.85	11.76	12.61	4.2	0.84	100
Surgery & Medical Instruments	82	50	17.07	7.32	12.2	12.2	1.22	100
Biotechnology	78	39.74	26.92	16.67	12.82	3.85	0	100
Miscellaneous-Drug&Med	43	55.81	16.28	4.65	16.28	4.65	2.33	100
Electrical Devices	91	43.96	13.19	9.89	21.98	7.69	3.3	100
Electrical Lighting	94	46.81	17.02	13.83	18.09	4.26	0	100
Measuring & Testing	107	47.66	9.35	10.28	20.56	9.35	2.8	100
Nuclears & X-rays	71	42.25	23.94	8.45	8.45	16.9	0	100
Power Systems	163	41.1	14.11	11.66	25.15	7.36	0.61	100
Semiconductor Devices	127	50.39	16.54	9.45	18.9	3.94	0.79	100
Miscellaneous-Elec.	115	49.57	8.7	12.17	17.39	8.7	3.48	100
Materials Processing & Handling	94	41.49	11.7	12.77	23.4	10.64	0	100
Metal Working	135	45.19	20	8.15	19.26	6.67	0.74	100
Motors, Engines & Parts	139	38.13	9.35	15.83	30.22	3.6	2.88	100
Optics	95	37.89	17.89	11.58	25.26	5.26	2.11	100
Transportation	66	37.88	21.21	12.12	19.7	9.09	0	100
Miscellaneous Mechanical	118	38.98	12.71	15.25	20.34	6.78	5.93	100
Agriculture, Husbandry, Food	80	43.75	17.5	15	18.75	5	0	100
Apparel & Textile	63	42.86	15.87	17.46	15.87	4.76	3.17	100
Earth Working & Wells	15	33.33	20	13.33	13.33	20	0	100
Furniture, House Fixtures	45	37.78	15.56	13.33	24.44	4.44	4.44	100
Heating	82	42.68	9.76	19.51	19.51	8.54	0	100
Pipes & Joints	58	29.31	10.34	22.41	20.69	12.07	5.17	100
Receptacles	52	44.23	15.38	9.62	25	3.85	1.92	100
Miscellaneous-Others	215	40.93	12.09	15.81	19.53	9.3	2.33	100
US-JP weighted		43.1	14.51	13.11	17.33	9.23	2.72	100
JP weighted		42.81	14.02	13.36	17.85	9.13	2.82	100

Your firm excluding co-inventors（組織内）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	428	140	167	540	1404	807	172
Agriculture, Food, Textiles	60	3	3	2	10	24	14	4
Coating	80	3	2	2	15	32	21	5
Gas	45	5	1	3	7	14	11	4
Organic Compounds	120	15	8	3	18	48	15	13
Resins	125	7	4	5	24	39	37	9
Miscellaneous-chemical	208	24	8	10	29	69	52	16
Communications	160	25	3	7	24	69	29	3
Computer Hardware	59	9	2	1	7	23	12	5
Computer Software	123	18	3	9	14	45	32	2
Computer Peripherals	76	9	4	1	6	34	20	2
Information Storage	120	14	3	8	14	48	29	4
Drugs	127	9	6	7	19	45	35	6
Surgery & Medical Instruments	85	18	3	3	18	22	19	2
Biotechnology	87	13	4	6	12	27	18	7
Miscellaneous-Drug&Med	45	9	0	2	6	19	9	0
Electrical Devices	91	10	3	7	17	36	18	0
Electrical Lighting	96	7	6	3	16	42	20	2
Measuring & Testing	111	16	5	5	22	33	27	3
Nuclears & X-rays	72	14	6	3	8	29	12	0
Power Systems	172	19	6	5	25	70	42	5
Semiconductor Devices	129	19	7	5	17	51	29	1
Miscellaneous-Elec.	120	15	2	7	17	50	26	3
Materials Processing & Handling	103	13	2	4	20	35	20	9
Metal Working	137	13	7	7	19	58	30	3
Motors, Engines & Parts	145	11	3	6	23	61	34	7
Optics	100	12	3	7	13	44	17	4
Transportation	73	4	5	2	9	32	15	6
Miscellaneous Mechanical	124	20	8	4	25	36	26	5
Agriculture, Husbandry, Food	87	10	4	3	13	29	23	5
Apparel & Textile	77	7	1	1	11	40	10	7
Earth Working & Wells	20	3	2	0	1	5	4	5
Furniture, House Fixtures	51	5	2	1	4	23	8	8
Heating	84	7	1	4	5	38	28	1
Pipes & Joints	66	7	2	5	9	26	13	4
Receptacles	55	6	4	2	7	22	12	2
Miscellaneous-Others	225	29	7	17	36	86	40	10

	N	I did not use	1	2	3	4	5	Total
All	3486	12.28	4.02	4.79	15.49	40.28	23.15	100
Agriculture, Food, Textiles	56	5.36	5.36	3.57	17.86	42.86	25	100
Coating	75	4	2.67	2.67	20	42.67	28	100
Gas	41	12.2	2.44	7.32	17.07	34.15	26.83	100
Organic Compounds	107	14.02	7.48	2.8	16.82	44.86	14.02	100
Resins	116	6.03	3.45	4.31	20.69	33.62	31.9	100
Miscellaneous-chemical	192	12.5	4.17	5.21	15.1	35.94	27.08	100
Communications	157	15.92	1.91	4.46	15.29	43.95	18.47	100
Computer Hardware	54	16.67	3.7	1.85	12.96	42.59	22.22	100
Computer Software	121	14.88	2.48	7.44	11.57	37.19	26.45	100
Computer Peripherals	74	12.16	5.41	1.35	8.11	45.95	27.03	100
Information Storage	116	12.07	2.59	6.9	12.07	41.38	25	100
Drugs	121	7.44	4.96	5.79	15.7	37.19	28.93	100
Surgery & Medical Instruments	83	21.69	3.61	3.61	21.69	26.51	22.89	100
Biotechnology	80	16.25	5	7.5	15	33.75	22.5	100
Miscellaneous-Drug&Med	45	20	0	4.44	13.33	42.22	20	100
Electrical Devices	91	10.99	3.3	7.69	18.68	39.56	19.78	100
Electrical Lighting	94	7.45	6.38	3.19	17.02	44.68	21.28	100
Measuring & Testing	108	14.81	4.63	4.63	20.37	30.56	25	100
Nuclears & X-rays	72	19.44	8.33	4.17	11.11	40.28	16.67	100
Power Systems	167	11.38	3.59	2.99	14.97	41.92	25.15	100
Semiconductor Devices	128	14.84	5.47	3.91	13.28	39.84	22.66	100
Miscellaneous-Elec.	117	12.82	1.71	5.98	14.53	42.74	22.22	100
Materials Processing & Handling	94	13.83	2.13	4.26	21.28	37.23	21.28	100
Metal Working	134	9.7	5.22	5.22	14.18	43.28	22.39	100
Motors, Engines & Parts	138	7.97	2.17	4.35	16.67	44.2	24.64	100
Optics	96	12.5	3.13	7.29	13.54	45.83	17.71	100
Transportation	67	5.97	7.46	2.99	13.43	47.76	22.39	100
Miscellaneous Mechanical	119	16.81	6.72	3.36	21.01	30.25	21.85	100
Agriculture, Husbandry, Food	82	12.2	4.88	3.66	15.85	35.37	28.05	100
Apparel & Textile	70	10	1.43	1.43	15.71	57.14	14.29	100
Earth Working & Wells	15	20	13.33	0	6.67	33.33	26.67	100
Furniture, House Fixtures	43	11.63	4.65	2.33	9.3	53.49	18.6	100
Heating	83	8.43	1.2	4.82	6.02	45.78	33.73	100
Pipes & Joints	62	11.29	3.23	8.06	14.52	41.94	20.97	100
Receptacles	53	11.32	7.55	3.77	13.21	41.51	22.64	100
Miscellaneous-Others	215	13.49	3.26	7.91	16.74	40	18.6	100
US-JP weighted		12.72	3.88	4.91	15.67	39.61	23.21	100
JP weighted		12.36	3.9	4.92	15.4	40.35	23.07	100

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

A8_e Standard documents, such as from ISO (standards, contributions)

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	1,220	191	109	110	56	35	198
11	Agriculture, Food, Textiles	8	4	3	0	0	0	0	1
12	Coating	34	22	3	0	3	1	1	4
13	Gas	11	5	3	1	0	1	0	1
14	Organic Compounds	61	47	5	1	3	1	0	4
15	Resins	84	55	12	5	6	1	1	4
19	Miscellaneous-chemical	233	155	24	12	19	4	1	18
21	Communications	149	83	13	10	11	7	11	14
22	Computer Hardware	42	23	6	3	1	4	0	5
77	Computer Software	93	65	7	6	3	4	2	6
23	Computer Peripherals	33	20	6	0	1	1	0	5
24	Information Storage	42	20	6	5	1	2	2	6
31	Drugs	101	67	5	9	3	3	0	14
32	Surgery & Medical Instruments	123	72	14	10	6	2	2	17
33	Biotechnology	41	24	8	1	1	0	0	7
39	Miscellaneous-Drug&Med	29	17	3	3	3	1	0	2
41	Electrical Devices	45	24	5	5	4	1	2	4
42	Electrical Lighting	33	24	4	0	0	1	0	4
43	Measuring & Testing	62	36	4	4	4	2	2	10
44	Nuclears & X-rays	39	28	3	1	1	0	0	6
45	Power Systems	89	65	4	5	5	2	1	7
46	Semiconductor Devices	55	38	7	1	3	0	0	6
49	Miscellaneous-Elec.	32	21	2	3	0	1	1	4
51	Materials Processing & Handling	56	38	3	5	4	0	1	5
52	Metal Working	49	32	4	4	0	3	0	6
53	Motors, Engines & Parts	56	42	4	2	3	0	0	5
54	Optics	43	32	1	3	1	2	0	4
55	Transportation	33	20	4	1	1	1	2	4
59	Miscellaneous Mechanical	42	20	3	5	6	2	2	4
61	Agriculture, Husbandry, Food	14	5	3	0	2	2	0	2
63	Apparel & Textile	9	5	0	0	3	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	4	2	0	1	0	0	2
66	Heating	8	3	1	1	1	0	0	2
67	Pipes & Joints	13	8	0	1	3	0	1	0
68	Receptacles	20	14	2	0	2	1	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

A8_F Your firm, excluding co-inventors

		all	I did not use	1	2	3	4	5	Missing
NBER	All	1,919	394	104	220	325	350	359	167
11	Agriculture, Food, Textiles	8	0	1	1	1	2	2	1
12	Coating	34	7	0	4	5	6	10	2
13	Gas	11	1	2	1	2	3	2	0
14	Organic Compounds	61	12	6	5	15	15	7	1
15	Resins	84	13	5	12	20	15	15	4
19	Miscellaneous-chemical	233	48	13	22	42	39	54	15
21	Communications	149	42	9	17	24	25	19	13
22	Computer Hardware	42	7	6	4	8	8	5	4
77	Computer Software	93	21	3	14	8	21	21	5
23	Computer Peripherals	33	4	3	4	8	4	7	3
24	Information Storage	42	5	2	7	9	9	5	5
31	Drugs	101	19	5	7	15	18	23	14
32	Surgery & Medical Instruments	123	32	6	9	23	20	17	16
33	Biotechnology	41	9	6	3	5	5	8	5
39	Miscellaneous-Drug&Med	29	8	0	3	6	7	3	2
41	Electrical Devices	45	7	1	6	8	15	5	3
42	Electrical Lighting	33	5	5	5	2	5	7	4
43	Measuring & Testing	62	13	3	7	12	9	10	8
44	Nuclears & X-rays	39	11	2	5	2	6	7	6
45	Power Systems	89	20	4	12	12	16	18	7
46	Semiconductor Devices	55	10	5	9	9	10	6	6
49	Miscellaneous-Elec.	32	6	1	3	2	8	9	3
51	Materials Processing & Handling	56	13	0	9	7	12	11	4
52	Metal Working	49	12	4	5	5	13	8	2
53	Motors, Engines & Parts	56	9	2	8	12	9	11	5
54	Optics	43	11	1	5	8	4	10	4
55	Transportation	33	4	1	4	8	7	5	4
59	Miscellaneous Mechanical	42	9	1	7	5	6	10	4
61	Agriculture, Husbandry, Food	14	5	0	0	1	3	3	2
63	Apparel & Textile	9	1	0	2	1	2	2	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	1	0	1	4	2	1	0
66	Heating	8	0	0	1	4	0	1	2
67	Pipes & Joints	13	2	1	2	3	2	3	0
68	Receptacles	20	7	2	3	4	2	1	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1721	70.89	11.10	6.33	6.39	3.25	2.03	100
11	Agriculture, Food, Textiles	7	57.14	42.86	0.00	0.00	0.00	0.00	100
12	Coating	30	73.33	10.00	0.00	10.00	3.33	3.33	100
13	Gas	10	50.00	30.00	10.00	0.00	10.00	0.00	100
14	Organic Compounds	57	82.46	8.77	1.75	5.26	1.75	0.00	100
15	Resins	80	68.75	15.00	6.25	7.50	1.25	1.25	100
19	Miscellaneous-chemical	215	72.09	11.16	5.58	8.84	1.86	0.47	100
21	Communications	135	61.48	9.63	7.41	8.15	5.19	8.15	100
22	Computer Hardware	37	62.16	16.22	8.11	2.70	10.81	0.00	100
77	Computer Software	87	74.71	8.05	6.90	3.45	4.60	2.30	100
23	Computer Peripherals	28	71.43	21.43	0.00	3.57	3.57	0.00	100
24	Information Storage	36	55.56	16.67	13.89	2.78	5.56	5.56	100
31	Drugs	87	77.01	5.75	10.34	3.45	3.45	0.00	100
32	Surgery & Medical Instruments	106	67.92	13.21	9.43	5.66	1.89	1.89	100
33	Biotechnology	34	70.59	23.53	2.94	2.94	0.00	0.00	100
39	Miscellaneous-Drug&Med	27	62.96	11.11	11.11	11.11	3.70	0.00	100
41	Electrical Devices	41	58.54	12.20	12.20	9.76	2.44	4.88	100
42	Electrical Lighting	29	82.76	13.79	0.00	0.00	3.45	0.00	100
43	Measuring & Testing	52	69.23	7.69	7.69	7.69	3.85	3.85	100
44	Nuclears & X-rays	33	84.85	9.09	3.03	3.03	0.00	0.00	100
45	Power Systems	82	79.27	4.88	6.10	6.10	2.44	1.22	100
46	Semiconductor Devices	49	77.55	14.29	2.04	6.12	0.00	0.00	100
49	Miscellaneous-Elec.	28	75.00	7.14	10.71	0.00	3.57	3.57	100
51	Materials Processing & Handling	51	74.51	5.88	9.80	7.84	0.00	1.96	100
52	Metal Working	43	74.42	9.30	9.30	0.00	6.98	0.00	100
53	Motors, Engines & Parts	51	82.35	7.84	3.92	5.88	0.00	0.00	100
54	Optics	39	82.05	2.56	7.69	2.56	5.13	0.00	100
55	Transportation	29	68.97	13.79	3.45	3.45	3.45	6.90	100
59	Miscellaneous Mechanical	38	52.63	7.89	13.16	15.79	5.26	5.26	100
61	Agriculture, Husbandry, Food	12	41.67	25.00	0.00	16.67	16.67	0.00	100
63	Apparel & Textile	8	62.50	0.00	0.00	37.50	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	7	57.14	28.57	0.00	14.29	0.00	0.00	100
66	Heating	6	50.00	16.67	16.67	16.67	0.00	0.00	100
67	Pipes & Joints	13	61.54	0.00	7.69	23.08	0.00	7.69	100
68	Receptacles	19	73.68	10.53	0.00	10.53	5.26	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**70.70**	**10.83**	**6.68**	**6.20**	**3.37**	**2.21**	100

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1752	22.49	5.94	12.56	18.55	19.98	20.49	100
11	Agriculture, Food, Textiles	7	0.00	14.29	14.29	14.29	28.57	28.57	100
12	Coating	32	21.88	0.00	12.50	15.63	18.75	31.25	100
13	Gas	11	9.09	18.18	9.09	18.18	27.27	18.18	100
14	Organic Compounds	60	20.00	10.00	8.33	25.00	25.00	11.67	100
15	Resins	80	16.25	6.25	15.00	25.00	18.75	18.75	100
19	Miscellaneous-chemical	218	22.02	5.96	10.09	19.27	17.89	24.77	100
21	Communications	136	30.88	6.62	12.50	17.65	18.38	13.97	100
22	Computer Hardware	38	18.42	15.79	10.53	21.05	21.05	13.16	100
77	Computer Software	88	23.86	3.41	15.91	9.09	23.86	23.86	100
23	Computer Peripherals	30	13.33	10.00	13.33	26.67	13.33	23.33	100
24	Information Storage	37	13.51	5.41	18.92	24.32	24.32	13.51	100
31	Drugs	87	21.84	5.75	8.05	17.24	20.69	26.44	100
32	Surgery & Medical Instruments	107	29.91	5.61	8.41	21.50	18.69	15.89	100
33	Biotechnology	36	25.00	16.67	8.33	13.89	13.89	22.22	100
39	Miscellaneous-Drug&Med	27	29.63	0.00	11.11	22.22	25.93	11.11	100
41	Electrical Devices	42	16.67	2.38	14.29	19.05	35.71	11.90	100
42	Electrical Lighting	29	17.24	17.24	17.24	6.90	17.24	24.14	100
43	Measuring & Testing	54	24.07	5.56	12.96	22.22	16.67	18.52	100
44	Nuclears & X-rays	33	33.33	6.06	15.15	6.06	18.18	21.21	100
45	Power Systems	82	24.39	4.88	14.63	14.63	19.51	21.95	100
46	Semiconductor Devices	49	20.41	10.20	18.37	18.37	20.41	12.24	100
49	Miscellaneous-Elec.	29	20.69	3.45	10.34	6.90	27.59	31.03	100
51	Materials Processing & Handling	52	25.00	0.00	17.31	13.46	23.08	21.15	100
52	Metal Working	47	25.53	8.51	10.64	10.64	27.66	17.02	100
53	Motors, Engines & Parts	51	17.65	3.92	15.69	23.53	17.65	21.57	100
54	Optics	39	28.21	2.56	12.82	20.51	10.26	25.64	100
55	Transportation	29	13.79	3.45	13.79	27.59	24.14	17.24	100
59	Miscellaneous Mechanical	38	23.68	2.63	18.42	13.16	15.79	26.32	100
61	Agriculture, Husbandry, Food	12	41.67	0.00	0.00	8.33	25.00	25.00	100
63	Apparel & Textile	8	12.50	0.00	25.00	12.50	25.00	25.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	11.11	0.00	11.11	44.44	22.22	11.11	100
66	Heating	6	0.00	0.00	16.67	66.67	0.00	16.67	100
67	Pipes & Joints	13	15.38	7.69	15.38	23.08	15.38	23.08	100
68	Receptacles	19	36.84	10.53	15.79	21.05	10.53	5.26	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**22.40**	**5.80**	**12.80**	**18.54**	**20.06**	**20.40**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)（研究を実施するために使用した知識の重要度）

University and Education（大学など高等教育機関）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1643	402	399	597	341	83	193
Agriculture, Food, Textiles	60	21	7	4	17	6	2	3
Coating	80	27	7	18	13	6	3	6
Gas	45	16	7	8	4	7	0	3
Organic Compounds	120	48	10	9	16	24	2	11
Resins	125	52	9	8	33	7	6	10
Miscellaneous-chemical	208	87	23	23	29	27	3	16
Communications	160	89	8	18	24	14	4	3
Computer Hardware	59	28	6	4	9	2	0	10
Computer Software	123	64	12	15	16	9	5	2
Computer Peripherals	76	36	11	10	14	3	0	2
Information Storage	120	67	10	15	18	6	1	3
Drugs	127	47	15	7	20	23	7	8
Surgery & Medical Instruments	85	44	12	8	6	12	1	2
Biotechnology	87	19	7	11	11	21	11	7
Miscellaneous-Drug&Med	45	26	4	1	8	3	2	1
Electrical Devices	91	53	13	11	10	4	0	0
Electrical Lighting	96	39	9	15	22	6	4	1
Measuring & Testing	111	53	6	6	23	12	7	4
Nuclears & X-rays	72	33	11	5	11	10	1	1
Power Systems	172	64	19	19	35	26	2	7
Semiconductor Devices	129	61	18	13	22	12	2	1
Miscellaneous-Elec.	120	66	11	15	21	3	0	4
Materials Processing & Handling	103	42	10	10	20	9	1	11
Metal Working	137	56	22	17	24	14	2	2
Motors, Engines & Parts	145	68	14	21	25	7	3	7
Optics	100	43	13	8	24	6	1	5
Transportation	73	33	13	9	10	2	0	6
Miscellaneous Mechanical	124	63	15	11	21	7	0	7
Agriculture, Husbandry, Food	87	32	10	10	13	15	2	5
Apparel & Textile	77	34	6	12	8	3	1	13
Earth Working & Wells	20	9	1	2	2	0	1	5
Furniture, House Fixtures	51	20	8	7	5	2	1	8
Heating	84	39	8	11	14	10	0	2
Pipes & Joints	66	29	11	4	10	2	3	7
Receptacles	55	30	8	4	9	2	0	2
Miscellaneous-Others	225	105	28	30	30	19	5	8

%	N	I did not use	1	2	3	4	5	Total
All	3465	47.42	11.6	11.52	17.23	9.84	2.4	100
Agriculture, Food, Textiles	57	36.84	12.28	7.02	29.82	10.53	3.51	100
Coating	74	36.49	9.46	24.32	17.57	8.11	4.05	100
Gas	42	38.1	16.67	19.05	9.52	16.67	0	100
Organic Compounds	109	44.04	9.17	8.26	14.68	22.02	1.83	100
Resins	115	45.22	7.83	6.96	28.7	6.09	5.22	100
Miscellaneous-chemical	192	45.31	11.98	11.98	15.1	14.06	1.56	100
Communications	157	56.69	5.1	11.46	15.29	8.92	2.55	100
Computer Hardware	49	57.14	12.24	8.16	18.37	4.08	0	100
Computer Software	121	52.89	9.92	12.4	13.22	7.44	4.13	100
Computer Peripherals	74	48.65	14.86	13.51	18.92	4.05	0	100
Information Storage	117	57.26	8.55	12.82	15.38	5.13	0.85	100
Drugs	119	39.5	12.61	5.88	16.81	19.33	5.88	100
Surgery & Medical Instruments	83	53.01	14.46	9.64	7.23	14.46	1.2	100
Biotechnology	80	23.75	8.75	13.75	13.75	26.25	13.75	100
Miscellaneous-Drug&Med	44	59.09	9.09	2.27	18.18	6.82	4.55	100
Electrical Devices	91	58.24	14.29	12.09	10.99	4.4	0	100
Electrical Lighting	95	41.05	9.47	15.79	23.16	6.32	4.21	100
Measuring & Testing	107	49.53	5.61	5.61	21.5	11.21	6.54	100
Nuclears & X-rays	71	46.48	15.49	7.04	15.49	14.08	1.41	100
Power Systems	165	38.79	11.52	11.52	21.21	15.76	1.21	100
Semiconductor Devices	128	47.66	14.06	10.16	17.19	9.38	1.56	100
Miscellaneous-Elec.	116	56.9	9.48	12.93	18.1	2.59	0	100
Materials Processing & Handling	92	45.65	10.87	10.87	21.74	9.78	1.09	100
Metal Working	135	41.48	16.3	12.59	17.78	10.37	1.48	100
Motors, Engines & Parts	138	49.28	10.14	15.22	18.12	5.07	2.17	100
Optics	95	45.26	13.68	8.42	25.26	6.32	1.05	100
Transportation	67	49.25	19.4	13.43	14.93	2.99	0	100
Miscellaneous Mechanical	117	53.85	12.82	9.4	17.95	5.98	0	100
Agriculture, Husbandry, Food	82	39.02	12.2	12.2	15.85	18.29	2.44	100
Apparel & Textile	64	53.13	9.38	18.75	12.5	4.69	1.56	100
Earth Working & Wells	15	60	6.67	13.33	13.33	0	6.67	100
Furniture, House Fixtures	43	46.51	18.6	16.28	11.63	4.65	2.33	100
Heating	82	47.56	9.76	13.41	17.07	12.2	0	100
Pipes & Joints	59	49.15	18.64	6.78	16.95	3.39	5.08	100
Receptacles	53	56.6	15.09	7.55	16.98	3.77	0	100
Miscellaneous-Others	217	48.39	12.9	13.82	13.82	8.76	2.3	100
US-JP weighted		48.06	11.26	11.29	16.96	10	2.42	100
JP weighted		48.35	11.28	11.65	17.2	9.37	2.14	100

Non-University Public Research Organization（大学以外の公的研究機関）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1711	403	416	603	271	48	206
Agriculture, Food, Textiles	60	23	6	5	13	7	2	4
Coating	80	28	8	15	14	8	2	5
Gas	45	19	7	6	7	3	0	3
Organic Compounds	120	57	10	10	16	13	2	12
Resins	125	52	8	11	35	6	3	10
Miscellaneous-chemical	208	90	24	22	40	13	2	17
Communications	160	89	10	17	24	14	4	2
Computer Hardware	59	31	6	4	7	1	0	10
Computer Software	123	64	13	16	18	7	3	2
Computer Peripherals	76	38	11	9	13	3	0	2
Information Storage	120	67	10	15	18	7	0	3
Drugs	127	53	15	12	18	18	1	10
Surgery & Medical Instruments	85	48	11	7	10	6	1	2
Biotechnology	87	26	7	10	16	16	3	9
Miscellaneous-Drug&Med	45	28	4	0	8	3	1	1
Electrical Devices	91	54	11	12	8	5	1	0
Electrical Lighting	96	45	11	14	19	5	0	2
Measuring & Testing	111	54	7	6	23	11	5	5
Nuclears & X-rays	72	31	12	5	12	10	0	2
Power Systems	172	72	20	19	33	19	0	9
Semiconductor Devices	129	62	19	14	22	10	0	2
Miscellaneous-Elec.	120	67	12	16	16	4	1	4
Materials Processing & Handling	103	44	9	11	21	7	1	10
Metal Working	137	59	21	18	23	10	4	2
Motors, Engines & Parts	145	70	13	23	23	6	3	7
Optics	100	46	11	9	24	5	0	5
Transportation	73	34	12	11	7	2	0	7
Miscellaneous Mechanical	124	64	14	12	22	5	0	7
Agriculture, Husbandry, Food	87	33	14	11	14	10	1	4
Apparel & Textile	77	35	6	12	9	1	0	14
Earth Working & Wells	20	9	2	2	1	1	0	5
Furniture, House Fixtures	51	20	7	5	5	5	1	8
Heating	84	41	8	16	12	5	0	2
Pipes & Joints	66	27	11	4	11	3	3	7
Receptacles	55	29	7	4	10	3	0	2
Miscellaneous-Others	225	102	26	33	31	19	4	10

%	N	I did not use	1	2	3	4	5	Total
All	3452	49.57	11.67	12.05	17.47	7.85	1.39	100
Agriculture, Food, Textiles	56	41.07	10.71	8.93	23.21	12.5	3.57	100
Coating	75	37.33	10.67	20	18.67	10.67	2.67	100
Gas	42	45.24	16.67	14.29	16.67	7.14	0	100
Organic Compounds	108	52.78	9.26	9.26	14.81	12.04	1.85	100
Resins	115	45.22	6.96	9.57	30.43	5.22	2.61	100
Miscellaneous-chemical	191	47.12	12.57	11.52	20.94	6.81	1.05	100
Communications	158	56.33	6.33	10.76	15.19	8.86	2.53	100
Computer Hardware	49	63.27	12.24	8.16	14.29	2.04	0	100
Computer Software	121	52.89	10.74	13.22	14.88	5.79	2.48	100
Computer Peripherals	74	51.35	14.86	12.16	17.57	4.05	0	100
Information Storage	117	57.26	8.55	12.82	15.38	5.98	0	100
Drugs	117	45.3	12.82	10.26	15.38	15.38	0.85	100
Surgery & Medical Instruments	83	57.83	13.25	8.43	12.05	7.23	1.2	100
Biotechnology	78	33.33	8.97	12.82	20.51	20.51	3.85	100
Miscellaneous-Drug&Med	44	63.64	9.09	0	18.18	6.82	2.27	100
Electrical Devices	91	59.34	12.09	13.19	8.79	5.49	1.1	100
Electrical Lighting	94	47.87	11.7	14.89	20.21	5.32	0	100
Measuring & Testing	106	50.94	6.6	5.66	21.7	10.38	4.72	100
Nuclears & X-rays	70	44.29	17.14	7.14	17.14	14.29	0	100
Power Systems	163	44.17	12.27	11.66	20.25	11.66	0	100
Semiconductor Devices	127	48.82	14.96	11.02	17.32	7.87	0	100
Miscellaneous-Elec.	116	57.76	10.34	13.79	13.79	3.45	0.86	100
Materials Processing & Handling	93	47.31	9.68	11.83	22.58	7.53	1.08	100
Metal Working	135	43.7	15.56	13.33	17.04	7.41	2.96	100
Motors, Engines & Parts	138	50.72	9.42	16.67	16.67	4.35	2.17	100
Optics	95	48.42	11.58	9.47	25.26	5.26	0	100
Transportation	66	51.52	18.18	16.67	10.61	3.03	0	100
Miscellaneous Mechanical	117	54.7	11.97	10.26	18.8	4.27	0	100
Agriculture, Husbandry, Food	83	39.76	16.87	13.25	16.87	12.05	1.2	100
Apparel & Textile	63	55.56	9.52	19.05	14.29	1.59	0	100
Earth Working & Wells	15	60	13.33	13.33	6.67	6.67	0	100
Furniture, House Fixtures	43	46.51	16.28	11.63	11.63	11.63	2.33	100
Heating	82	50	9.76	19.51	14.63	6.1	0	100
Pipes & Joints	59	45.76	18.64	6.78	18.64	5.08	5.08	100
Receptacles	53	54.72	13.21	7.55	18.87	5.66	0	100
Miscellaneous-Others	215	47.44	12.09	15.35	14.42	8.84	1.86	100
		50.16	11.3	11.79	17.52	7.84	1.39	100
		50.23	11.31	12.05	17.39	7.68	1.34	100

US (4/7)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

A8_G Universities

		all	I did not use	1	2	3	4	5	missing
NBER	All	1,919	1,253	175	121	90	50	36	194
11	Agriculture, Food, Textiles	8	4	2	0	1	0	0	1
12	Coating	34	24	2	1	2	1	0	4
13	Gas	11	6	3	0	0	1	0	1
14	Organic Compounds	61	38	9	4	3	4	1	2
15	Resins	84	58	5	11	4	2	0	4
19	Miscellaneous-chemical	233	164	20	13	9	6	4	17
21	Communications	149	98	15	7	8	6	2	13
22	Computer Hardware	42	28	7	1	0	1	0	5
77	Computer Software	93	63	7	8	4	3	1	7
23	Computer Peripherals	33	22	4	1	1	0	0	5
24	Information Storage	42	19	5	6	3	3	1	5
31	Drugs	101	43	8	12	11	6	7	14
32	Surgery & Medical Instruments	123	79	7	4	10	4	3	16
33	Biotechnology	41	15	9	2	2	1	6	6
39	Miscellaneous-Drug&Med	29	19	3	2	1	0	2	2
41	Electrical Devices	45	34	3	1	2	0	0	5
42	Electrical Lighting	33	18	6	2	3	0	0	4
43	Measuring & Testing	62	38	3	6	3	1	1	10
44	Nuclears & X-rays	39	25	4	3	0	1	0	6
45	Power Systems	89	66	5	4	4	1	2	7
46	Semiconductor Devices	55	34	6	4	3	2	0	6
49	Miscellaneous-Elec.	32	20	2	5	1	0	0	4
51	Materials Processing & Handling	56	37	6	2	2	2	1	6
52	Metal Working	49	36	3	2	1	1	0	6
53	Motors, Engines & Parts	56	44	2	3	2	0	0	5
54	Optics	43	32	1	2	1	1	2	4
55	Transportation	33	24	2	2	0	0	1	4
59	Miscellaneous Mechanical	42	31	3	4	0	0	0	4
61	Agriculture, Husbandry, Food	14	5	2	1	2	0	1	3
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	2	1	0	0	0	1
66	Heating	8	5	0	0	0	0	1	2
67	Pipes & Joints	13	11	0	1	1	0	0	0
68	Receptacles	20	15	2	1	1	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

A8_H Governments research organization

		all	I did not use	1	2	3	4	5	missing
NBER	All	1,919	1,388	168	81	52	21	12	197
11	Agriculture, Food, Textiles	8	5	2	0	0	0	0	1
12	Coating	34	25	2	0	1	1	0	5
13	Gas	11	6	4	0	0	0	0	1
14	Organic Compounds	61	46	8	0	4	0	0	3
15	Resins	84	63	6	7	2	1	0	5
19	Miscellaneous-chemical	233	176	15	13	5	2	2	20
21	Communications	149	106	18	7	4	0	1	13
22	Computer Hardware	42	31	4	0	1	1	1	4
77	Computer Software	93	77	6	2	2	0	0	6
23	Computer Peripherals	33	24	4	0	0	0	0	5
24	Information Storage	42	27	5	2	1	0	0	7
31	Drugs	101	56	15	7	5	3	1	14
32	Surgery & Medical Instruments	123	87	10	6	2	2	0	16
33	Biotechnology	41	16	10	2	3	1	3	6
39	Miscellaneous-Drug&Med	29	24	1	2	0	0	0	2
41	Electrical Devices	45	36	2	1	2	0	0	4
42	Electrical Lighting	33	18	4	2	4	1	0	4
43	Measuring & Testing	62	45	3	3	0	1	0	10
44	Nuclears & X-rays	39	28	2	1	1	1	0	6
45	Power Systems	89	68	4	5	2	3	1	6
46	Semiconductor Devices	55	37	8	1	2	0	1	6
49	Miscellaneous-Elec.	32	25	2	1	0	0	0	4
51	Materials Processing & Handling	56	43	4	2	1	0	0	6
52	Metal Working	49	38	2	3	0	0	0	6
53	Motors, Engines & Parts	56	44	3	2	2	0	0	5
54	Optics	43	34	2	1	1	0	0	5
55	Transportation	33	25	2	1	1	0	0	4
59	Miscellaneous Mechanical	42	32	2	2	1	1	0	4
61	Agriculture, Husbandry, Food	14	7	2	1	1	1	0	2
63	Apparel & Textile	9	8	0	0	0	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	5	2	1	0	0	0	1
66	Heating	8	5	0	0	0	0	1	2
67	Pipes & Joints	13	11	1	1	0	0	0	0
68	Receptacles	20	15	3	0	1	0	0	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1725	72.64	10.14	7.01	5.22	2.90	2.09	100
11	Agriculture, Food, Textiles	7	57.14	28.57	0.00	14.29	0.00	0.00	100
12	Coating	30	80.00	6.67	3.33	6.67	3.33	0.00	100
13	Gas	10	60.00	30.00	0.00	0.00	10.00	0.00	100
14	Organic Compounds	59	64.41	15.25	6.78	5.08	6.78	1.69	100
15	Resins	80	72.50	6.25	13.75	5.00	2.50	0.00	100
19	Miscellaneous-chemical	216	75.93	9.26	6.02	4.17	2.78	1.85	100
21	Communications	136	72.06	11.03	5.15	5.88	4.41	1.47	100
22	Computer Hardware	37	75.68	18.92	2.70	0.00	2.70	0.00	100
77	Computer Software	86	73.26	8.14	9.30	4.65	3.49	1.16	100
23	Computer Peripherals	28	78.57	14.29	3.57	3.57	0.00	0.00	100
24	Information Storage	37	51.35	13.51	16.22	8.11	8.11	2.70	100
31	Drugs	87	49.43	9.20	13.79	12.64	6.90	8.05	100
32	Surgery & Medical Instruments	107	73.83	6.54	3.74	9.35	3.74	2.80	100
33	Biotechnology	35	42.86	25.71	5.71	5.71	2.86	17.14	100
39	Miscellaneous-Drug&Med	27	70.37	11.11	7.41	3.70	0.00	7.41	100
41	Electrical Devices	40	85.00	7.50	2.50	5.00	0.00	0.00	100
42	Electrical Lighting	29	62.07	20.69	6.90	10.34	0.00	0.00	100
43	Measuring & Testing	52	73.08	5.77	11.54	5.77	1.92	1.92	100
44	Nuclears & X-rays	33	75.76	12.12	9.09	0.00	3.03	0.00	100
45	Power Systems	82	80.49	6.10	4.88	4.88	1.22	2.44	100
46	Semiconductor Devices	49	69.39	12.24	8.16	6.12	4.08	0.00	100
49	Miscellaneous-Elec.	28	71.43	7.14	17.86	3.57	0.00	0.00	100
51	Materials Processing & Handling	50	74.00	12.00	4.00	4.00	4.00	2.00	100
52	Metal Working	43	83.72	6.98	4.65	2.33	2.33	0.00	100
53	Motors, Engines & Parts	51	86.27	3.92	5.88	3.92	0.00	0.00	100
54	Optics	39	82.05	2.56	5.13	2.56	2.56	5.13	100
55	Transportation	29	82.76	6.90	6.90	0.00	0.00	3.45	100
59	Miscellaneous Mechanical	38	81.58	7.89	10.53	0.00	0.00	0.00	100
61	Agriculture, Husbandry, Food	11	45.45	18.18	9.09	18.18	0.00	9.09	100
63	Apparel & Textile	8	100.00	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	8	62.50	25.00	12.50	0.00	0.00	0.00	100
66	Heating	6	83.33	0.00	0.00	0.00	0.00	16.67	100
67	Pipes & Joints	13	84.62	0.00	7.69	7.69	0.00	0.00	100
68	Receptacles	19	78.95	10.53	5.26	5.26	0.00	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**71.87**	**9.93**	**7.51**	**5.48**	**3.06**	**2.16**	100

		N	I did not use	1	2	3	4	5	Total
NBER	All	1722	80.6	9.76	4.70	3.02	1.22	0.70	100
11	Agriculture, Food, Textiles	7	71.43	28.57	0.00	0.00	0.00	0.00	100
12	Coating	29	86.21	6.90	0.00	3.45	3.45	0.00	100
13	Gas	10	60	40.00	0.00	0.00	0.00	0.00	100
14	Organic Compounds	58	79.31	13.79	0.00	6.90	0.00	0.00	100
15	Resins	79	79.75	7.59	8.86	2.53	1.27	0.00	100
19	Miscellaneous-chemical	213	82.63	7.04	6.10	2.35	0.94	0.94	100
21	Communications	136	77.94	13.24	5.15	2.94	0.00	0.74	100
22	Computer Hardware	38	81.58	10.53	0.00	2.63	2.63	2.63	100
77	Computer Software	87	88.51	6.90	2.30	2.30	0.00	0.00	100
23	Computer Peripherals	28	85.71	14.29	0.00	0.00	0.00	0.00	100
24	Information Storage	35	77.14	14.29	5.71	2.86	0.00	0.00	100
31	Drugs	87	64.37	17.24	8.05	5.75	3.45	1.15	100
32	Surgery & Medical Instruments	107	81.31	9.35	5.61	1.87	1.87	0.00	100
33	Biotechnology	35	45.71	28.57	5.71	8.57	2.86	8.57	100
39	Miscellaneous-Drug&Med	27	88.89	3.70	7.41	0.00	0.00	0.00	100
41	Electrical Devices	41	87.8	4.88	2.44	4.88	0.00	0.00	100
42	Electrical Lighting	29	62.07	13.79	6.90	13.79	3.45	0.00	100
43	Measuring & Testing	52	86.54	5.77	5.77	0.00	1.92	0.00	100
44	Nuclears & X-rays	33	84.85	6.06	3.03	3.03	3.03	0.00	100
45	Power Systems	83	81.93	4.82	6.02	2.41	3.61	1.20	100
46	Semiconductor Devices	49	75.51	16.33	2.04	4.08	0.00	2.04	100
49	Miscellaneous-Elec.	28	89.29	7.14	3.57	0.00	0.00	0.00	100
51	Materials Processing & Handling	50	86	8.00	4.00	2.00	0.00	0.00	100
52	Metal Working	43	88.37	4.65	6.98	0.00	0.00	0.00	100
53	Motors, Engines & Parts	51	86.27	5.88	3.92	3.92	0.00	0.00	100
54	Optics	38	89.47	5.26	2.63	2.63	0.00	0.00	100
55	Transportation	29	86.21	6.90	3.45	3.45	0.00	0.00	100
59	Miscellaneous Mechanical	38	84.21	5.26	5.26	2.63	2.63	0.00	100
61	Agriculture, Husbandry, Food	12	58.33	16.67	8.33	8.33	8.33	0.00	100
63	Apparel & Textile	8	100	0.00	0.00	0.00	0.00	0.00	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	8	62.5	25.00	12.50	0.00	0.00	0.00	100
66	Heating	6	83.33	0.00	0.00	0.00	0.00	16.67	100
67	Pipes & Joints	13	84.62	7.69	7.69	0.00	0.00	0.00	100
68	Receptacles	19	78.95	15.79	0.00	5.26	0.00	0.00	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
			80.56	**9.91**	**4.77**	**3.01**	**1.16**	**0.59**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

Customers or Product users(顧客・製品ユーザー)

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	996	207	244	484	977	585	165
Agriculture, Food, Textiles	60	12	4	3	9	16	12	4
Coating	80	15	4	4	7	24	21	5
Gas	45	11	3	1	6	13	9	2
Organic Compounds	120	39	8	6	17	21	15	14
Resins	125	28	7	6	26	27	23	8
Miscellaneous-chemical	208	50	18	11	20	52	43	14
Communications	160	61	7	15	22	38	15	2
Computer Hardware	59	18	4	3	4	14	6	10
Computer Software	123	39	3	9	17	28	25	2
Computer Peripherals	76	27	6	7	8	13	13	2
Information Storage	120	45	7	11	20	20	14	3
Drugs	127	50	13	9	17	18	11	9
Surgery & Medical Instruments	85	24	6	3	6	23	21	2
Biotechnology	87	26	12	14	10	15	2	8
Miscellaneous-Drug&Med	45	12	3	0	9	9	11	1
Electrical Devices	91	22	4	3	20	25	17	0
Electrical Lighting	96	24	5	9	20	23	14	1
Measuring & Testing	111	32	5	6	15	35	14	4
Nuclears & X-rays	72	23	6	6	7	19	10	1
Power Systems	172	44	11	14	26	46	23	8
Semiconductor Devices	129	39	10	10	15	37	17	1
Miscellaneous-Elec.	120	38	6	5	17	36	15	3
Materials Processing & Handling	103	18	2	5	17	41	12	8
Metal Working	137	36	11	10	17	35	27	1
Motors, Engines & Parts	145	30	6	14	22	54	13	6
Optics	100	31	6	7	20	15	18	3
Transportation	73	13	4	6	9	22	14	5
Miscellaneous Mechanical	124	32	4	7	18	39	19	5
Agriculture, Husbandry, Food	87	21	5	5	9	26	16	5
Apparel & Textile	77	14	2	4	6	24	21	6
Earth Working & Wells	20	4	2	0	0	6	4	4
Furniture, House Fixtures	51	11	3	4	3	15	10	5
Heating	84	28	1	9	14	20	11	1
Pipes & Joints	66	15	2	2	4	26	14	3
Receptacles	55	13	4	0	6	21	9	2
Miscellaneous-Others	225	51	3	16	21	81	46	7

%	N	I did not use	1	2	3	4	5	Total
All	3493	28.51	5.93	6.99	13.86	27.97	16.75	100
Agriculture, Food, Textiles	56	21.43	7.14	5.36	16.07	28.57	21.43	100
Coating	75	20	5.33	5.33	9.33	32	28	100
Gas	43	25.58	6.98	2.33	13.95	30.23	20.93	100
Organic Compounds	106	36.79	7.55	5.66	16.04	19.81	14.15	100
Resins	117	23.93	5.98	5.13	22.22	23.08	19.66	100
Miscellaneous-chemical	194	25.77	9.28	5.67	10.31	26.8	22.16	100
Communications	158	38.61	4.43	9.49	13.92	24.05	9.49	100
Computer Hardware	49	36.73	8.16	6.12	8.16	28.57	12.24	100
Computer Software	121	32.23	2.48	7.44	14.05	23.14	20.66	100
Computer Peripherals	74	36.49	8.11	9.46	10.81	17.57	17.57	100
Information Storage	117	38.46	5.98	9.4	17.09	17.09	11.97	100
Drugs	118	42.37	11.02	7.63	14.41	15.25	9.32	100
Surgery & Medical Instruments	83	28.92	7.23	3.61	7.23	27.71	25.3	100
Biotechnology	79	32.91	15.19	17.72	12.66	18.99	2.53	100
Miscellaneous-Drug&Med	44	27.27	6.82	0	20.45	20.45	25	100
Electrical Devices	91	24.18	4.4	3.3	21.98	27.47	18.68	100
Electrical Lighting	95	25.26	5.26	9.47	21.05	24.21	14.74	100
Measuring & Testing	107	29.91	4.67	5.61	14.02	32.71	13.08	100
Nuclears & X-rays	71	32.39	8.45	8.45	9.86	26.76	14.08	100
Power Systems	164	26.83	6.71	8.54	15.85	28.05	14.02	100
Semiconductor Devices	128	30.47	7.81	7.81	11.72	28.91	13.28	100
Miscellaneous-Elec.	117	32.48	5.13	4.27	14.53	30.77	12.82	100
Materials Processing & Handling	95	18.95	2.11	5.26	17.89	43.16	12.63	100
Metal Working	136	26.47	8.09	7.35	12.5	25.74	19.85	100
Motors, Engines & Parts	139	21.58	4.32	10.07	15.83	38.85	9.35	100
Optics	97	31.96	6.19	7.22	20.62	15.46	18.56	100
Transportation	68	19.12	5.88	8.82	13.24	32.35	20.59	100
Miscellaneous Mechanical	119	26.89	3.36	5.88	15.13	32.77	15.97	100
Agriculture, Husbandry, Food	82	25.61	6.1	6.1	10.98	31.71	19.51	100
Apparel & Textile	71	19.72	2.82	5.63	8.45	33.8	29.58	100
Earth Working & Wells	16	25	12.5	0	0	37.5	25	100
Furniture, House Fixtures	46	23.91	6.52	8.7	6.52	32.61	21.74	100
Heating	83	33.73	1.2	10.84	16.87	24.1	13.25	100
Pipes & Joints	63	23.81	3.17	3.17	6.35	41.27	22.22	100
Receptacles	53	24.53	7.55	0	11.32	39.62	16.98	100
Miscellaneous-Others	218	23.39	1.38	7.34	9.63	37.16	21.1	100
US-JP weighted		29.42	6.02	7.12	13.98	27	16.46	100
JP weighted		28.82	5.76	7.26	14.14	27.63	16.4	100

Suppliers(サプライヤー)

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1141	286	320	646	788	279	198
Agriculture, Food, Textiles	60	14	5	10	11	13	4	3
Coating	80	15	4	10	15	19	11	6
Gas	45	14	2	1	9	15	1	3
Organic Compounds	120	44	11	9	19	20	3	14
Resins	125	28	10	12	20	32	14	9
Miscellaneous-chemical	208	56	21	16	30	50	19	16
Communications	160	74	9	14	27	23	10	3
Computer Hardware	59	25	2	6	8	8	0	10
Computer Software	123	52	10	7	25	21	6	2
Computer Peripherals	76	27	6	8	13	16	4	2
Information Storage	120	48	10	7	21	22	9	3
Drugs	127	51	16	12	21	17	3	7
Surgery & Medical Instruments	85	38	8	5	9	12	12	1
Biotechnology	87	27	15	10	13	11	2	9
Miscellaneous-Drug&Med	45	19	2	1	9	10	1	3
Electrical Devices	91	29	6	7	20	21	8	0
Electrical Lighting	96	28	8	11	20	17	10	2
Measuring & Testing	111	44	7	5	27	17	7	4
Nuclears & X-rays	72	27	12	6	12	11	4	0
Power Systems	172	45	11	17	27	51	13	8
Semiconductor Devices	129	40	15	11	19	30	12	2
Miscellaneous-Elec.	120	42	4	8	24	29	9	4
Materials Processing & Handling	103	28	2	10	26	23	5	9
Metal Working	137	41	15	8	32	26	13	2
Motors, Engines & Parts	145	30	8	15	22	47	17	6
Optics	100	26	8	7	25	20	9	5
Transportation	73	17	8	8	7	19	7	7
Miscellaneous Mechanical	124	34	10	12	21	30	10	7
Agriculture, Husbandry, Food	87	28	5	13	8	17	9	7
Apparel & Textile	77	20	4	8	10	14	7	14
Earth Working & Wells	20	2	2	2	3	5	1	5
Furniture, House Fixtures	51	12	3	3	6	13	7	7
Heating	84	22	4	9	17	23	7	2
Pipes & Joints	66	16	6	2	13	17	5	7
Receptacles	55	17	4	4	11	13	4	2
Miscellaneous-Others	225	61	13	26	46	56	16	7

%	N	I did not use	1	2	3	4	5	Total
All	3460	32.98	8.27	9.25	18.67	22.77	8.06	100
Agriculture, Food, Textiles	57	24.56	8.77	17.54	19.3	22.81	7.02	100
Coating	74	20.27	5.41	13.51	20.27	25.68	14.86	100
Gas	42	33.33	4.76	2.38	21.43	35.71	2.38	100
Organic Compounds	106	41.51	10.38	8.49	17.92	18.87	2.83	100
Resins	116	24.14	8.62	10.34	17.24	27.59	12.07	100
Miscellaneous-chemical	192	29.17	10.94	8.33	15.63	26.04	9.9	100
Communications	157	47.13	5.73	8.92	17.2	14.65	6.37	100
Computer Hardware	49	51.02	4.08	12.24	16.33	16.33	0	100
Computer Software	121	42.98	8.26	5.79	20.66	17.36	4.96	100
Computer Peripherals	74	36.49	8.11	10.81	17.57	21.62	5.41	100
Information Storage	117	41.03	8.55	5.98	17.95	18.8	7.69	100
Drugs	120	42.5	13.33	10	17.5	14.17	2.5	100
Surgery & Medical Instruments	84	45.24	9.52	5.95	10.71	14.29	14.29	100
Biotechnology	78	34.62	19.23	12.82	16.67	14.1	2.56	100
Miscellaneous-Drug&Med	42	45.24	4.76	2.38	21.43	23.81	2.38	100
Electrical Devices	91	31.87	6.59	7.69	21.98	23.08	8.79	100
Electrical Lighting	94	29.79	8.51	11.7	21.28	18.09	10.64	100
Measuring & Testing	107	41.12	6.54	4.67	25.23	15.89	6.54	100
Nuclears & X-rays	72	37.5	16.67	8.33	16.67	15.28	5.56	100
Power Systems	164	27.44	6.71	10.37	16.46	31.1	7.93	100
Semiconductor Devices	127	31.5	11.81	8.66	14.96	23.62	9.45	100
Miscellaneous-Elec.	116	36.21	3.45	6.9	20.69	25	7.76	100
Materials Processing & Handling	94	29.79	2.13	10.64	27.66	24.47	5.32	100
Metal Working	135	30.37	11.11	5.93	23.7	19.26	9.63	100
Motors, Engines & Parts	139	21.58	5.76	10.79	15.83	33.81	12.23	100
Optics	95	27.37	8.42	7.37	26.32	21.05	9.47	100
Transportation	66	25.76	12.12	12.12	10.61	28.79	10.61	100
Miscellaneous Mechanical	117	29.06	8.55	10.26	17.95	25.64	8.55	100
Agriculture, Husbandry, Food	80	35	6.25	16.25	10	21.25	11.25	100
Apparel & Textile	63	31.75	6.35	12.7	15.87	22.22	11.11	100
Earth Working & Wells	15	13.33	13.33	13.33	20	33.33	6.67	100
Furniture, House Fixtures	44	27.27	6.82	6.82	13.64	29.55	15.91	100
Heating	82	26.83	4.88	10.98	20.73	28.05	8.54	100
Pipes & Joints	59	27.12	10.17	3.39	22.03	28.81	8.47	100
Receptacles	53	32.08	7.55	7.55	20.75	24.53	7.55	100
Miscellaneous-Others	218	27.98	5.96	11.93	21.1	25.69	7.34	100
US-JP weighted		34.23	8.35	9.05	18.49	22	7.88	100
JP weighted		33.15	8.07	9.13	18.7	22.87	8.08	100

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

		A8_I Customers or product users								A8_J Suppliers							
		all	I did not use	1	2	3	4	5	missing	all	I did not use	1	2	3	4	5	missing
NBER	All	1,919	905	156	156	169	186	157	190	1,919	1,073	176	151	165	106	57	191
11	Agriculture, Food, Textiles	8	3	1	1	1	0	1	1	8	4	2	0	1	0	0	1
12	Coating	34	10	1	2	5	5	7	4	34	13	3	3	7	3	3	2
13	Gas	11	2	3	2	0	2	1	1	11	2	5	2	1	0	0	1
14	Organic Compounds	61	35	6	4	5	5	3	3	61	36	8	6	7	2	0	2
15	Resins	84	38	7	9	9	6	11	4	84	43	11	11	7	5	3	4
19	Miscellaneous-chemical	233	107	13	16	24	32	25	16	233	129	16	19	23	16	12	18
21	Communications	149	75	13	14	13	12	9	13	149	100	12	8	10	5	1	13
22	Computer Hardware	42	22	4	4	2	1	4	5	42	27	4	1	3	1	1	5
77	Computer Software	93	45	6	5	9	14	8	6	93	72	4	6	3	0	2	6
23	Computer Peripherals	33	19	6	2	2	0	0	4	33	16	4	4	3	1	0	5
24	Information Storage	42	21	6	4	1	3	1	6	42	23	6	3	2	0	2	6
31	Drugs	101	66	7	6	3	3	2	14	101	70	6	4	5	0	2	14
32	Surgery & Medical Instruments	123	52	9	9	12	12	14	15	123	62	8	10	12	10	4	17
33	Biotechnology	41	22	6	2	2	3	0	6	41	20	9	2	3	1	0	6
39	Miscellaneous-Drug&Med	29	12	3	2	4	5	1	2	29	18	4	2	1	1	1	2
41	Electrical Devices	45	14	2	4	5	8	8	4	45	24	3	5	2	7	0	4
42	Electrical Lighting	33	13	3	10	0	0	3	4	33	18	5	2	1	2	1	4
43	Measuring & Testing	62	26	7	6	5	6	2	10	62	33	7	2	4	5	1	10
44	Nuclears & X-rays	39	21	2	3	2	1	4	6	39	20	3	2	6	1	1	6
45	Power Systems	89	48	6	8	9	7	4	7	89	48	5	7	10	9	2	8
46	Semiconductor Devices	55	31	8	1	2	6	1	6	55	33	10	1	2	3	0	6
49	Miscellaneous-Elec.	32	12	5	1	6	3	1	4	32	16	2	3	6	0	2	3
51	Materials Processing & Handling	56	26	3	7	3	4	7	6	56	26	6	6	4	4	4	6
52	Metal Working	49	25	2	4	4	7	2	5	49	28	2	4	3	4	2	6
53	Motors, Engines & Parts	56	28	1	6	5	8	2	6	56	29	2	5	6	5	3	6
54	Optics	43	21	4	5	4	2	3	4	43	24	1	5	3	3	2	5
55	Transportation	33	16	1	3	2	5	2	4	33	16	2	2	5	4	0	4
59	Miscellaneous Mechanical	42	18	2	2	4	7	5	4	42	23	5	5	3	0	2	4
61	Agriculture, Husbandry, Food	14	4	1	1	1	2	3	2	14	4	1	2	3	2	0	2
63	Apparel & Textile	9	3	2	0	0	0	3	1	9	4	1	1	2	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	5	1	0	0	1	1	1	1
65	Furniture, House Fixtures	9	3	1	0	2	0	3	0	9	3	2	0	2	1	1	0
66	Heating	8	1	0	1	2	2	0	2	8	4	0	0	2	0	0	2
67	Pipes & Joints	13	8	1	0	1	2	1	0	13	9	1	1	0	1	1	0
68	Receptacles	20	8	2	2	4	1	2	1	20	11	0	1	4	2	1	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	123	64	16	16	8	7	2	10

		%	N	I did not use	1	2	3	4	5	Total	N	I did not use	1	2	3	4	5	Total
NBER	All		1729	52.34	9.02	9.02	9.77	10.76	9.08	100	1728	62.09	10.19	8.74	9.55	6.13	3.30	100
11	Agriculture, Food, Textiles		7	42.86	14.29	14.29	14.29	0	14.29	100	7	57.14	28.57	0.00	14.29	0.00	0.00	100
12	Coating		30	33.33	3.33	6.67	16.67	16.67	23.33	100	32	40.63	9.38	9.38	21.88	9.38	9.38	100
13	Gas		10	20	30	20	0	20	10	100	10	20.00	50.00	20.00	10.00	0.00	0.00	100
14	Organic Compounds		58	60.34	10.34	6.9	8.62	8.62	5.17	100	59	61.02	13.56	10.17	11.86	3.39	0.00	100
15	Resins		80	47.5	8.75	11.25	11.25	7.5	13.75	100	80	53.75	13.75	13.75	8.75	6.25	3.75	100
19	Miscellaneous-chemical		217	49.31	5.99	7.37	11.06	14.75	11.52	100	215	60.00	7.44	8.84	10.70	7.44	5.58	100
21	Communications		136	55.15	9.56	10.29	9.56	8.82	6.62	100	136	73.53	8.82	5.88	7.35	3.68	0.74	100
22	Computer Hardware		37	59.46	10.81	10.81	5.41	2.7	10.81	100	37	72.97	10.81	2.70	8.11	2.70	2.70	100
77	Computer Software		87	51.72	6.9	5.75	10.34	16.09	9.2	100	87	82.76	4.60	6.90	3.45	0.00	2.30	100
23	Computer Peripherals		29	65.52	20.69	6.9	6.9	0	0	100	28	57.14	14.29	14.29	10.71	3.57	0.00	100
24	Information Storage		36	58.33	16.67	11.11	2.78	8.33	2.78	100	36	63.89	16.67	8.33	5.56	0.00	5.56	100
31	Drugs		87	75.86	8.05	6.9	3.45	3.45	2.3	100	87	80.46	6.90	4.60	5.75	0.00	2.30	100
32	Surgery & Medical Instruments		108	48.15	8.33	8.33	11.11	11.11	12.96	100	106	58.49	7.55	9.43	11.32	9.43	3.77	100
33	Biotechnology		35	62.86	17.14	5.71	5.71	8.57	0	100	35	57.14	25.71	5.71	8.57	2.86	0.00	100
39	Miscellaneous-Drug&Med		27	44.44	11.11	7.41	14.81	18.52	3.7	100	27	66.67	14.81	7.41	3.70	3.70	3.70	100
41	Electrical Devices		41	34.15	4.88	9.76	12.2	19.51	19.51	100	41	58.54	7.32	12.20	4.88	17.07	0.00	100
42	Electrical Lighting		29	44.83	10.34	34.48	0	0	10.34	100	29	62.07	17.24	6.90	3.45	6.90	3.45	100
43	Measuring & Testing		52	50	13.46	11.54	9.62	11.54	3.85	100	52	63.46	13.46	3.85	7.69	9.62	1.92	100
44	Nuclears & X-rays		33	63.64	6.06	9.09	6.06	3.03	12.12	100	33	60.61	9.09	6.06	18.18	3.03	3.03	100
45	Power Systems		82	58.54	7.32	9.76	10.98	8.54	4.88	100	81	59.26	6.17	8.64	12.35	11.11	2.47	100
46	Semiconductor Devices		49	63.27	16.33	2.04	4.08	12.24	2.04	100	49	67.35	20.41	2.04	4.08	6.12	0.00	100
49	Miscellaneous-Elec.		28	42.86	17.86	3.57	21.43	10.71	3.57	100	29	55.17	6.90	10.34	20.69	0.00	6.90	100
51	Materials Processing & Handling		50	52	6	14	6	8	14	100	50	52.00	12.00	12.00	8.00	8.00	8.00	100
52	Metal Working		44	56.82	4.55	9.09	9.09	15.91	4.55	100	43	65.12	4.65	9.30	6.98	9.30	4.65	100
53	Motors, Engines & Parts		50	56	2	12	10	16	4	100	50	58.00	4.00	10.00	12.00	10.00	6.00	100
54	Optics		39	53.85	10.26	12.82	10.26	5.13	7.69	100	38	63.16	2.63	13.16	7.89	7.89	5.26	100
55	Transportation		29	55.17	3.45	10.34	6.9	17.24	6.9	100	29	55.17	6.90	6.90	17.24	13.79	0.00	100
59	Miscellaneous Mechanical		38	47.37	5.26	5.26	10.53	18.42	13.16	100	38	60.53	13.16	13.16	7.89	0.00	5.26	100
61	Agriculture, Husbandry, Food		12	33.33	8.33	8.33	8.33	16.67	25	100	12	33.33	8.33	16.67	25.00	16.67	0.00	100
63	Apparel & Textile		8	37.5	25	0	0	0	37.5	100	8	50.00	12.50	12.50	25.00	0.00	0.00	100
64	Earth Working & Wells		XX	XX	XX	XX	XX	XX	XX	XX	4	25.00	0.00	0.00	25.00	25.00	25.00	100
65	Furniture, House Fixtures		9	33.33	11.11	0	22.22	0	33.33	100	9	33.33	22.22	0.00	22.22	11.11	11.11	100
66	Heating		6	16.67	0	16.67	33.33	33.33	0	100	6	66.67	0.00	0.00	33.33	0.00	0.00	100
67	Pipes & Joints		13	61.54	7.69	0	7.69	15.38	7.69	100	13	69.23	7.69	7.69	0.00	7.69	7.69	100
68	Receptacles		19	42.11	10.53	10.53	21.05	5.26	10.53	100	19	57.89	0.00	5.26	21.05	10.53	5.26	100
69	Miscellaneous-Others		XX	XX	XX	XX	XX	XX	XX	XX	113	56.64	14.16	14.16	7.08	6.19	1.77	100
	US-JP weighted			**53.09**	**9.21**	**9.28**	**9.32**	**10.51**	**8.59**	100		**62.76**	**10.13**	**8.54**	**9.34**	**5.85**	**3.38**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)
（研究を実施するために使用した知識の重要度）

Competitors (e.g. knowledge from its products)（競争相手）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1100	246	260	641	917	298	196
Agriculture, Food, Textiles	60	16	1	6	14	15	4	4
Coating	80	21	4	7	14	23	6	5
Gas	45	10	5	4	4	12	6	4
Organic Compounds	120	39	12	7	16	26	7	13
Resins	125	36	5	10	30	24	11	9
Miscellaneous-chemical	208	60	18	17	42	42	13	16
Communications	160	61	5	10	27	40	14	3
Computer Hardware	59	23	3	0	6	13	4	10
Computer Software	123	45	7	7	22	28	11	3
Computer Peripherals	76	24	8	6	9	17	10	2
Information Storage	120	38	6	6	21	34	12	3
Drugs	127	40	10	7	18	30	15	7
Surgery & Medical Instruments	85	34	7	6	12	18	5	3
Biotechnology	87	22	12	5	11	24	4	9
Miscellaneous-Drug&Med	45	19	2	1	7	11	4	1
Electrical Devices	91	28	5	7	8	30	13	0
Electrical Lighting	96	27	4	6	23	25	9	2
Measuring & Testing	111	38	5	7	17	34	5	5
Nuclears & X-rays	72	25	8	3	10	22	3	1
Power Systems	172	44	12	19	31	45	12	9
Semiconductor Devices	129	49	11	8	29	19	10	3
Miscellaneous-Elec.	120	41	8	6	24	27	12	2
Materials Processing & Handling	103	25	2	7	20	27	13	9
Metal Working	137	43	11	11	30	35	5	2
Motors, Engines & Parts	145	32	11	13	25	47	12	5
Optics	100	26	6	5	28	25	6	4
Transportation	73	12	6	6	10	27	7	5
Miscellaneous Mechanical	124	38	7	9	29	24	10	7
Agriculture, Husbandry, Food	87	28	7	7	11	22	5	7
Apparel & Textile	77	18	3	8	9	21	5	13
Earth Working & Wells	20	2	1	0	2	6	4	5
Furniture, House Fixtures	51	12	2	3	6	14	7	7
Heating	84	25	7	6	20	19	6	1
Pipes & Joints	66	16	6	6	6	19	7	6
Receptacles	55	18	6	2	8	17	2	2
Miscellaneous-Others	225	65	13	22	42	55	19	9

%	N	I did not use	1	2	3	4	5	Total
All	3462	31.77	7.11	7.51	18.52	26.49	8.61	100
Agriculture, Food, Textiles	56	28.57	1.79	10.71	25	26.79	7.14	100
Coating	75	28	5.33	9.33	18.67	30.67	8	100
Gas	41	24.39	12.2	9.76	9.76	29.27	14.63	100
Organic Compounds	107	36.45	11.21	6.54	14.95	24.3	6.54	100
Resins	116	31.03	4.31	8.62	25.86	20.69	9.48	100
Miscellaneous-chemical	192	31.25	9.38	8.85	21.88	21.88	6.77	100
Communications	157	38.85	3.18	6.37	17.2	25.48	8.92	100
Computer Hardware	49	46.94	6.12	0	12.24	26.53	8.16	100
Computer Software	120	37.5	5.83	5.83	18.33	23.33	9.17	100
Computer Peripherals	74	32.43	10.81	8.11	12.16	22.97	13.51	100
Information Storage	117	32.48	5.13	5.13	17.95	29.06	10.26	100
Drugs	120	33.33	8.33	5.83	15	25	12.5	100
Surgery & Medical Instruments	82	41.46	8.54	7.32	14.63	21.95	6.1	100
Biotechnology	78	28.21	15.38	6.41	14.1	30.77	5.13	100
Miscellaneous-Drug&Med	44	43.18	4.55	2.27	15.91	25	9.09	100
Electrical Devices	91	30.77	5.49	7.69	8.79	32.97	14.29	100
Electrical Lighting	94	28.72	4.26	6.38	24.47	26.6	9.57	100
Measuring & Testing	106	35.85	4.72	6.6	16.04	32.08	4.72	100
Nuclears & X-rays	71	35.21	11.27	4.23	14.08	30.99	4.23	100
Power Systems	163	26.99	7.36	11.66	19.02	27.61	7.36	100
Semiconductor Devices	126	38.89	8.73	6.35	23.02	15.08	7.94	100
Miscellaneous-Elec.	118	34.75	6.78	5.08	20.34	22.88	10.17	100
Materials Processing & Handling	94	26.6	2.13	7.45	21.28	28.72	13.83	100
Metal Working	135	31.85	8.15	8.15	22.22	25.93	3.7	100
Motors, Engines & Parts	140	22.86	7.86	9.29	17.86	33.57	8.57	100
Optics	96	27.08	6.25	5.21	29.17	26.04	6.25	100
Transportation	68	17.65	8.82	8.82	14.71	39.71	10.29	100
Miscellaneous Mechanical	117	32.48	5.98	7.69	24.79	20.51	8.55	100
Agriculture, Husbandry, Food	80	35	8.75	8.75	13.75	27.5	6.25	100
Apparel & Textile	64	28.13	4.69	12.5	14.06	32.81	7.81	100
Earth Working & Wells	15	13.33	6.67	0	13.33	40	26.67	100
Furniture, House Fixtures	44	27.27	4.55	6.82	13.64	31.82	15.91	100
Heating	83	30.12	8.43	7.23	24.1	22.89	7.23	100
Pipes & Joints	60	26.67	10	10	10	31.67	11.67	100
Receptacles	53	33.96	11.32	3.77	15.09	32.08	3.77	100
Miscellaneous-Others	216	30.09	6.02	10.19	19.44	25.46	8.8	100
US-JP weighted		32.55	6.93	7.42	18.62	25.73	8.75	100
JP weighted		31.81	6.82	7.6	18.87	26	8.91	100

Consulting or contract R&D firms（コンサルティング企業・R&D請負企業）

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
		I did not use	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	1912	508	430	494	84	21	209
Agriculture, Food, Textiles	60	28	11	8	8	1	0	4
Coating	80	35	13	10	16	1	0	5
Gas	45	22	5	9	5	0	0	4
Organic Compounds	120	58	17	9	13	8	0	15
Resins	125	59	12	15	25	3	0	11
Miscellaneous-chemical	208	101	37	23	28	1	1	17
Communications	160	98	17	16	17	8	1	3
Computer Hardware	59	32	7	5	3	1	1	10
Computer Software	123	71	18	10	17	5	0	2
Computer Peripherals	76	43	11	9	10	1	0	2
Information Storage	120	74	12	10	20	1	0	3
Drugs	127	64	21	14	16	4	0	8
Surgery & Medical Instruments	85	50	15	4	11	2	1	2
Biotechnology	87	33	18	13	12	1	1	9
Miscellaneous-Drug&Med	45	30	3	2	9	0	0	1
Electrical Devices	91	55	12	12	11	0	1	0
Electrical Lighting	96	53	15	10	16	0	0	2
Measuring & Testing	111	66	14	8	15	4	0	4
Nuclears & X-rays	72	39	13	10	7	1	1	1
Power Systems	172	82	25	22	20	11	1	11
Semiconductor Devices	129	69	20	14	19	4	1	2
Miscellaneous-Elec.	120	72	14	13	14	2	1	4
Materials Processing & Handling	103	50	7	13	21	2	0	10
Metal Working	137	70	27	18	19	1	0	2
Motors, Engines & Parts	145	79	15	24	16	5	1	5
Optics	100	54	13	11	16	0	1	5
Transportation	73	34	14	12	5	1	0	7
Miscellaneous Mechanical	124	69	14	19	13	1	1	7
Agriculture, Husbandry, Food	87	40	13	13	12	2	0	7
Apparel & Textile	77	36	6	12	9	0	1	13
Earth Working & Wells	20	9	2	2	1	1	0	5
Furniture, House Fixtures	51	21	6	7	8	1	0	8
Heating	84	41	11	14	11	5	0	2
Pipes & Joints	66	29	12	6	10	0	2	7
Receptacles	55	30	9	4	9	1	0	2
Miscellaneous-Others	225	116	29	29	32	5	5	9

%	N	I did not use	1	2	3	4	5	Total
All	3449	55.44	14.73	12.47	14.32	2.44	0.61	100
Agriculture, Food, Textiles	56	50	19.64	14.29	14.29	1.79	0	100
Coating	75	46.67	17.33	13.33	21.33	1.33	0	100
Gas	41	53.66	12.2	21.95	12.2	0	0	100
Organic Compounds	105	55.24	16.19	8.57	12.38	7.62	0	100
Resins	114	51.75	10.53	13.16	21.93	2.63	0	100
Miscellaneous-chemical	191	52.88	19.37	12.04	14.66	0.52	0.52	100
Communications	157	62.42	10.83	10.19	10.83	5.1	0.64	100
Computer Hardware	49	65.31	14.29	10.2	6.12	2.04	2.04	100
Computer Software	121	58.68	14.88	8.26	14.05	4.13	0	100
Computer Peripherals	74	58.11	14.86	12.16	13.51	1.35	0	100
Information Storage	117	63.25	10.26	8.55	17.09	0.85	0	100
Drugs	119	53.78	17.65	11.76	13.45	3.36	0	100
Surgery & Medical Instruments	83	60.24	18.07	4.82	13.25	2.41	1.2	100
Biotechnology	78	42.31	23.08	16.67	15.38	1.28	1.28	100
Miscellaneous-Drug&Med	44	68.18	6.82	4.55	20.45	0	0	100
Electrical Devices	91	60.44	13.19	13.19	12.09	0	1.1	100
Electrical Lighting	94	56.38	15.96	10.64	17.02	0	0	100
Measuring & Testing	107	61.68	13.08	7.48	14.02	3.74	0	100
Nuclears & X-rays	71	54.93	18.31	14.08	9.86	1.41	1.41	100
Power Systems	161	50.93	15.53	13.66	12.42	6.83	0.62	100
Semiconductor Devices	127	54.33	15.75	11.02	14.96	3.15	0.79	100
Miscellaneous-Elec.	116	62.07	12.07	11.21	12.07	1.72	0.86	100
Materials Processing & Handling	93	53.76	7.53	13.98	22.58	2.15	0	100
Metal Working	135	51.85	20	13.33	14.07	0.74	0	100
Motors, Engines & Parts	140	56.43	10.71	17.14	11.43	3.57	0.71	100
Optics	95	56.84	13.68	11.58	16.84	0	1.05	100
Transportation	66	51.52	21.21	18.18	7.58	1.52	0	100
Miscellaneous Mechanical	117	58.97	11.97	16.24	11.11	0.85	0.85	100
Agriculture, Husbandry, Food	80	50	16.25	16.25	15	2.5	0	100
Apparel & Textile	64	56.25	9.38	18.75	14.06	0	1.56	100
Earth Working & Wells	15	60	13.33	13.33	6.67	6.67	0	100
Furniture, House Fixtures	43	48.84	13.95	16.28	18.6	2.33	0	100
Heating	82	50	13.41	17.07	13.41	6.1	0	100
Pipes & Joints	59	49.15	20.34	10.17	16.95	0	3.39	100
Receptacles	53	56.6	16.98	7.55	16.98	1.89	0	100
Miscellaneous-Others	216	53.7	13.43	13.43	14.81	2.31	2.31	100
US-JP weighted		56.11	14.63	11.87	14.22	2.56	0.61	100
JP weighted		55.99	14.49	12.28	14.03	2.54	0.67	100

US (6/7)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

A8_K competitors

		all	I did not use	1	2	3	4	5	missing
NBER	All	1,919	1,259	160	127	97	47	36	193
11	Agriculture, Food, Textiles	8	4	1	1	0	1	0	1
12	Coating	34	21	4	1	2	1	1	4
13	Gas	11	5	3	1	1	0	0	1
14	Organic Compounds	61	46	8	3	2	0	0	2
15	Resins	84	59	10	5	4	0	2	4
19	Miscellaneous-chemical	233	149	15	18	20	7	5	19
21	Communications	149	107	10	8	6	3	1	14
22	Computer Hardware	42	28	3	4	1	0	1	5
77	Computer Software	93	74	2	6	4	1	0	6
23	Computer Peripherals	33	18	6	3	1	0	0	5
24	Information Storage	42	24	5	3	3	2	1	4
31	Drugs	101	60	7	9	5	2	4	14
32	Surgery & Medical Instruments	123	65	12	8	8	6	7	17
33	Biotechnology	41	23	6	3	1	1	1	6
39	Miscellaneous-Drug&Med	29	18	4	2	2	1	0	2
41	Electrical Devices	45	28	3	5	1	2	2	4
42	Electrical Lighting	33	22	3	1	0	2	1	4
43	Measuring & Testing	62	38	3	3	6	2	0	10
44	Nuclears & X-rays	39	26	3	2	1	0	1	6
45	Power Systems	89	65	4	5	4	2	2	7
46	Semiconductor Devices	55	36	5	2	4	2	0	6
49	Miscellaneous-Elec.	32	25	1	1	0	1	0	4
51	Materials Processing & Handling	56	37	4	5	2	1	1	6
52	Metal Working	49	33	1	5	3	2	0	5
53	Motors, Engines & Parts	56	42	6	2	0	1	0	5
54	Optics	43	28	3	3	4	0	0	5
55	Transportation	33	22	1	1	3	1	0	5
59	Miscellaneous Mechanical	42	29	2	4	1	2	0	4
61	Agriculture, Husbandry, Food	14	6	2	1	1	1	1	2
63	Apparel & Textile	9	5	0	1	1	1	1	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	4	1	2	1	0	0	1
66	Heating	8	6	0	0	0	0	0	2
67	Pipes & Joints	13	9	3	0	0	0	1	0
68	Receptacles	20	10	2	4	2	0	1	1
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX

	%	N	I did not use	1	2	3	4	5	Total
NBER	All	1726	72.94	9.27	7.36	5.62	2.72	2.09	100
11	Agriculture, Food, Textiles	7	57.14	14.29	14.29	0.00	14.29	0.00	100
12	Coating	30	70.00	13.33	3.33	6.67	3.33	3.33	100
13	Gas	10	50.00	30.00	10.00	10.00	0.00	0.00	100
14	Organic Compounds	59	77.97	13.56	5.08	3.39	0.00	0.00	100
15	Resins	80	73.75	12.50	6.25	5.00	0.00	2.50	100
19	Miscellaneous-chemical	214	69.63	7.01	8.41	9.35	3.27	2.34	100
21	Communications	135	79.26	7.41	5.93	4.44	2.22	0.74	100
22	Computer Hardware	37	75.68	8.11	10.81	2.70	0.00	2.70	100
77	Computer Software	87	85.06	2.30	6.90	4.60	1.15	0.00	100
23	Computer Peripherals	28	64.29	21.43	10.71	3.57	0.00	0.00	100
24	Information Storage	38	63.16	13.16	7.89	7.89	5.26	2.63	100
31	Drugs	87	68.97	8.05	10.34	5.75	2.30	4.60	100
32	Surgery & Medical Instruments	106	61.32	11.32	7.55	7.55	5.66	6.60	100
33	Biotechnology	35	65.71	17.14	8.57	2.86	2.86	2.86	100
39	Miscellaneous-Drug&Med	27	66.67	14.81	7.41	7.41	3.70	0.00	100
41	Electrical Devices	41	68.29	7.32	12.20	2.44	4.88	4.88	100
42	Electrical Lighting	29	75.86	10.34	3.45	0.00	6.90	3.45	100
43	Measuring & Testing	52	73.08	5.77	5.77	11.54	3.85	0.00	100
44	Nuclears & X-rays	33	78.79	9.09	6.06	3.03	0.00	3.03	100
45	Power Systems	82	79.27	4.88	6.10	4.88	2.44	2.44	100
46	Semiconductor Devices	49	73.47	10.20	4.08	8.16	4.08	0.00	100
49	Miscellaneous-Elec.	28	89.29	3.57	3.57	0.00	3.57	0.00	100
51	Materials Processing & Handling	50	74.00	8.00	10.00	4.00	2.00	2.00	100
52	Metal Working	44	75.00	2.27	11.36	6.82	4.55	0.00	100
53	Motors, Engines & Parts	51	82.35	11.76	3.92	0.00	1.96	0.00	100
54	Optics	38	73.68	7.89	7.89	10.53	0.00	0.00	100
55	Transportation	28	78.57	3.57	3.57	10.71	3.57	0.00	100
59	Miscellaneous Mechanical	38	76.32	5.26	10.53	2.63	5.26	0.00	100
61	Agriculture, Husbandry, Food	12	50.00	16.67	8.33	8.33	8.33	8.33	100
63	Apparel & Textile	9	55.56	0.00	11.11	11.11	11.11	11.11	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	8	50.00	12.50	25.00	12.50	0.00	0.00	100
66	Heating	6	100.00	0.00	0.00	0.00	0.00	0.00	100
67	Pipes & Joints	13	69.23	23.08	0.00	0.00	0.00	7.69	100
68	Receptacles	19	52.63	10.53	21.05	10.53	0.00	5.26	100
69	Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
	US-JP weighted		**73.09**	**9.10**	**7.28**	**5.70**	**2.82**	**2.03**	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important)（研究を実施するために使用した知識の重要度）

others

	All	使っていない	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**I did not use**	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	3172	155	72	156	20	21	62
Agriculture, Food, Textiles	60	50	3	4	2	0	0	1
Coating	80	71	3	0	5	0	0	1
Gas	45	43	0	0	0	1	1	0
Organic Compounds	120	108	4	1	2	0	0	5
Resins	125	100	6	3	9	1	0	6
Miscellaneous-chemical	208	182	8	3	7	0	2	6
Communications	160	148	3	4	4	0	1	0
Computer Hardware	59	55	3	0	0	0	0	1
Computer Software	123	111	3	1	5	0	1	2
Computer Peripherals	76	65	4	0	5	0	0	2
Information Storage	120	107	1	3	6	2	0	1
Drugs	127	112	5	3	4	1	0	2
Surgery & Medical Instruments	85	72	6	0	5	0	1	1
Biotechnology	87	76	4	1	3	0	1	2
Miscellaneous-Drug&Med	45	40	2	0	3	0	0	0
Electrical Devices	91	78	3	2	6	0	2	0
Electrical Lighting	96	84	4	2	6	0	0	0
Measuring & Testing	111	97	5	1	4	0	1	3
Nuclears & X-rays	72	66	4	1	1	0	0	0
Power Systems	172	144	9	5	7	4	1	2
Semiconductor Devices	129	109	9	3	6	2	0	0
Miscellaneous-Elec.	120	108	3	1	5	1	1	1
Materials Processing & Handling	103	90	3	1	3	0	0	6
Metal Working	137	117	7	3	7	1	2	0
Motors, Engines & Parts	145	120	10	6	5	1	0	3
Optics	100	86	2	3	3	3	0	3
Transportation	73	57	6	2	4	0	2	2
Miscellaneous Mechanical	124	108	6	5	2	0	1	2
Agriculture, Husbandry, Food	87	73	5	2	5	0	1	1
Apparel & Textile	77	69	3	1	4	0	0	0
Earth Working & Wells	20	13	2	1	1	1	0	2
Furniture, House Fixtures	51	43	3	0	3	0	0	2
Heating	84	74	3	2	4	0	1	0
Pipes & Joints	66	57	2	1	4	0	0	2
Receptacles	55	49	2	0	1	1	0	2
Miscellaneous-Others	225	190	9	7	15	1	2	1

%	**N**	**I did not use**	**1**	**2**	**3**	**4**	**5**	**Total**
All	3596	88.21	4.31	2	4.34	0.56	0.58	100
Agriculture, Food, Textiles	59	84.75	5.08	6.78	3.39	0	0	100
Coating	79	89.87	3.8	0	6.33	0	0	100
Gas	45	95.56	0	0	0	2.22	2.22	100
Organic Compounds	115	93.91	3.48	0.87	1.74	0	0	100
Resins	119	84.03	5.04	2.52	7.56	0.84	0	100
Miscellaneous-chemical	202	90.1	3.96	1.49	3.47	0	0.99	100
Communications	160	92.5	1.88	2.5	2.5	0	0.63	100
Computer Hardware	58	94.83	5.17	0	0	0	0	100
Computer Software	121	91.74	2.48	0.83	4.13	0	0.83	100
Computer Peripherals	74	87.84	5.41	0	6.76	0	0	100
Information Storage	119	89.92	0.84	2.52	5.04	1.68	0	100
Drugs	125	89.6	4	2.4	3.2	0.8	0	100
Surgery & Medical Instruments	84	85.71	7.14	0	5.95	0	1.19	100
Biotechnology	85	89.41	4.71	1.18	3.53	0	1.18	100
Miscellaneous-Drug&Med	45	88.89	4.44	0	6.67	0	0	100
Electrical Devices	91	85.71	3.3	2.2	6.59	0	2.2	100
Electrical Lighting	96	87.5	4.17	2.08	6.25	0	0	100
Measuring & Testing	108	89.81	4.63	0.93	3.7	0	0.93	100
Nuclears & X-rays	72	91.67	5.56	1.39	1.39	0	0	100
Power Systems	170	84.71	5.29	2.94	4.12	2.35	0.59	100
Semiconductor Devices	129	84.5	6.98	2.33	4.65	1.55	0	100
Miscellaneous-Elec.	119	90.76	2.52	0.84	4.2	0.84	0.84	100
Materials Processing & Handling	97	92.78	3.09	1.03	3.09	0	0	100
Metal Working	137	85.4	5.11	2.19	5.11	0.73	1.46	100
Motors, Engines & Parts	142	84.51	7.04	4.23	3.52	0.7	0	100
Optics	97	88.66	2.06	3.09	3.09	3.09	0	100
Transportation	71	80.28	8.45	2.82	5.63	0	2.82	100
Miscellaneous Mechanical	122	88.52	4.92	4.1	1.64	0	0.82	100
Agriculture, Husbandry, Food	86	84.88	5.81	2.33	5.81	0	1.16	100
Apparel & Textile	77	89.61	3.9	1.3	5.19	0	0	100
Earth Working & Wells	18	72.22	11.11	5.56	5.56	5.56	0	100
Furniture, House Fixtures	49	87.76	6.12	0	6.12	0	0	100
Heating	84	88.1	3.57	2.38	4.76	0	1.19	100
Pipes & Joints	64	89.06	3.13	1.56	6.25	0	0	100
Receptacles	53	92.45	3.77	0	1.89	1.89	0	100
Miscellaneous-Others	224	84.82	4.02	3.13	6.7	0.45	0.89	100
US-JP weighted		88.46	4.19	1.95	4.3	0.52	0.59	100
JP weighted		88.15	4.18	2.08	4.44	0.56	0.58	100

Japan

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

4 or 5

	Scientific and Technical Literature	Patent Literature	Trade Fair or Exhibition	technical conferences and workshops	Standard documents, such as those from ISO (standards, contributions)	Your firm excluding co-inventors	University and Education	Non-University Public Research Organization	Customers or Product users	Suppliers	Competitors (e.g. knowledge from its products)	Consulting or contract R&D firms
All	50.09	58.07	19.53	19.98	10.84	63.43	12.24	9.24	44.72	30.84	35.10	3.04
Agriculture, Food, Textiles	56.90	76.27	17.86	12.50	10.71	67.86	14.04	16.07	50.00	29.82	33.93	1.79
Coating	50.65	68.83	28.95	13.33	14.67	70.67	12.16	13.33	60.00	40.54	38.67	1.33
Gas	54.76	55.81	14.29	23.81	11.90	60.98	16.67	7.14	51.16	38.10	43.90	0.00
Organic Compounds	75.00	72.07	8.41	16.82	3.74	58.88	23.85	13.89	33.96	21.70	30.84	7.62
Resins	62.39	73.28	12.17	14.16	9.65	65.52	11.30	7.83	42.74	39.66	30.17	2.63
Miscellaneous-chemical	58.50	60.80	18.32	16.49	5.24	63.02	15.63	7.85	48.97	35.94	28.65	1.05
Communications	54.72	56.33	17.83	31.01	33.76	62.42	11.46	11.39	33.54	21.02	34.39	5.73
Computer Hardware	47.17	58.18	21.57	18.00	14.00	64.81	4.08	2.04	40.82	16.33	34.69	4.08
Computer Software	42.15	36.36	25.83	21.49	24.79	63.64	11.57	8.26	43.80	22.31	32.50	4.13
Computer Peripherals	43.24	56.76	20.27	14.86	6.76	72.97	4.05	4.05	35.14	27.03	36.49	1.35
Information Storage	44.07	55.08	18.80	22.22	16.24	66.38	5.98	5.98	29.06	26.50	39.32	0.85
Drugs	82.26	73.77	10.00	25.00	5.04	66.12	25.21	16.24	24.58	16.67	37.50	3.36
Surgery & Medical Instruments	42.17	55.42	23.17	18.07	13.41	49.40	15.66	8.43	53.01	28.57	28.05	3.61
Biotechnology	82.35	63.41	12.99	26.92	3.85	56.25	40.00	24.36	21.52	16.67	35.90	2.56
Miscellaneous-Drug&Med	38.64	59.09	20.45	11.36	6.98	62.22	11.36	9.09	45.45	26.19	34.09	0.00
Electrical Devices	30.77	57.14	15.38	17.58	10.99	59.34	4.40	6.59	46.15	31.87	47.25	1.10
Electrical Lighting	52.13	58.95	21.28	27.96	4.26	65.96	10.53	5.32	38.95	28.72	36.17	0.00
Measuring & Testing	56.07	48.60	21.50	20.75	12.15	55.56	17.76	15.09	45.79	22.43	36.79	3.74
Nuclears & X-rays	50.70	43.66	18.84	22.86	16.90	56.94	15.49	14.29	40.85	20.83	35.21	2.82
Power Systems	56.02	57.93	17.79	24.10	7.98	67.07	16.97	11.66	42.07	39.02	34.97	7.45
Semiconductor Devices	59.38	52.71	13.18	29.69	4.72	62.50	10.94	7.87	42.19	33.07	23.02	3.94
Miscellaneous-Elec.	35.04	49.15	16.38	13.04	12.17	64.96	2.59	4.31	43.59	32.76	33.05	2.59
Materials Processing & Handling	30.43	55.32	41.49	21.74	10.64	58.51	10.87	8.60	55.79	29.79	42.55	2.15
Metal Working	55.56	52.21	11.85	20.59	7.41	65.67	11.85	10.37	45.59	28.89	29.63	0.74
Motors, Engines & Parts	43.26	64.54	17.86	21.58	6.47	68.84	7.25	6.52	48.20	46.04	42.14	4.29
Optics	51.58	51.58	20.00	21.88	7.37	63.54	7.37	5.26	34.02	30.53	32.29	1.05
Transportation	23.53	47.76	17.91	13.43	9.09	70.15	2.99	3.03	52.94	39.39	50.00	1.52
Miscellaneous Mechanical	39.83	54.24	22.22	12.82	12.71	52.10	5.98	4.27	48.74	34.19	29.06	1.71
Agriculture, Husbandry, Food	57.83	55.42	18.29	17.28	5.00	63.41	20.73	13.25	51.22	32.50	33.75	2.50
Apparel & Textile	18.18	55.07	29.23	20.31	7.94	71.43	6.25	1.59	63.38	33.33	40.63	1.56
Earth Working & Wells	37.50	66.67	31.25	6.67	20.00	60.00	6.67	6.67	62.50	40.00	66.67	6.67
Furniture, House Fixtures	29.55	61.70	28.26	23.26	8.89	72.09	6.98	13.95	54.35	45.45	47.73	2.33
Heating	47.56	64.29	19.51	14.81	8.54	79.52	12.20	6.10	37.35	36.59	30.12	6.10
Pipes & Joints	40.68	60.00	20.34	15.52	17.24	62.90	8.47	10.17	63.49	37.29	43.33	3.39
Receptacles	28.30	60.38	32.08	15.09	5.77	64.15	3.77	5.66	56.60	32.08	35.85	1.89
Miscellaneous-Others	47.06	60.73	25.23	20.00	11.63	58.60	11.06	10.70	58.26	33.03	34.26	4.63
US-JP weighted	51.29	57.75	19.39	20.72	11.95	62.82	12.42	9.23	43.46	29.88	34.48	3.17
JP weighted	49.69	57.28	19.59	20.87	11.95	63.42	11.51	9.02	44.03	30.95	34.91	3.21

US (7/7)

Question 4-13 Excluding co-inventors, how important were the following sources of knowledge for contributing to the completion of the research that led to the patented invention? (1 = not important, 5 = very important) (研究を実施するために使用した知識の重要度)

4 or 5

	A8 (4 or 5) %	a Scientific and Technical Literature	b patent literature	c Fair or exhibition	d Technical conferences and workshops	e Standard documents, such as from ISO (standards, contributions)	F Your firm, excluding co-inventors	G Universities	H Governments research organization	I Customers or product users	J Suppliers	K competitors
NBER	All	33.69	24.93	1.97	7.79	5.29	40.47	4.99	1.92	19.84	9.43	4.81
11	Agriculture, Food, Textiles	42.86	28.57	0.00	0.00	0.00	57.14	0.00	0.00	14.29	0.00	14.29
12	Coating	25.00	30.00	6.67	6.67	6.67	50.00	3.33	3.45	40.00	18.75	6.67
13	Gas	36.36	18.18	0.00	10.00	10.00	45.45	10.00	0.00	30.00	0.00	0.00
14	Organic Compounds	45.00	31.67	0.00	5.08	1.75	36.67	8.47	0.00	13.79	3.39	0.00
15	Resins	46.25	43.04	0.00	8.75	2.50	37.50	2.50	1.27	21.25	10.00	2.50
19	Miscellaneous-chemical	36.70	35.94	0.94	6.94	2.33	42.66	4.63	1.88	26.27	13.02	5.61
21	Communications	29.41	18.38	0.74	6.62	13.33	32.35	5.88	0.74	15.44	4.41	2.96
22	Computer Hardware	34.15	15.79	7.89	10.81	10.81	34.21	2.70	5.26	13.51	5.41	2.70
77	Computer Software	22.73	6.90	2.33	8.05	6.90	47.73	4.65	0.00	25.29	2.30	1.15
23	Computer Peripherals	26.67	30.00	3.45	7.14	3.57	36.67	0.00	0.00	0.00	3.57	0.00
24	Information Storage	38.46	15.79	0.00	10.81	11.11	37.84	10.81	0.00	11.11	5.56	7.89
31	Drugs	63.04	43.48	2.25	13.33	3.45	47.13	14.94	4.60	5.75	2.30	6.90
32	Surgery & Medical Instruments	42.20	29.63	3.74	8.41	3.77	34.58	6.54	1.87	24.07	13.21	12.26
33	Biotechnology	66.67	20.00	0.00	2.86	0.00	36.11	20.00	11.43	8.57	2.86	5.71
39	Miscellaneous-Drug&Med	37.04	25.93	3.70	11.11	3.70	37.04	7.41	0.00	22.22	7.41	3.70
41	Electrical Devices	29.27	29.27	2.44	9.76	7.32	47.62	0.00	0.00	39.02	17.07	9.76
42	Electrical Lighting	46.67	23.33	11.11	3.45	3.45	41.38	0.00	3.45	10.34	10.34	10.34
43	Measuring & Testing	38.89	13.21	1.89	9.43	7.69	35.19	3.85	1.92	15.38	11.54	3.85
44	Nuclears & X-rays	24.24	12.12	6.06	12.12	0.00	39.39	3.03	3.03	15.15	6.06	3.03
45	Power Systems	26.51	14.46	2.44	8.43	3.66	41.46	3.66	4.82	13.41	13.58	4.88
46	Semiconductor Devices	44.00	30.00	0.00	20.41	0.00	32.65	4.08	2.04	14.29	6.12	4.08
49	Miscellaneous-Elec.	20.69	10.71	0.00	14.29	7.14	58.62	0.00	0.00	14.29	6.90	3.57
51	Materials Processing & Handling	12.24	20.41	2.00	2.00	1.96	44.23	6.00	0.00	22.00	16.00	4.00
52	Metal Working	15.91	25.00	2.33	2.33	6.98	44.68	2.33	0.00	20.45	13.95	4.55
53	Motors, Engines & Parts	23.08	7.84	0.00	3.92	0.00	39.22	0.00	0.00	20.00	16.00	1.96
54	Optics	30.77	15.38	0.00	7.69	5.13	35.90	7.69	0.00	12.82	13.16	0.00
55	Transportation	16.67	17.24	3.45	6.67	10.34	41.38	3.45	0.00	24.14	13.79	3.57
59	Miscellaneous Mechanical	13.16	15.79	2.63	7.89	10.53	42.11	0.00	2.63	31.58	5.26	5.26
61	Agriculture, Husbandry, Food	50.00	46.15	0.00	0.00	16.67	50.00	9.09	8.33	41.67	16.67	16.67
63	Apparel & Textile	0.00	12.50	0.00	0.00	0.00	50.00	0.00	0.00	37.50	0.00	22.22
64	Earth Working & Wells	25.00	XX	XX	XX	XX	XX	XX	XX	XX	50.00	XX
65	Furniture, House Fixtures	12.50	12.50	0.00	0.00	0.00	33.33	0.00	0.00	33.33	22.22	0.00
66	Heating	33.33	16.67	16.67	0.00	0.00	16.67	16.67	16.67	33.33	0.00	0.00
67	Pipes & Joints	38.46	25.00	0.00	7.69	7.69	38.46	0.00	0.00	23.08	15.38	7.69
68	Receptacles	10.53	36.84	0.00	0.00	5.26	15.79	0.00	0.00	15.79	15.79	5.26
69	Miscellaneous-Others	26.96	XX	XX	XX	XX	XX	XX	XX	XX	7.96	XX
	US-JP weighted	**33.85**	**24.43**	**1.97**	**7.95**	**5.59**	**40.46**	**5.22**	**1.75**	**19.1**	**9.24**	**4.84**

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

Scientific and Technical Literature（科学技術文献 ）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1089	122	275	1174	526	298	174
Agriculture, Food, Textiles	60	13	3	4	21	13	4	2
Coating	80	17	3	5	37	10	4	4
Gas	45	15	0	1	15	9	3	2
Organic Compounds	120	12	3	2	51	26	16	10
Resins	125	21	5	8	62	14	6	9
Miscellaneous-chemical	208	45	9	25	81	24	13	11
Communications	160	41	2	6	64	25	20	2
Computer Hardware	59	17	1	2	16	8	9	6
Computer Software	123	48	3	9	31	17	12	3
Computer Peripherals	76	36	4	5	20	5	4	2
Information Storage	120	43	4	9	31	18	12	3
Drugs	127	13	1	3	41	27	37	5
Surgery & Medical Instruments	85	29	1	6	19	19	8	3
Biotechnology	87	7	1	5	16	24	30	4
Miscellaneous-Drug&Med	45	20	2	1	8	10	2	2
Electrical Devices	91	36	1	6	26	13	8	1
Electrical Lighting	96	32	2	7	30	16	7	2
Measuring & Testing	111	38	2	8	32	13	13	5
Nuclears & X-rays	72	17	3	4	25	15	8	0
Power Systems	172	43	8	13	69	27	6	6
Semiconductor Devices	129	24	4	15	46	25	14	1
Miscellaneous-Elec.	120	47	2	8	37	20	3	3
Materials Processing & Handling	103	41	0	13	22	13	2	12
Metal Working	137	36	9	16	46	19	8	3
Motors, Engines & Parts	145	50	3	6	50	28	4	4
Optics	100	30	5	12	25	14	8	6
Transportation	73	34	2	4	20	3	3	7
Miscellaneous Mechanical	124	49	6	12	37	7	4	9
Agriculture, Husbandry, Food	87	25	3	11	24	15	5	4
Apparel & Textile	77	37	1	4	20	4	1	10
Earth Working & Wells	20	8	0	1	6	1	0	4
Furniture, House Fixtures	51	20	2	2	13	6	0	8
Heating	84	24	4	8	31	9	5	3
Pipes & Joints	66	22	3	7	15	5	5	9
Receptacles	55	28	1	4	14	5	0	3
Miscellaneous-Others	225	71	19	23	73	19	14	6

%	N	I did not use	-2	-1	0	1	2	Total
All	3484	31.26	3.5	7.89	33.7	15.1	8.55	100
Agriculture, Food, Textiles	58	22.41	5.17	6.9	36.21	22.41	6.9	100
Coating	76	22.37	3.95	6.58	48.68	13.16	5.26	100
Gas	43	34.88	0	2.33	34.88	20.93	6.98	100
Organic Compounds	110	10.91	2.73	1.82	46.36	23.64	14.55	100
Resins	116	18.1	4.31	6.9	53.45	12.07	5.17	100
Miscellaneous-chemical	197	22.84	4.57	12.69	41.12	12.18	6.6	100
Communications	158	25.95	1.27	3.8	40.51	15.82	12.66	100
Computer Hardware	53	32.08	1.89	3.77	30.19	15.09	16.98	100
Computer Software	120	40	2.5	7.5	25.83	14.17	10	100
Computer Peripherals	74	48.65	5.41	6.76	27.03	6.76	5.41	100
Information Storage	117	36.75	3.42	7.69	26.5	15.38	10.26	100
Drugs	122	10.66	0.82	2.46	33.61	22.13	30.33	100
Surgery & Medical Instruments	82	35.37	1.22	7.32	23.17	23.17	9.76	100
Biotechnology	83	8.43	1.2	6.02	19.28	28.92	36.14	100
Miscellaneous-Drug&Med	43	46.51	4.65	2.33	18.6	23.26	4.65	100
Electrical Devices	90	40	1.11	6.67	28.89	14.44	8.89	100
Electrical Lighting	94	34.04	2.13	7.45	31.91	17.02	7.45	100
Measuring & Testing	106	35.85	1.89	7.55	30.19	12.26	12.26	100
Nuclears & X-rays	72	23.61	4.17	5.56	34.72	20.83	11.11	100
Power Systems	166	25.9	4.82	7.83	41.57	16.27	3.61	100
Semiconductor Devices	128	18.75	3.13	11.72	35.94	19.53	10.94	100
Miscellaneous-Elec.	117	40.17	1.71	6.84	31.62	17.09	2.56	100
Materials Processing & Handling	91	45.05	0	14.29	24.18	14.29	2.2	100
Metal Working	134	26.87	6.72	11.94	34.33	14.18	5.97	100
Motors, Engines & Parts	141	35.46	2.13	4.26	35.46	19.86	2.84	100
Optics	94	31.91	5.32	12.77	26.6	14.89	8.51	100
Transportation	66	51.52	3.03	6.06	30.3	4.55	4.55	100
Miscellaneous Mechanical	115	42.61	5.22	10.43	32.17	6.09	3.48	100
Agriculture, Husbandry, Food	83	30.12	3.61	13.25	28.92	18.07	6.02	100
Apparel & Textile	67	55.22	1.49	5.97	29.85	5.97	1.49	100
Earth Working & Wells	16	50	0	6.25	37.5	6.25	0	100
Furniture, House Fixtures	43	46.51	4.65	4.65	30.23	13.95	0	100
Heating	81	29.63	4.94	9.88	38.27	11.11	6.17	100
Pipes & Joints	57	38.6	5.26	12.28	26.32	8.77	8.77	100
Receptacles	52	53.85	1.92	7.69	26.92	9.62	0	100
Miscellaneous-Others	219	32.42	8.68	10.5	33.33	8.68	6.39	100
JP weighted		31.48	3.58	8.09	34.31	14.22	8.32	100

Patent Literature（特許文献）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	895	139	314	1370	524	260	156
Agriculture, Food, Textiles	60	8	4	3	18	19	7	1
Coating	80	16	3	6	33	13	5	4
Gas	45	12	1	1	20	7	4	0
Organic Compounds	120	16	3	7	53	20	10	11
Resins	125	20	4	9	62	15	7	8
Miscellaneous-chemical	208	44	10	30	78	27	12	7
Communications	160	39	3	15	70	21	9	3
Computer Hardware	59	18	2	2	22	7	6	2
Computer Software	123	52	4	7	43	7	6	4
Computer Peripherals	76	25	5	7	26	8	4	1
Information Storage	120	31	3	10	46	21	6	3
Drugs	127	13	3	7	57	19	21	7
Surgery & Medical Instruments	85	22	1	4	27	17	12	2
Biotechnology	87	13	2	5	30	18	14	5
Miscellaneous-Drug&Med	45	14	5	2	14	5	3	2
Electrical Devices	91	23	2	6	35	14	10	1
Electrical Lighting	96	25	2	10	35	17	6	1
Measuring & Testing	111	37	3	11	33	13	9	5
Nuclears & X-rays	72	21	5	3	23	9	10	1
Power Systems	172	38	5	24	67	26	4	8
Semiconductor Devices	129	25	6	18	53	21	6	0
Miscellaneous-Elec.	120	40	3	8	42	13	9	5
Materials Processing & Handling	103	27	2	7	37	13	8	9
Metal Working	137	34	10	17	50	18	6	2
Motors, Engines & Parts	145	29	6	9	62	29	7	3
Optics	100	29	6	9	38	8	5	5
Transportation	73	23	2	6	20	13	5	4
Miscellaneous Mechanical	124	39	2	12	39	13	10	9
Agriculture, Husbandry, Food	87	20	4	7	27	19	5	5
Apparel & Textile	77	22	0	2	30	11	5	7
Earth Working & Wells	20	3	0	4	6	0	1	6
Furniture, House Fixtures	51	15	2	0	19	7	3	5
Heating	84	21	2	10	35	10	4	2
Pipes & Joints	66	14	2	6	20	10	6	8
Receptacles	55	16	1	2	19	12	3	2
Miscellaneous-Others	225	51	21	28	81	24	12	8

%	N	I did not use	-2	-1	0	1	2	Total
All	3502	25.56	3.97	8.97	39.12	14.96	7.42	100
Agriculture, Food, Textiles	59	13.56	6.78	5.08	30.51	32.2	11.86	100
Coating	76	21.05	3.95	7.89	43.42	17.11	6.58	100
Gas	45	26.67	2.22	2.22	44.44	15.56	8.89	100
Organic Compounds	109	14.68	2.75	6.42	48.62	18.35	9.17	100
Resins	117	17.09	3.42	7.69	52.99	12.82	5.98	100
Miscellaneous-chemical	201	21.89	4.98	14.93	38.81	13.43	5.97	100
Communications	157	24.84	1.91	9.55	44.59	13.38	5.73	100
Computer Hardware	57	31.58	3.51	3.51	38.6	12.28	10.53	100
Computer Software	119	43.7	3.36	5.88	36.13	5.88	5.04	100
Computer Peripherals	75	33.33	6.67	9.33	34.67	10.67	5.33	100
Information Storage	117	26.5	2.56	8.55	39.32	17.95	5.13	100
Drugs	120	10.83	2.5	5.83	47.5	15.83	17.5	100
Surgery & Medical Instruments	83	26.51	1.2	4.82	32.53	20.48	14.46	100
Biotechnology	82	15.85	2.44	6.1	36.59	21.95	17.07	100
Miscellaneous-Drug&Med	43	32.56	11.63	4.65	32.56	11.63	6.98	100
Electrical Devices	90	25.56	2.22	6.67	38.89	15.56	11.11	100
Electrical Lighting	95	26.32	2.11	10.53	36.84	17.89	6.32	100
Measuring & Testing	106	34.91	2.83	10.38	31.13	12.26	8.49	100
Nuclears & X-rays	71	29.58	7.04	4.23	32.39	12.68	14.08	100
Power Systems	164	23.17	3.05	14.63	40.85	15.85	2.44	100
Semiconductor Devices	129	19.38	4.65	13.95	41.09	16.28	4.65	100
Miscellaneous-Elec.	115	34.78	2.61	6.96	36.52	11.3	7.83	100
Materials Processing & Handling	94	28.72	2.13	7.45	39.36	13.83	8.51	100
Metal Working	135	25.19	7.41	12.59	37.04	13.33	4.44	100
Motors, Engines & Parts	142	20.42	4.23	6.34	43.66	20.42	4.93	100
Optics	95	30.53	6.32	9.47	40	8.42	5.26	100
Transportation	69	33.33	2.9	8.7	28.99	18.84	7.25	100
Miscellaneous Mechanical	115	33.91	1.74	10.43	33.91	11.3	8.7	100
Agriculture, Husbandry, Food	82	24.39	4.88	8.54	32.93	23.17	6.1	100
Apparel & Textile	70	31.43	0	2.86	42.86	15.71	7.14	100
Earth Working & Wells	14	21.43	0	28.57	42.86	0	7.14	100
Furniture, House Fixtures	46	32.61	4.35	0	41.3	15.22	6.52	100
Heating	82	25.61	2.44	12.2	42.68	12.2	4.88	100
Pipes & Joints	58	24.14	3.45	10.34	34.48	17.24	10.34	100
Receptacles	53	30.19	1.89	3.77	35.85	22.64	5.66	100
Miscellaneous-Others	217	23.5	9.68	12.9	37.33	11.06	5.53	100
		25.88	4.03	9.65	39.71	13.89	6.84	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

Trade Fair or Exhibition（見本市、展示会）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1721	187	295	889	259	71	236
Agriculture, Food, Textiles	60	27	2	7	18	1	2	3
Coating	80	31	9	11	19	6	0	4
Gas	45	21	1	1	15	3	1	3
Organic Compounds	120	69	5	3	20	4	1	18
Resins	125	63	6	10	31	4	1	10
Miscellaneous-chemical	208	96	17	21	42	12	1	19
Communications	160	80	1	10	42	18	5	4
Computer Hardware	59	27	3	3	14	4	1	7
Computer Software	123	68	2	6	26	11	5	5
Computer Peripherals	76	43	6	5	17	4	0	1
Information Storage	120	62	8	8	30	6	1	5
Drugs	127	66	4	8	31	6	1	11
Surgery & Medical Instruments	85	43	6	6	20	8	0	2
Biotechnology	87	37	2	5	20	9	4	10
Miscellaneous-Drug&Med	45	22	1	2	12	4	2	2
Electrical Devices	91	49	2	6	27	5	1	1
Electrical Lighting	96	42	3	9	33	6	0	3
Measuring & Testing	111	59	6	14	17	9	1	5
Nuclears & X-rays	72	35	3	6	21	4	0	3
Power Systems	172	81	10	14	43	9	2	13
Semiconductor Devices	129	63	4	14	40	6	1	1
Miscellaneous-Elec.	120	59	9	6	33	4	3	6
Materials Processing & Handling	103	43	4	6	21	12	6	11
Metal Working	137	67	15	12	32	6	2	3
Motors, Engines & Parts	145	61	8	13	42	10	6	5
Optics	100	42	6	12	23	8	2	7
Transportation	73	31	4	9	15	4	2	8
Miscellaneous Mechanical	124	55	5	10	29	14	2	9
Agriculture, Husbandry, Food	87	35	8	6	21	7	4	6
Apparel & Textile	77	26	1	4	21	11	2	12
Earth Working & Wells	20	5	1	2	3	3	1	5
Furniture, House Fixtures	51	18	3	3	14	4	3	6
Heating	84	43	5	12	15	5	1	3
Pipes & Joints	66	22	3	5	18	7	3	8
Receptacles	55	29	1	3	13	7	0	2
Miscellaneous-Others	225	101	13	23	51	18	4	15

%	N	I did not use	-2	-1	0	1	2	Total
All	3422	50.29	5.46	8.62	25.98	7.57	2.07	100
Agriculture, Food, Textiles	57	47.37	3.51	12.28	31.58	1.75	3.51	100
Coating	76	40.79	11.84	14.47	25	7.89	0	100
Gas	42	50	2.38	2.38	35.71	7.14	2.38	100
Organic Compounds	102	67.65	4.9	2.94	19.61	3.92	0.98	100
Resins	115	54.78	5.22	8.7	26.96	3.48	0.87	100
Miscellaneous-chemical	189	50.79	8.99	11.11	22.22	6.35	0.53	100
Communications	156	51.28	0.64	6.41	26.92	11.54	3.21	100
Computer Hardware	52	51.92	5.77	5.77	26.92	7.69	1.92	100
Computer Software	118	57.63	1.69	5.08	22.03	9.32	4.24	100
Computer Peripherals	75	57.33	8	6.67	22.67	5.33	0	100
Information Storage	115	53.91	6.96	6.96	26.09	5.22	0.87	100
Drugs	116	56.9	3.45	6.9	26.72	5.17	0.86	100
Surgery & Medical Instruments	83	51.81	7.23	7.23	24.1	9.64	0	100
Biotechnology	77	48.05	2.6	6.49	25.97	11.69	5.19	100
Miscellaneous-Drug&Med	43	51.16	2.33	4.65	27.91	9.3	4.65	100
Electrical Devices	90	54.44	2.22	6.67	30	5.56	1.11	100
Electrical Lighting	93	45.16	3.23	9.68	35.48	6.45	0	100
Measuring & Testing	106	55.66	5.66	13.21	16.04	8.49	0.94	100
Nuclears & X-rays	69	50.72	4.35	8.7	30.43	5.8	0	100
Power Systems	159	50.94	6.29	8.81	27.04	5.66	1.26	100
Semiconductor Devices	128	49.22	3.13	10.94	31.25	4.69	0.78	100
Miscellaneous-Elec.	114	51.75	7.89	5.26	28.95	3.51	2.63	100
Materials Processing & Handling	92	46.74	4.35	6.52	22.83	13.04	6.52	100
Metal Working	134	50	11.19	8.96	23.88	4.48	1.49	100
Motors, Engines & Parts	140	43.57	5.71	9.29	30	7.14	4.29	100
Optics	93	45.16	6.45	12.9	24.73	8.6	2.15	100
Transportation	65	47.69	6.15	13.85	23.08	6.15	3.08	100
Miscellaneous Mechanical	115	47.83	4.35	8.7	25.22	12.17	1.74	100
Agriculture, Husbandry, Food	81	43.21	9.88	7.41	25.93	8.64	4.94	100
Apparel & Textile	65	40	1.54	6.15	32.31	16.92	3.08	100
Earth Working & Wells	15	33.33	6.67	13.33	20	20	6.67	100
Furniture, House Fixtures	45	40	6.67	6.67	31.11	8.89	6.67	100
Heating	81	53.09	6.17	14.81	18.52	6.17	1.23	100
Pipes & Joints	58	37.93	5.17	8.62	31.03	12.07	5.17	100
Receptacles	53	54.72	1.89	5.66	24.53	13.21	0	100
Miscellaneous-Others	210	48.1	6.19	10.95	24.29	8.57	1.9	100
JP weighted		50.96	5.33	8.62	25.65	7.45	2	100

Technical conferences and workshops（技術的なコンファレンス・ワークショップ）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1701	172	281	899	268	95	242
Agriculture, Food, Textiles	60	25	5	7	12	4	3	4
Coating	80	36	9	11	15	4	1	4
Gas	45	21	1	2	15	2	1	3
Organic Compounds	120	57	4	7	29	5	3	15
Resins	125	64	7	9	28	4	2	11
Miscellaneous-chemical	208	98	15	18	45	11	5	16
Communications	160	74	1	6	48	20	8	3
Computer Hardware	59	25	1	3	15	4	3	8
Computer Software	123	63	6	6	27	12	6	3
Computer Peripherals	76	39	4	6	23	2	1	1
Information Storage	120	57	4	8	32	11	4	4
Drugs	127	59	4	7	31	8	5	13
Surgery & Medical Instruments	85	44	5	5	23	5	1	2
Biotechnology	87	33	1	8	15	15	5	10
Miscellaneous-Drug&Med	45	27	0	2	12	1	1	2
Electrical Devices	91	47	3	5	24	9	2	1
Electrical Lighting	96	40	1	10	27	15	1	2
Measuring & Testing	111	56	5	9	19	10	7	5
Nuclears & X-rays	72	38	1	1	21	7	0	4
Power Systems	172	74	10	15	44	14	2	13
Semiconductor Devices	129	47	5	12	42	14	8	1
Miscellaneous-Elec.	120	58	8	7	35	5	1	6
Materials Processing & Handling	103	47	6	8	20	6	3	13
Metal Working	137	60	12	12	37	10	1	5
Motors, Engines & Parts	145	62	5	15	37	14	7	5
Optics	100	42	6	12	21	12	1	6
Transportation	73	33	4	6	17	5	1	7
Miscellaneous Mechanical	124	63	4	14	25	7	2	9
Agriculture, Husbandry, Food	87	34	7	5	25	5	2	9
Apparel & Textile	77	39	2	1	17	5	0	13
Earth Working & Wells	20	8	0	3	2	0	1	6
Furniture, House Fixtures	51	25	1	2	13	2	0	8
Heating	84	45	4	12	17	2	1	3
Pipes & Joints	66	27	3	4	17	3	2	10
Receptacles	55	32	1	4	12	4	0	2
Miscellaneous-Others	225	102	17	19	57	11	4	15

%	N	I did not use	-2	-1	0	1	2	Total
All	3416	49.8	5.04	8.23	26.32	7.85	2.78	100
Agriculture, Food, Textiles	56	44.64	8.93	12.5	21.43	7.14	5.36	100
Coating	76	47.37	11.84	14.47	19.74	5.26	1.32	100
Gas	42	50	2.38	4.76	35.71	4.76	2.38	100
Organic Compounds	105	54.29	3.81	6.67	27.62	4.76	2.86	100
Resins	114	56.14	6.14	7.89	24.56	3.51	1.75	100
Miscellaneous-chemical	192	51.04	7.81	9.38	23.44	5.73	2.6	100
Communications	157	47.13	0.64	3.82	30.57	12.74	5.1	100
Computer Hardware	51	49.02	1.96	5.88	29.41	7.84	5.88	100
Computer Software	120	52.5	5	5	22.5	10	5	100
Computer Peripherals	75	52	5.33	8	30.67	2.67	1.33	100
Information Storage	116	49.14	3.45	6.9	27.59	9.48	3.45	100
Drugs	114	51.75	3.51	6.14	27.19	7.02	4.39	100
Surgery & Medical Instruments	83	53.01	6.02	6.02	27.71	6.02	1.2	100
Biotechnology	77	42.86	1.3	10.39	19.48	19.48	6.49	100
Miscellaneous-Drug&Med	43	62.79	0	4.65	27.91	2.33	2.33	100
Electrical Devices	90	52.22	3.33	5.56	26.67	10	2.22	100
Electrical Lighting	94	42.55	1.06	10.64	28.72	15.96	1.06	100
Measuring & Testing	106	52.83	4.72	8.49	17.92	9.43	6.6	100
Nuclears & X-rays	68	55.88	1.47	1.47	30.88	10.29	0	100
Power Systems	159	46.54	6.29	9.43	27.67	8.81	1.26	100
Semiconductor Devices	128	36.72	3.91	9.38	32.81	10.94	6.25	100
Miscellaneous-Elec.	114	50.88	7.02	6.14	30.7	4.39	0.88	100
Materials Processing & Handling	90	52.22	6.67	8.89	22.22	6.67	3.33	100
Metal Working	132	45.45	9.09	9.09	28.03	7.58	0.76	100
Motors, Engines & Parts	140	44.29	3.57	10.71	26.43	10	5	100
Optics	94	44.68	6.38	12.77	22.34	12.77	1.06	100
Transportation	66	50	6.06	9.09	25.76	7.58	1.52	100
Miscellaneous Mechanical	115	54.78	3.48	12.17	21.74	6.09	1.74	100
Agriculture, Husbandry, Food	78	43.59	8.97	6.41	32.05	6.41	2.56	100
Apparel & Textile	64	60.94	3.13	1.56	26.56	7.81	0	100
Earth Working & Wells	14	57.14	0	21.43	14.29	0	7.14	100
Furniture, House Fixtures	43	58.14	2.33	4.65	30.23	4.65	0	100
Heating	81	55.56	4.94	14.81	20.99	2.47	1.23	100
Pipes & Joints	56	48.21	5.36	7.14	30.36	5.36	3.57	100
Receptacles	53	60.38	1.89	7.55	22.64	7.55	0	100
Miscellaneous-Others	210	48.57	8.1	9.05	27.14	5.24	1.9	100
JP weighted		49.44	5	8.07	26.33	8.31	2.85	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

Standard documents, such as those from ISO (standards, contributions)（ISOなどの標準関連文書）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1889	224	243	870	141	52	239
Agriculture, Food, Textiles	60	30	6	5	14	2	0	3
Coating	80	38	9	11	17	0	0	5
Gas	45	24	1	1	13	2	1	3
Organic Compounds	120	72	4	7	21	1	0	15
Resins	125	65	8	6	35	1	0	10
Miscellaneous-chemical	208	107	21	16	42	1	2	19
Communications	160	68	1	3	45	21	19	3
Computer Hardware	59	32	2	2	9	3	3	8
Computer Software	123	59	5	3	34	12	6	4
Computer Peripherals	76	48	7	8	11	1	0	1
Information Storage	120	61	5	8	35	7	1	3
Drugs	127	74	6	8	22	4	0	13
Surgery & Medical Instruments	85	47	7	3	19	6	1	2
Biotechnology	87	44	2	5	25	1	0	10
Miscellaneous-Drug&Med	45	27	1	0	11	2	1	3
Electrical Devices	91	50	5	4	25	6	0	1
Electrical Lighting	96	58	5	6	21	4	0	2
Measuring & Testing	111	58	5	8	23	9	3	5
Nuclears & X-rays	72	41	4	1	22	2	0	2
Power Systems	172	85	12	13	46	3	0	13
Semiconductor Devices	129	77	6	10	30	4	0	2
Miscellaneous-Elec.	120	65	7	7	27	7	1	6
Materials Processing & Handling	103	52	5	9	19	4	1	13
Metal Working	137	70	17	12	32	3	0	3
Motors, Engines & Parts	145	66	8	15	45	5	0	6
Optics	100	49	9	7	23	5	1	6
Transportation	73	36	5	5	14	4	1	8
Miscellaneous Mechanical	124	63	9	8	24	4	6	10
Agriculture, Husbandry, Food	87	41	7	4	25	1	0	9
Apparel & Textile	77	39	4	4	13	4	1	12
Earth Working & Wells	20	6	1	3	4	0	0	6
Furniture, House Fixtures	51	26	2	2	12	3	0	6
Heating	84	46	6	8	19	1	1	3
Pipes & Joints	66	25	4	5	19	3	2	8
Receptacles	55	31	2	4	15	1	0	2
Miscellaneous-Others	225	109	16	22	59	4	1	14

%	N	I did not use	-2	-1	0	1	2	Total
All	3419	55.25	6.55	7.11	25.45	4.12	1.52	100
Agriculture, Food, Textiles	57	52.63	10.53	8.77	24.56	3.51	0	100
Coating	75	50.67	12	14.67	22.67	0	0	100
Gas	42	57.14	2.38	2.38	30.95	4.76	2.38	100
Organic Compounds	105	68.57	3.81	6.67	20	0.95	0	100
Resins	115	56.52	6.96	5.22	30.43	0.87	0	100
Miscellaneous-chemical	189	56.61	11.11	8.47	22.22	0.53	1.06	100
Communications	157	43.31	0.64	1.91	28.66	13.38	12.1	100
Computer Hardware	51	62.75	3.92	3.92	17.65	5.88	5.88	100
Computer Software	119	49.58	4.2	2.52	28.57	10.08	5.04	100
Computer Peripherals	75	64	9.33	10.67	14.67	1.33	0	100
Information Storage	117	52.14	4.27	6.84	29.91	5.98	0.85	100
Drugs	114	64.91	5.26	7.02	19.3	3.51	0	100
Surgery & Medical Instruments	83	56.63	8.43	3.61	22.89	7.23	1.2	100
Biotechnology	77	57.14	2.6	6.49	32.47	1.3	0	100
Miscellaneous-Drug&Med	42	64.29	2.38	0	26.19	4.76	2.38	100
Electrical Devices	90	55.56	5.56	4.44	27.78	6.67	0	100
Electrical Lighting	94	61.7	5.32	6.38	22.34	4.26	0	100
Measuring & Testing	106	54.72	4.72	7.55	21.7	8.49	2.83	100
Nuclears & X-rays	70	58.57	5.71	1.43	31.43	2.86	0	100
Power Systems	159	53.46	7.55	8.18	28.93	1.89	0	100
Semiconductor Devices	127	60.63	4.72	7.87	23.62	3.15	0	100
Miscellaneous-Elec.	114	57.02	6.14	6.14	23.68	6.14	0.88	100
Materials Processing & Handling	90	57.78	5.56	10	21.11	4.44	1.11	100
Metal Working	134	52.24	12.69	8.96	23.88	2.24	0	100
Motors, Engines & Parts	139	47.48	5.76	10.79	32.37	3.6	0	100
Optics	94	52.13	9.57	7.45	24.47	5.32	1.06	100
Transportation	65	55.38	7.69	7.69	21.54	6.15	1.54	100
Miscellaneous Mechanical	114	55.26	7.89	7.02	21.05	3.51	5.26	100
Agriculture, Husbandry, Food	78	52.56	8.97	5.13	32.05	1.28	0	100
Apparel & Textile	65	60	6.15	6.15	20	6.15	1.54	100
Earth Working & Wells	14	42.86	7.14	21.43	28.57	0	0	100
Furniture, House Fixtures	45	57.78	4.44	4.44	26.67	6.67	0	100
Heating	81	56.79	7.41	9.88	23.46	1.23	1.23	100
Pipes & Joints	58	43.1	6.9	8.62	32.76	5.17	3.45	100
Receptacles	53	58.49	3.77	7.55	28.3	1.89	0	100
Miscellaneous-Others	211	51.66	7.58	10.43	27.96	1.9	0.47	100
JP weighted		54.64	6.46	7.08	25.2	4.53	2.08	100

Your firm excluding co-inventors（組織内）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1482	190	285	1165	202	83	251
Agriculture, Food, Textiles	60	21	6	8	18	2	2	3
Coating	80	30	9	6	28	1	2	4
Gas	45	18	1	1	16	2	3	4
Organic Compounds	120	44	9	6	37	7	2	15
Resins	125	47	7	5	46	6	2	12
Miscellaneous-chemical	208	79	16	22	53	14	4	20
Communications	160	75	9	9	55	8	1	3
Computer Hardware	59	25	3	4	20	0	0	7
Computer Software	123	65	3	11	36	2	3	3
Computer Peripherals	76	39	6	10	17	2	1	1
Information Storage	120	54	6	8	38	5	5	4
Drugs	127	41	5	6	48	11	3	13
Surgery & Medical Instruments	85	37	5	2	30	5	4	2
Biotechnology	87	34	1	2	30	6	2	12
Miscellaneous-Drug&Med	45	18	0	1	21	3	0	2
Electrical Devices	91	33	5	7	38	5	2	1
Electrical Lighting	96	41	5	11	30	5	1	3
Measuring & Testing	111	60	5	5	23	7	6	5
Nuclears & X-rays	72	36	1	3	21	7	1	3
Power Systems	172	72	10	15	48	4	4	19
Semiconductor Devices	129	56	4	15	42	7	4	1
Miscellaneous-Elec.	120	52	6	10	41	6	1	4
Materials Processing & Handling	103	40	3	6	36	5	1	12
Metal Working	137	55	10	14	42	7	3	6
Motors, Engines & Parts	145	46	6	20	52	12	1	8
Optics	100	36	7	9	33	6	2	7
Transportation	73	27	5	6	20	6	2	7
Miscellaneous Mechanical	124	53	5	6	42	7	3	8
Agriculture, Husbandry, Food	87	27	5	4	30	8	5	8
Apparel & Textile	77	26	3	3	28	6	1	10
Earth Working & Wells	20	7	0	4	2	1	0	6
Furniture, House Fixtures	51	20	1	3	16	2	1	8
Heating	84	30	3	9	30	7	2	3
Pipes & Joints	66	21	2	7	21	4	2	9
Receptacles	55	24	2	4	15	4	3	3
Miscellaneous-Others	225	93	16	23	62	12	4	15

	N	I did not use	-2	-1	0	1	2	Total
All	3407	43.5	5.58	8.37	34.19	5.93	2.44	100
Agriculture, Food, Textiles	57	36.84	10.53	14.04	31.58	3.51	3.51	100
Coating	76	39.47	11.84	7.89	36.84	1.32	2.63	100
Gas	41	43.9	2.44	2.44	39.02	4.88	7.32	100
Organic Compounds	105	41.9	8.57	5.71	35.24	6.67	1.9	100
Resins	113	41.59	6.19	4.42	40.71	5.31	1.77	100
Miscellaneous-chemical	188	42.02	8.51	11.7	28.19	7.45	2.13	100
Communications	157	47.77	5.73	5.73	35.03	5.1	0.64	100
Computer Hardware	52	48.08	5.77	7.69	38.46	0	0	100
Computer Software	120	54.17	2.5	9.17	30	1.67	2.5	100
Computer Peripherals	75	52	8	13.33	22.67	2.67	1.33	100
Information Storage	116	46.55	5.17	6.9	32.76	4.31	4.31	100
Drugs	114	35.96	4.39	5.26	42.11	9.65	2.63	100
Surgery & Medical Instruments	83	44.58	6.02	2.41	36.14	6.02	4.82	100
Biotechnology	75	45.33	1.33	2.67	40	8	2.67	100
Miscellaneous-Drug&Med	43	41.86	0	2.33	48.84	6.98	0	100
Electrical Devices	90	36.67	5.56	7.78	42.22	5.56	2.22	100
Electrical Lighting	93	44.09	5.38	11.83	32.26	5.38	1.08	100
Measuring & Testing	106	56.6	4.72	4.72	21.7	6.6	5.66	100
Nuclears & X-rays	69	52.17	1.45	4.35	30.43	10.14	1.45	100
Power Systems	153	47.06	6.54	9.8	31.37	2.61	2.61	100
Semiconductor Devices	128	43.75	3.13	11.72	32.81	5.47	3.13	100
Miscellaneous-Elec.	116	44.83	5.17	8.62	35.34	5.17	0.86	100
Materials Processing & Handling	91	43.96	3.3	6.59	39.56	5.49	1.1	100
Metal Working	131	41.98	7.63	10.69	32.06	5.34	2.29	100
Motors, Engines & Parts	137	33.58	4.38	14.6	37.96	8.76	0.73	100
Optics	93	38.71	7.53	9.68	35.48	6.45	2.15	100
Transportation	66	40.91	7.58	9.09	30.3	9.09	3.03	100
Miscellaneous Mechanical	116	45.69	4.31	5.17	36.21	6.03	2.59	100
Agriculture, Husbandry, Food	79	34.18	6.33	5.06	37.97	10.13	6.33	100
Apparel & Textile	67	38.81	4.48	4.48	41.79	8.96	1.49	100
Earth Working & Wells	14	50	0	28.57	14.29	7.14	0	100
Furniture, House Fixtures	43	46.51	2.33	6.98	37.21	4.65	2.33	100
Heating	81	37.04	3.7	11.11	37.04	8.64	2.47	100
Pipes & Joints	57	36.84	3.51	12.28	36.84	7.02	3.51	100
Receptacles	52	46.15	3.85	7.69	28.85	7.69	5.77	100
Miscellaneous-Others	210	44.29	7.62	10.95	29.52	5.71	1.9	100
JP weighted		43.97	5.91	8.79	33.57	5.58	2.18	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

University and Education（大学など高等教育機関）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	2006	197	256	753	162	55	229
Agriculture, Food, Textiles	60	31	3	4	16	3	1	2
Coating	80	38	9	8	18	1	2	4
Gas	45	23	2	0	14	2	1	3
Organic Compounds	120	60	4	7	26	8	2	13
Resins	125	64	4	9	31	7	0	10
Miscellaneous-chemical	208	107	17	20	38	6	1	19
Communications	160	94	5	9	35	11	3	3
Computer Hardware	59	29	3	2	9	4	2	10
Computer Software	123	76	7	7	22	7	1	3
Computer Peripherals	76	49	5	6	14	1	0	1
Information Storage	120	73	5	8	20	8	2	4
Drugs	127	64	4	5	29	12	1	12
Surgery & Medical Instruments	85	54	4	2	15	6	2	2
Biotechnology	87	35	1	3	17	12	11	8
Miscellaneous-Drug&Med	45	30	0	0	11	1	1	2
Electrical Devices	91	57	3	6	21	3	0	1
Electrical Lighting	96	51	5	10	23	3	2	2
Measuring & Testing	111	67	5	6	19	7	2	5
Nuclears & X-rays	72	43	3	3	17	3	1	2
Power Systems	172	88	8	12	43	8	2	11
Semiconductor Devices	129	72	3	10	28	14	1	1
Miscellaneous-Elec.	120	75	9	6	23	2	0	5
Materials Processing & Handling	103	55	5	10	17	3	2	11
Metal Working	137	68	15	10	32	4	4	4
Motors, Engines & Parts	145	83	9	11	29	4	3	6
Optics	100	51	9	11	18	4	1	6
Transportation	73	40	5	6	15	0	0	7
Miscellaneous Mechanical	124	72	7	11	23	2	0	9
Agriculture, Husbandry, Food	87	40	5	6	23	3	2	8
Apparel & Textile	77	46	4	3	11	1	0	12
Earth Working & Wells	20	11	0	2	1	0	0	6
Furniture, House Fixtures	51	28	1	6	8	0	0	8
Heating	84	48	5	12	12	4	0	3
Pipes & Joints	66	33	4	5	13	0	2	9
Receptacles	55	37	2	3	10	1	0	2
Miscellaneous-Others	225	114	17	17	52	7	3	15

%	N	I did not use	-2	-1	0	1	2	Total
All	238	58.5	5.75	7.47	21.96	4.72	1.6	100
Agriculture, Food, Textiles	3	53.45	5.17	6.9	27.59	5.17	1.72	100
Coating	4	50	11.84	10.53	23.68	1.32	2.63	100
Gas	3	54.76	4.76	0	33.33	4.76	2.38	100
Organic Compounds	14	56.07	3.74	6.54	24.3	7.48	1.87	100
Resins	11	55.65	3.48	7.83	26.96	6.09	0	100
Miscellaneous-chemical	17	56.61	8.99	10.58	20.11	3.17	0.53	100
Communications	3	59.87	3.18	5.73	22.29	7.01	1.91	100
Computer Hardware	10	59.18	6.12	4.08	18.37	8.16	4.08	100
Computer Software	3	63.33	5.83	5.83	18.33	5.83	0.83	100
Computer Peripherals	1	65.33	6.67	8	18.67	1.33	0	100
Information Storage	4	62.93	4.31	6.9	17.24	6.9	1.72	100
Drugs	12	55.65	3.48	4.35	25.22	10.43	0.87	100
Surgery & Medical Instruments	3	65.06	4.82	2.41	18.07	7.23	2.41	100
Biotechnology	10	44.3	1.27	3.8	21.52	15.19	13.92	100
Miscellaneous-Drug&Med	2	69.77	0	0	25.58	2.33	2.33	100
Electrical Devices	2	63.33	3.33	6.67	23.33	3.33	0	100
Electrical Lighting	2	54.26	5.32	10.64	24.47	3.19	2.13	100
Measuring & Testing	5	63.21	4.72	5.66	17.92	6.6	1.89	100
Nuclears & X-rays	2	61.43	4.29	4.29	24.29	4.29	1.43	100
Power Systems	12	54.66	4.97	7.45	26.71	4.97	1.24	100
Semiconductor Devices	1	56.25	2.34	7.81	21.88	10.94	0.78	100
Miscellaneous-Elec.	5	65.22	7.83	5.22	20	1.74	0	100
Materials Processing & Handling	12	59.78	5.43	10.87	18.48	3.26	2.17	100
Metal Working	5	51.13	11.28	7.52	24.06	3.01	3.01	100
Motors, Engines & Parts	6	59.71	6.47	7.91	20.86	2.88	2.16	100
Optics	6	54.26	9.57	11.7	19.15	4.26	1.06	100
Transportation	7	60.61	7.58	9.09	22.73	0	0	100
Miscellaneous Mechanical	9	62.61	6.09	9.57	20	1.74	0	100
Agriculture, Husbandry, Food	9	50.63	6.33	7.59	29.11	3.8	2.53	100
Apparel & Textile	12	70.77	6.15	4.62	16.92	1.54	0	100
Earth Working & Wells	6	78.57	0	14.29	7.14	0	0	100
Furniture, House Fixtures	8	65.12	2.33	13.95	18.6	0	0	100
Heating	3	59.26	6.17	14.81	14.81	4.94	0	100
Pipes & Joints	9	57.89	7.02	8.77	22.81	0	3.51	100
Receptacles	2	69.81	3.77	5.66	18.87	1.89	0	100
Miscellaneous-Others	15	54.29	8.1	8.1	24.76	3.33	1.43	100
JP weighted		58.67	5.83	7.65	21.73	4.68	1.45	100

Non-University Public Research Organization（大学以外の公的研究機関）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	2066	204	239	752	123	36	238
Agriculture, Food, Textiles	60	31	4	4	15	2	1	3
Coating	80	37	9	6	21	2	1	4
Gas	45	24	2	2	10	3	1	3
Organic Compounds	120	68	4	2	25	7	0	14
Resins	125	65	6	11	28	3	1	11
Miscellaneous-chemical	208	110	19	18	39	5	0	17
Communications	160	97	4	10	36	9	1	3
Computer Hardware	59	32	3	2	9	2	1	10
Computer Software	123	79	8	8	20	4	1	3
Computer Peripherals	76	50	5	6	14	0	0	1
Information Storage	120	74	5	8	23	6	0	4
Drugs	127	71	4	3	26	10	1	12
Surgery & Medical Instruments	85	55	3	2	17	2	3	3
Biotechnology	87	38	2	4	20	8	5	10
Miscellaneous-Drug&Med	45	31	0	1	11	0	0	2
Electrical Devices	91	57	3	8	18	3	0	2
Electrical Lighting	96	56	6	7	22	2	1	2
Measuring & Testing	111	70	3	4	24	4	1	5
Nuclears & X-rays	72	44	3	1	20	1	1	2
Power Systems	172	90	10	14	38	5	3	12
Semiconductor Devices	129	73	4	10	31	8	2	1
Miscellaneous-Elec.	120	76	8	7	20	4	0	5
Materials Processing & Handling	103	56	5	9	17	4	0	12
Metal Working	137	70	14	11	30	6	1	5
Motors, Engines & Parts	145	88	9	10	27	3	2	6
Optics	100	52	9	9	19	3	2	6
Transportation	73	42	5	6	12	1	0	7
Miscellaneous Mechanical	124	74	8	8	23	2	0	9
Agriculture, Husbandry, Food	87	42	6	4	25	1	0	9
Apparel & Textile	77	46	3	2	11	2	1	12
Earth Working & Wells	20	10	0	3	1	0	0	6
Furniture, House Fixtures	51	27	2	4	9	1	0	8
Heating	84	49	6	12	11	3	0	3
Pipes & Joints	66	31	4	5	15	0	2	9
Receptacles	55	35	2	3	12	1	0	2
Miscellaneous-Others	225	116	16	15	53	6	4	15

	N	I did not use	-2	-1	0	1	2	Total
All	3420	60.41	5.96	6.99	21.99	3.6	1.05	100
Agriculture, Food, Textiles	57	54.39	7.02	7.02	26.32	3.51	1.75	100
Coating	76	48.68	11.84	7.89	27.63	2.63	1.32	100
Gas	42	57.14	4.76	4.76	23.81	7.14	2.38	100
Organic Compounds	106	64.15	3.77	1.89	23.58	6.6	0	100
Resins	114	57.02	5.26	9.65	24.56	2.63	0.88	100
Miscellaneous-chemical	191	57.59	9.95	9.42	20.42	2.62	0	100
Communications	157	61.78	2.55	6.37	22.93	5.73	0.64	100
Computer Hardware	49	65.31	6.12	4.08	18.37	4.08	2.04	100
Computer Software	120	65.83	6.67	6.67	16.67	3.33	0.83	100
Computer Peripherals	75	66.67	6.67	8	18.67	0	0	100
Information Storage	116	63.79	4.31	6.9	19.83	5.17	0	100
Drugs	115	61.74	3.48	2.61	22.61	8.7	0.87	100
Surgery & Medical Instruments	82	67.07	3.66	2.44	20.73	2.44	3.66	100
Biotechnology	77	49.35	2.6	5.19	25.97	10.39	6.49	100
Miscellaneous-Drug&Med	43	72.09	0	2.33	25.58	0	0	100
Electrical Devices	89	64.04	3.37	8.99	20.22	3.37	0	100
Electrical Lighting	94	59.57	6.38	7.45	23.4	2.13	1.06	100
Measuring & Testing	106	66.04	2.83	3.77	22.64	3.77	0.94	100
Nuclears & X-rays	70	62.86	4.29	1.43	28.57	1.43	1.43	100
Power Systems	160	56.25	6.25	8.75	23.75	3.13	1.88	100
Semiconductor Devices	128	57.03	3.13	7.81	24.22	6.25	1.56	100
Miscellaneous-Elec.	115	66.09	6.96	6.09	17.39	3.48	0	100
Materials Processing & Handling	91	61.54	5.49	9.89	18.68	4.4	0	100
Metal Working	132	53.03	10.61	8.33	22.73	4.55	0.76	100
Motors, Engines & Parts	139	63.31	6.47	7.19	19.42	2.16	1.44	100
Optics	94	55.32	9.57	9.57	20.21	3.19	2.13	100
Transportation	66	63.64	7.58	9.09	18.18	1.52	0	100
Miscellaneous Mechanical	115	64.35	6.96	6.96	20	1.74	0	100
Agriculture, Husbandry, Food	78	53.85	7.69	5.13	32.05	1.28	0	100
Apparel & Textile	65	70.77	4.62	3.08	16.92	3.08	1.54	100
Earth Working & Wells	14	71.43	0	21.43	7.14	0	0	100
Furniture, House Fixtures	43	62.79	4.65	9.3	20.93	2.33	0	100
Heating	81	60.49	7.41	14.81	13.58	3.7	0	100
Pipes & Joints	57	54.39	7.02	8.77	26.32	0	3.51	100
Receptacles	53	66.04	3.77	5.66	22.64	1.89	0	100
Miscellaneous-Others	210	55.24	7.62	7.14	25.24	2.86	1.9	100
JP weighted		60.72	6.08	7.22	21.41	3.59	0.99	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

Customers or Product users（顧客・製品ユーザー）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1500	150	250	978	384	180	216
Agriculture, Food, Textiles	60	24	2	4	16	9	2	3
Coating	80	25	9	5	25	5	7	4
Gas	45	17	2	1	18	4	1	2
Organic Compounds	120	60	6	3	24	7	4	16
Resins	125	52	3	7	41	7	7	8
Miscellaneous-chemical	208	80	14	16	51	23	9	15
Communications	160	72	7	16	44	9	9	3
Computer Hardware	59	23	2	4	15	5	0	10
Computer Software	123	59	3	7	41	7	2	4
Computer Peripherals	76	38	3	4	24	4	2	1
Information Storage	120	55	5	12	32	9	3	4
Drugs	127	63	2	5	34	8	3	12
Surgery & Medical Instruments	85	35	3	3	22	13	7	2
Biotechnology	87	38	3	6	16	12	1	11
Miscellaneous-Drug&Med	45	18	0	1	14	5	5	2
Electrical Devices	91	32	4	2	31	13	7	2
Electrical Lighting	96	37	2	8	26	17	4	2
Measuring & Testing	111	51	6	6	23	15	5	5
Nuclears & X-rays	72	34	2	1	24	3	6	2
Power Systems	172	71	7	15	45	17	6	11
Semiconductor Devices	129	58	3	8	45	11	4	0
Miscellaneous-Elec.	120	55	3	6	29	16	6	5
Materials Processing & Handling	103	40	1	6	26	12	7	11
Metal Working	137	52	10	11	41	11	8	4
Motors, Engines & Parts	145	48	5	17	32	29	7	7
Optics	100	39	5	8	28	11	4	5
Transportation	73	27	4	10	16	5	4	7
Miscellaneous Mechanical	124	51	5	6	30	18	6	8
Agriculture, Husbandry, Food	87	32	5	6	18	11	8	7
Apparel & Textile	77	22	3	2	18	18	7	7
Earth Working & Wells	20	5	1	1	5	2	0	6
Furniture, House Fixtures	51	22	1	0	13	6	2	7
Heating	84	37	3	9	25	3	5	2
Pipes & Joints	66	19	2	8	15	10	7	5
Receptacles	55	20	3	3	15	8	4	2
Miscellaneous-Others	225	89	11	23	56	21	11	14

%	N	I did not use	-2	-1	0	1	2	Total
All	3442	43.58	4.36	7.26	28.41	11.16	5.23	100
Agriculture, Food, Textiles	57	42.11	3.51	7.02	28.07	15.79	3.51	100
Coating	76	32.89	11.84	6.58	32.89	6.58	9.21	100
Gas	43	39.53	4.65	2.33	41.86	9.3	2.33	100
Organic Compounds	104	57.69	5.77	2.88	23.08	6.73	3.85	100
Resins	117	44.44	2.56	5.98	35.04	5.98	5.98	100
Miscellaneous-chemical	193	41.45	7.25	8.29	26.42	11.92	4.66	100
Communications	157	45.86	4.46	10.19	28.03	5.73	5.73	100
Computer Hardware	49	46.94	4.08	8.16	30.61	10.2	0	100
Computer Software	119	49.58	2.52	5.88	34.45	5.88	1.68	100
Computer Peripherals	75	50.67	4	5.33	32	5.33	2.67	100
Information Storage	116	47.41	4.31	10.34	27.59	7.76	2.59	100
Drugs	115	54.78	1.74	4.35	29.57	6.96	2.61	100
Surgery & Medical Instruments	83	42.17	3.61	3.61	26.51	15.66	8.43	100
Biotechnology	76	50	3.95	7.89	21.05	15.79	1.32	100
Miscellaneous-Drug&Med	43	41.86	0	2.33	32.56	11.63	11.63	100
Electrical Devices	89	35.96	4.49	2.25	34.83	14.61	7.87	100
Electrical Lighting	94	39.36	2.13	8.51	27.66	18.09	4.26	100
Measuring & Testing	106	48.11	5.66	5.66	21.7	14.15	4.72	100
Nuclears & X-rays	70	48.57	2.86	1.43	34.29	4.29	8.57	100
Power Systems	161	44.1	4.35	9.32	27.95	10.56	3.73	100
Semiconductor Devices	129	44.96	2.33	6.2	34.88	8.53	3.1	100
Miscellaneous-Elec.	115	47.83	2.61	5.22	25.22	13.91	5.22	100
Materials Processing & Handling	92	43.48	1.09	6.52	28.26	13.04	7.61	100
Metal Working	133	39.1	7.52	8.27	30.83	8.27	6.02	100
Motors, Engines & Parts	138	34.78	3.62	12.32	23.19	21.01	5.07	100
Optics	95	41.05	5.26	8.42	29.47	11.58	4.21	100
Transportation	66	40.91	6.06	15.15	24.24	7.58	6.06	100
Miscellaneous Mechanical	116	43.97	4.31	5.17	25.86	15.52	5.17	100
Agriculture, Husbandry, Food	80	40	6.25	7.5	22.5	13.75	10	100
Apparel & Textile	70	31.43	4.29	2.86	25.71	25.71	10	100
Earth Working & Wells	14	35.71	7.14	7.14	35.71	14.29	0	100
Furniture, House Fixtures	44	50	2.27	0	29.55	13.64	4.55	100
Heating	82	45.12	3.66	10.98	30.49	3.66	6.1	100
Pipes & Joints	61	31.15	3.28	13.11	24.59	16.39	11.48	100
Receptacles	53	37.74	5.66	5.66	28.3	15.09	7.55	100
Miscellaneous-Others	211	42.18	5.21	10.9	26.54	9.95	5.21	100
JP weighted		43.9	4.45	7.79	28.34	10.57	4.93	100

Suppliers（サプライヤー）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1698	183	297	907	235	95	243
Agriculture, Food, Textiles	60	24	1	5	24	3	0	3
Coating	80	29	6	10	19	8	4	4
Gas	45	19	0	3	14	5	1	3
Organic Compounds	120	63	6	2	22	10	1	16
Resins	125	58	5	9	32	9	2	10
Miscellaneous-chemical	208	93	19	18	37	17	6	18
Communications	160	83	7	14	37	11	5	3
Computer Hardware	59	30	3	4	13	0	0	9
Computer Software	123	67	4	8	33	6	1	4
Computer Peripherals	76	43	4	6	19	2	1	1
Information Storage	120	60	5	9	38	3	1	4
Drugs	127	67	1	10	30	5	2	12
Surgery & Medical Instruments	85	43	5	1	20	5	9	2
Biotechnology	87	37	5	6	17	9	2	11
Miscellaneous-Drug&Med	45	24	1	1	14	1	2	2
Electrical Devices	91	41	3	6	29	9	1	2
Electrical Lighting	96	42	0	8	31	10	3	2
Measuring & Testing	111	59	10	3	27	7	0	5
Nuclears & X-rays	72	39	2	6	20	2	1	2
Power Systems	172	76	9	15	46	11	2	13
Semiconductor Devices	129	62	9	15	33	5	3	2
Miscellaneous-Elec.	120	61	4	13	19	15	3	5
Materials Processing & Handling	103	47	1	8	28	3	4	12
Metal Working	137	63	12	13	34	7	4	4
Motors, Engines & Parts	145	58	6	13	43	13	6	6
Optics	100	38	9	10	31	3	3	6
Transportation	73	28	3	8	16	7	4	7
Miscellaneous Mechanical	124	58	5	14	29	7	2	9
Agriculture, Husbandry, Food	87	33	7	5	19	6	8	9
Apparel & Textile	77	32	3	2	16	9	2	13
Earth Working & Wells	20	6	1	2	4	1	0	6
Furniture, House Fixtures	51	22	1	3	13	2	1	9
Heating	84	37	5	11	21	3	4	3
Pipes & Joints	66	29	3	8	11	3	3	9
Receptacles	55	26	3	4	15	4	1	2
Miscellaneous-Others	225	101	15	24	53	14	3	15

%	N	I did not use	-2	-1	0	1	2	Total
All	3415	49.72	5.36	8.7	26.56	6.88	2.78	100
Agriculture, Food, Textiles	57	42.11	1.75	8.77	42.11	5.26	0	100
Coating	76	38.16	7.89	13.16	25	10.53	5.26	100
Gas	42	45.24	0	7.14	33.33	11.9	2.38	100
Organic Compounds	104	60.58	5.77	1.92	21.15	9.62	0.96	100
Resins	115	50.43	4.35	7.83	27.83	7.83	1.74	100
Miscellaneous-chemical	190	48.95	10	9.47	19.47	8.95	3.16	100
Communications	157	52.87	4.46	8.92	23.57	7.01	3.18	100
Computer Hardware	50	60	6	8	26	0	0	100
Computer Software	119	56.3	3.36	6.72	27.73	5.04	0.84	100
Computer Peripherals	75	57.33	5.33	8	25.33	2.67	1.33	100
Information Storage	116	51.72	4.31	7.76	32.76	2.59	0.86	100
Drugs	115	58.26	0.87	8.7	26.09	4.35	1.74	100
Surgery & Medical Instruments	83	51.81	6.02	1.2	24.1	6.02	10.84	100
Biotechnology	76	48.68	6.58	7.89	22.37	11.84	2.63	100
Miscellaneous-Drug&Med	43	55.81	2.33	2.33	32.56	2.33	4.65	100
Electrical Devices	89	46.07	3.37	6.74	32.58	10.11	1.12	100
Electrical Lighting	94	44.68	0	8.51	32.98	10.64	3.19	100
Measuring & Testing	106	55.66	9.43	2.83	25.47	6.6	0	100
Nuclears & X-rays	70	55.71	2.86	8.57	28.57	2.86	1.43	100
Power Systems	159	47.8	5.66	9.43	28.93	6.92	1.26	100
Semiconductor Devices	127	48.82	7.09	11.81	25.98	3.94	2.36	100
Miscellaneous-Elec.	115	53.04	3.48	11.3	16.52	13.04	2.61	100
Materials Processing & Handling	91	51.65	1.1	8.79	30.77	3.3	4.4	100
Metal Working	133	47.37	9.02	9.77	25.56	5.26	3.01	100
Motors, Engines & Parts	139	41.73	4.32	9.35	30.94	9.35	4.32	100
Optics	94	40.43	9.57	10.64	32.98	3.19	3.19	100
Transportation	66	42.42	4.55	12.12	24.24	10.61	6.06	100
Miscellaneous Mechanical	115	50.43	4.35	12.17	25.22	6.09	1.74	100
Agriculture, Husbandry, Food	78	42.31	8.97	6.41	24.36	7.69	10.26	100
Apparel & Textile	64	50	4.69	3.13	25	14.06	3.13	100
Earth Working & Wells	14	42.86	7.14	14.29	28.57	7.14	0	100
Furniture, House Fixtures	42	52.38	2.38	7.14	30.95	4.76	2.38	100
Heating	81	45.68	6.17	13.58	25.93	3.7	4.94	100
Pipes & Joints	57	50.88	5.26	14.04	19.3	5.26	5.26	100
Receptacles	53	49.06	5.66	7.55	28.3	7.55	1.89	100
Miscellaneous-Others	210	48.1	7.14	11.43	25.24	6.67	1.43	100
JP weighted		50.01	5.55	8.91	26.24	6.82	2.46	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)（外国の知識源は国内のものと比較してどの程度重要であったか）

Competitors (e.g. knowledge from its products)（競争相手）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	1389	139	228	1004	452	222	224
Agriculture, Food, Textiles	60	19	1	5	20	7	6	2
Coating	80	29	4	7	17	11	8	4
Gas	45	13	1	2	16	5	5	3
Organic Compounds	120	55	6	4	25	9	7	14
Resins	125	43	4	10	39	16	5	8
Miscellaneous-chemical	208	76	13	18	52	18	14	17
Communications	160	62	4	7	46	23	15	3
Computer Hardware	59	23	1	3	19	5	0	8
Computer Software	123	55	2	9	40	10	4	3
Computer Peripherals	76	34	5	3	23	6	4	1
Information Storage	120	42	5	2	43	18	6	4
Drugs	127	51	0	3	36	15	12	10
Surgery & Medical Instruments	85	37	4	1	19	16	5	3
Biotechnology	87	29	4	4	16	15	8	11
Miscellaneous-Drug&Med	45	19	0	2	11	6	5	2
Electrical Devices	91	32	3	3	31	13	7	2
Electrical Lighting	96	40	0	8	23	18	5	2
Measuring & Testing	111	47	4	2	26	18	9	5
Nuclears & X-rays	72	31	0	2	25	7	5	2
Power Systems	172	69	7	13	39	23	5	16
Semiconductor Devices	129	60	4	5	40	9	9	2
Miscellaneous-Elec.	120	52	5	8	30	15	6	4
Materials Processing & Handling	103	35	2	6	25	15	9	11
Metal Working	137	50	11	10	43	15	4	4
Motors, Engines & Parts	145	43	5	14	39	28	9	7
Optics	100	36	5	6	33	9	6	5
Transportation	73	26	4	7	15	10	6	5
Miscellaneous Mechanical	124	45	2	8	37	16	7	9
Agriculture, Husbandry, Food	87	29	6	5	22	8	8	9
Apparel & Textile	77	25	0	3	20	13	5	11
Earth Working & Wells	20	5	1	3	3	2	0	6
Furniture, House Fixtures	51	16	1	7	16	2	4	5
Heating	84	33	5	7	26	9	2	2
Pipes & Joints	66	19	4	6	18	6	4	9
Receptacles	55	23	3	1	13	11	2	2
Miscellaneous-Others	225	86	13	24	58	25	6	13

%	N	I did not use	1	2	3	4	5	Total
All	3434	40.45	4.05	6.64	29.24	13.16	6.46	100
Agriculture, Food, Textiles	58	32.76	1.72	8.62	34.48	12.07	10.34	100
Coating	76	38.16	5.26	9.21	22.37	14.47	10.53	100
Gas	42	30.95	2.38	4.76	38.1	11.9	11.9	100
Organic Compounds	106	51.89	5.66	3.77	23.58	8.49	6.6	100
Resins	117	36.75	3.42	8.55	33.33	13.68	4.27	100
Miscellaneous-chemical	191	39.79	6.81	9.42	27.23	9.42	7.33	100
Communications	157	39.49	2.55	4.46	29.3	14.65	9.55	100
Computer Hardware	51	45.1	1.96	5.88	37.25	9.8	0	100
Computer Software	120	45.83	1.67	7.5	33.33	8.33	3.33	100
Computer Peripherals	75	45.33	6.67	4	30.67	8	5.33	100
Information Storage	116	36.21	4.31	1.72	37.07	15.52	5.17	100
Drugs	117	43.59	0	2.56	30.77	12.82	10.26	100
Surgery & Medical Instruments	82	45.12	4.88	1.22	23.17	19.51	6.1	100
Biotechnology	76	38.16	5.26	5.26	21.05	19.74	10.53	100
Miscellaneous-Drug&Med	43	44.19	0	4.65	25.58	13.95	11.63	100
Electrical Devices	89	35.96	3.37	3.37	34.83	14.61	7.87	100
Electrical Lighting	94	42.55	0	8.51	24.47	19.15	5.32	100
Measuring & Testing	106	44.34	3.77	1.89	24.53	16.98	8.49	100
Nuclears & X-rays	70	44.29	0	2.86	35.71	10	7.14	100
Power Systems	156	44.23	4.49	8.33	25	14.74	3.21	100
Semiconductor Devices	127	47.24	3.15	3.94	31.5	7.09	7.09	100
Miscellaneous-Elec.	116	44.83	4.31	6.9	25.86	12.93	5.17	100
Materials Processing & Handling	92	38.04	2.17	6.52	27.17	16.3	9.78	100
Metal Working	133	37.59	8.27	7.52	32.33	11.28	3.01	100
Motors, Engines & Parts	138	31.16	3.62	10.14	28.26	20.29	6.52	100
Optics	95	37.89	5.26	6.32	34.74	9.47	6.32	100
Transportation	68	38.24	5.88	10.29	22.06	14.71	8.82	100
Miscellaneous Mechanical	115	39.13	1.74	6.96	32.17	13.91	6.09	100
Agriculture, Husbandry, Food	78	37.18	7.69	6.41	28.21	10.26	10.26	100
Apparel & Textile	66	37.88	0	4.55	30.3	19.7	7.58	100
Earth Working & Wells	14	35.71	7.14	21.43	21.43	14.29	0	100
Furniture, House Fixtures	46	34.78	2.17	15.22	34.78	4.35	8.7	100
Heating	82	40.24	6.1	8.54	31.71	10.98	2.44	100
Pipes & Joints	57	33.33	7.02	10.53	31.58	10.53	7.02	100
Receptacles	53	43.4	5.66	1.89	24.53	20.75	3.77	100
Miscellaneous-Others	212	40.57	6.13	11.32	27.36	11.79	2.83	100
JP weighted		40.54	4.07	6.75	29.51	12.81	6.33	100

Consulting or contract R&D firms（コンサルティング企業・R&D請負企業）

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	2222	217	239	650	65	22	243
Agriculture, Food, Textiles	60	36	2	6	11	2	0	3
Coating	80	44	11	9	11	1	0	4
Gas	45	26	1	3	11	0	1	3
Organic Compounds	120	72	5	6	20	3	0	14
Resins	125	73	5	10	23	3	0	11
Miscellaneous-chemical	208	115	20	16	35	3	1	18
Communications	160	107	6	8	30	5	1	3
Computer Hardware	59	34	4	1	10	1	0	9
Computer Software	123	83	4	6	24	2	0	4
Computer Peripherals	76	55	4	6	9	1	0	1
Information Storage	120	78	6	9	22	0	1	4
Drugs	127	76	4	7	26	2	0	12
Surgery & Medical Instruments	85	58	5	0	17	3	0	2
Biotechnology	87	41	4	5	19	4	2	12
Miscellaneous-Drug&Med	45	32	0	1	9	0	0	3
Electrical Devices	91	60	3	5	20	2	0	1
Electrical Lighting	96	66	6	6	16	0	0	2
Measuring & Testing	111	75	7	3	17	3	1	5
Nuclears & X-rays	72	50	3	1	13	1	1	3
Power Systems	172	98	11	13	32	4	0	14
Semiconductor Devices	129	82	6	11	23	4	1	2
Miscellaneous-Elec.	120	78	8	7	19	2	1	5
Materials Processing & Handling	103	59	6	8	17	1	0	12
Metal Working	137	77	15	12	27	2	0	4
Motors, Engines & Parts	145	88	10	12	20	6	4	5
Optics	100	62	7	7	17	0	1	6
Transportation	73	41	7	4	12	1	1	7
Miscellaneous Mechanical	124	77	7	11	18	2	0	9
Agriculture, Husbandry, Food	87	44	7	6	18	1	2	9
Apparel & Textile	77	45	3	2	13	0	0	14
Earth Working & Wells	20	10	1	2	0	1	0	6
Furniture, House Fixtures	51	28	2	3	8	2	0	8
Heating	84	52	6	9	12	1	1	3
Pipes & Joints	66	34	4	4	13	0	2	9
Receptacles	55	37	2	4	10	0	0	2
Miscellaneous-Others	225	129	15	16	48	2	1	14

%	N	I did not use	1	2	3	4	5	Total
All	3415	65.07	6.35	7	19.03	1.9	0.64	100
Agriculture, Food, Textiles	57	63.16	3.51	10.53	19.3	3.51	0	100
Coating	76	57.89	14.47	11.84	14.47	1.32	0	100
Gas	42	61.9	2.38	7.14	26.19	0	2.38	100
Organic Compounds	106	67.92	4.72	5.66	18.87	2.83	0	100
Resins	114	64.04	4.39	8.77	20.18	2.63	0	100
Miscellaneous-chemical	190	60.53	10.53	8.42	18.42	1.58	0.53	100
Communications	157	68.15	3.82	5.1	19.11	3.18	0.64	100
Computer Hardware	50	68	8	2	20	2	0	100
Computer Software	119	69.75	3.36	5.04	20.17	1.68	0	100
Computer Peripherals	75	73.33	5.33	8	12	1.33	0	100
Information Storage	116	67.24	5.17	7.76	18.97	0	0.86	100
Drugs	115	66.09	3.48	6.09	22.61	1.74	0	100
Surgery & Medical Instruments	83	69.88	6.02	0	20.48	3.61	0	100
Biotechnology	75	54.67	5.33	6.67	25.33	5.33	2.67	100
Miscellaneous-Drug&Med	42	76.19	0	2.38	21.43	0	0	100
Electrical Devices	90	66.67	3.33	5.56	22.22	2.22	0	100
Electrical Lighting	94	70.21	6.38	6.38	17.02	0	0	100
Measuring & Testing	106	70.75	6.6	2.83	16.04	2.83	0.94	100
Nuclears & X-rays	69	72.46	4.35	1.45	18.84	1.45	1.45	100
Power Systems	158	62.03	6.96	8.23	20.25	2.53	0	100
Semiconductor Devices	127	64.57	4.72	8.66	18.11	3.15	0.79	100
Miscellaneous-Elec.	115	67.83	6.96	6.09	16.52	1.74	0.87	100
Materials Processing & Handling	91	64.84	6.59	8.79	18.68	1.1	0	100
Metal Working	133	57.89	11.28	9.02	20.3	1.5	0	100
Motors, Engines & Parts	140	62.86	7.14	8.57	14.29	4.29	2.86	100
Optics	94	65.96	7.45	7.45	18.09	0	1.06	100
Transportation	66	62.12	10.61	6.06	18.18	1.52	1.52	100
Miscellaneous Mechanical	115	66.96	6.09	9.57	15.65	1.74	0	100
Agriculture, Husbandry, Food	78	56.41	8.97	7.69	23.08	1.28	2.56	100
Apparel & Textile	63	71.43	4.76	3.17	20.63	0	0	100
Earth Working & Wells	14	71.43	7.14	14.29	0	7.14	0	100
Furniture, House Fixtures	43	65.12	4.65	6.98	18.6	4.65	0	100
Heating	81	64.2	7.41	11.11	14.81	1.23	1.23	100
Pipes & Joints	57	59.65	7.02	7.02	22.81	0	3.51	100
Receptacles	53	69.81	3.77	7.55	18.87	0	0	100
Miscellaneous-Others	211	61.14	7.11	7.58	22.75	0.95	0.47	100
		65.41	6.38	7.05	18.71	1.9	0.54	100

Japan

Question 4-14 What was the relative importance of the following sources of knowledge of foreign countries compared to those in Japan for your research that led to the patented invention as a whole? (-2 = much less important, 0= equal, 2 = much more import)(外国の知識源は国内のものと比較してどの程度重要であったか)

other

	All	使っていない	重要性で大きく劣る	重要性で上回る	同等	重要性で上回る	重要性で大きく上回る	無回答
	All	**I did not use**	**-2**	**-1**	**0**	**1**	**2**	**no response**
All	3658	3199	83	36	229	5	5	101
Agriculture, Food, Textiles	60	52	2	2	3	0	0	1
Coating	80	70	2	1	4	0	0	3
Gas	45	43	0	0	1	0	1	0
Organic Compounds	120	103	2	1	5	0	0	9
Resins	125	103	3	0	12	0	0	7
Miscellaneous-chemical	208	180	7	3	11	0	1	6
Communications	160	148	2	1	8	0	0	1
Computer Hardware	59	54	2	1	2	0	0	0
Computer Software	123	113	2	0	4	0	1	3
Computer Peripherals	76	67	3	0	5	0	0	1
Information Storage	120	104	1	1	12	0	0	2
Drugs	127	113	1	1	8	0	0	4
Surgery & Medical Instruments	85	75	3	0	6	0	0	1
Biotechnology	87	75	2	2	5	0	0	3
Miscellaneous-Drug&Med	45	41	0	0	3	0	0	1
Electrical Devices	91	79	1	1	8	0	1	1
Electrical Lighting	96	86	1	3	5	0	0	1
Measuring & Testing	111	101	2	0	4	0	0	4
Nuclears & X-rays	72	69	2	0	1	0	0	0
Power Systems	172	149	3	2	13	1	0	4
Semiconductor Devices	129	114	2	4	8	1	0	0
Miscellaneous-Elec.	120	110	2	0	7	0	0	1
Materials Processing & Handling	103	86	2	0	7	0	0	8
Metal Working	137	117	5	2	10	1	0	2
Motors, Engines & Parts	145	123	3	1	15	1	0	2
Optics	100	85	3	2	7	0	0	3
Transportation	73	58	4	0	7	0	0	4
Miscellaneous Mechanical	124	112	4	1	2	0	0	5
Agriculture, Husbandry, Food	87	74	3	0	7	0	0	3
Apparel & Textile	77	71	1	0	4	0	0	1
Earth Working & Wells	20	15	0	1	0	1	0	3
Furniture, House Fixtures	51	44	1	0	3	0	0	3
Heating	84	74	2	2	4	0	0	2
Pipes & Joints	66	53	1	0	8	0	0	4
Receptacles	55	50	0	1	2	0	0	2
Miscellaneous-Others	225	188	9	3	18	0	1	6

%	N	I did not use	1	2	3	4	5	Total
All	3557	89.94	2.33	1.01	6.44	0.14	0.14	100
Agriculture, Food, Textiles	59	88.14	3.39	3.39	5.08	0	0	100
Coating	77	90.91	2.6	1.3	5.19	0	0	100
Gas	45	95.56	0	0	2.22	0	2.22	100
Organic Compounds	111	92.79	1.8	0.9	4.5	0	0	100
Resins	118	87.29	2.54	0	10.17	0	0	100
Miscellaneous-chemical	202	89.11	3.47	1.49	5.45	0	0.5	100
Communications	159	93.08	1.26	0.63	5.03	0	0	100
Computer Hardware	59	91.53	3.39	1.69	3.39	0	0	100
Computer Software	120	94.17	1.67	0	3.33	0	0.83	100
Computer Peripherals	75	89.33	4	0	6.67	0	0	100
Information Storage	118	88.14	0.85	0.85	10.17	0	0	100
Drugs	123	91.87	0.81	0.81	6.5	0	0	100
Surgery & Medical Instruments	84	89.29	3.57	0	7.14	0	0	100
Biotechnology	84	89.29	2.38	2.38	5.95	0	0	100
Miscellaneous-Drug&Med	44	93.18	0	0	6.82	0	0	100
Electrical Devices	90	87.78	1.11	1.11	8.89	0	1.11	100
Electrical Lighting	95	90.53	1.05	3.16	5.26	0	0	100
Measuring & Testing	107	94.39	1.87	0	3.74	0	0	100
Nuclears & X-rays	72	95.83	2.78	0	1.39	0	0	100
Power Systems	168	88.69	1.79	1.19	7.74	0.6	0	100
Semiconductor Devices	129	88.37	1.55	3.1	6.2	0.78	0	100
Miscellaneous-Elec.	119	92.44	1.68	0	5.88	0	0	100
Materials Processing & Handling	95	90.53	2.11	0	7.37	0	0	100
Metal Working	135	86.67	3.7	1.48	7.41	0.74	0	100
Motors, Engines & Parts	143	86.01	2.1	0.7	10.49	0.7	0	100
Optics	97	87.63	3.09	2.06	7.22	0	0	100
Transportation	69	84.06	5.8	0	10.14	0	0	100
Miscellaneous Mechanical	119	94.12	3.36	0.84	1.68	0	0	100
Agriculture, Husbandry, Food	84	88.1	3.57	0	8.33	0	0	100
Apparel & Textile	76	93.42	1.32	0	5.26	0	0	100
Earth Working & Wells	17	88.24	0	5.88	0	5.88	0	100
Furniture, House Fixtures	48	91.67	2.08	0	6.25	0	0	100
Heating	82	90.24	2.44	2.44	4.88	0	0	100
Pipes & Joints	62	85.48	1.61	0	12.9	0	0	100
Receptacles	53	94.34	0	1.89	3.77	0	0	100
Miscellaneous-Others	219	85.84	4.11	1.37	8.22	0	0.46	100
JP weighted		89.85	2.42	0.98	6.47	0.11	0.16	100

Japan

Question 4-15 Including this patent, how many domestic patent grants do you expect your research would generate directly for your firm, including those with joint ownership? (当該研究は何件の国内特許登録をもたらしますか？)

	All	1	2-5	6-10	11-50	51-100	101-	no response
All	3658	616	1813	581	420	89	51	88
Agriculture, Food, Textiles	60	9	35	4	8	1	0	3
Coating	80	7	46	10	10	4	1	2
Gas	45	7	21	7	5	2	1	2
Organic Compounds	120	27	56	13	12	2	2	8
Resins	125	15	55	26	19	4	1	5
Miscellaneous-chemical	208	32	100	36	28	4	2	6
Communications	160	18	74	24	30	5	6	3
Computer Hardware	59	7	35	10	6	1	0	0
Computer Software	123	25	54	22	14	4	2	2
Computer Peripherals	76	12	34	10	12	3	3	2
Information Storage	120	24	54	24	11	3	3	1
Drugs	127	25	75	14	7	1	0	5
Surgery & Medical Instruments	85	15	44	19	3	2	2	0
Biotechnology	87	19	46	13	5	1	0	3
Miscellaneous-Drug&Med	45	13	23	5	2	2	0	0
Electrical Devices	91	20	47	14	7	3	0	0
Electrical Lighting	96	11	51	14	15	5	0	0
Measuring & Testing	111	14	62	19	12	2	1	1
Nuclears & X-rays	72	19	31	9	10	1	0	2
Power Systems	172	29	73	32	21	6	8	3
Semiconductor Devices	129	16	66	24	17	4	1	1
Miscellaneous-Elec.	120	21	51	21	20	3	1	3
Materials Processing & Handling	103	27	43	13	7	3	3	7
Metal Working	137	15	71	25	20	2	2	2
Motors, Engines & Parts	145	18	70	21	22	8	4	2
Optics	100	13	43	21	16	2	1	4
Transportation	73	17	25	16	8	3	1	3
Miscellaneous Mechanical	124	22	67	22	7	1	1	4
Agriculture, Husbandry, Food	87	12	48	19	3	2	1	2
Apparel & Textile	77	23	40	9	5	0	0	0
Earth Working & Wells	20	2	14	3	1	0	0	0
Furniture, House Fixtures	51	12	26	6	3	0	1	3
Heating	84	12	42	12	16	1	1	0
Pipes & Joints	66	11	40	7	5	0	0	3
Receptacles	55	15	28	6	3	0	1	2
Miscellaneous-Others	225	32	123	31	30	4	1	4

%	N	1	2-5	6-10	11-50	51-100	101-	Total
All	3570	17.25	50.78	16.27	11.76	2.49	1.43	100
Agriculture, Food, Textiles	57	15.79	61.4	7.02	14.04	1.75	0	100
Coating	78	8.97	58.97	12.82	12.82	5.13	1.28	100
Gas	43	16.28	48.84	16.28	11.63	4.65	2.33	100
Organic Compounds	112	24.11	50	11.61	10.71	1.79	1.79	100
Resins	120	12.5	45.83	21.67	15.83	3.33	0.83	100
Miscellaneous-chemical	202	15.84	49.5	17.82	13.86	1.98	0.99	100
Communications	157	11.46	47.13	15.29	19.11	3.18	3.82	100
Computer Hardware	59	11.86	59.32	16.95	10.17	1.69	0	100
Computer Software	121	20.66	44.63	18.18	11.57	3.31	1.65	100
Computer Peripherals	74	16.22	45.95	13.51	16.22	4.05	4.05	100
Information Storage	119	20.17	45.38	20.17	9.24	2.52	2.52	100
Drugs	122	20.49	61.48	11.48	5.74	0.82	0	100
Surgery & Medical Instruments	85	17.65	51.76	22.35	3.53	2.35	2.35	100
Biotechnology	84	22.62	54.76	15.48	5.95	1.19	0	100
Miscellaneous-Drug&Med	45	28.89	51.11	11.11	4.44	4.44	0	100
Electrical Devices	91	21.98	51.65	15.38	7.69	3.3	0	100
Electrical Lighting	96	11.46	53.13	14.58	15.63	5.21	0	100
Measuring & Testing	110	12.73	56.36	17.27	10.91	1.82	0.91	100
Nuclears & X-rays	70	27.14	44.29	12.86	14.29	1.43	0	100
Power Systems	169	17.16	43.2	18.93	12.43	3.55	4.73	100
Semiconductor Devices	128	12.5	51.56	18.75	13.28	3.13	0.78	100
Miscellaneous-Elec.	117	17.95	43.59	17.95	17.09	2.56	0.85	100
Materials Processing & Handling	96	28.13	44.79	13.54	7.29	3.13	3.13	100
Metal Working	135	11.11	52.59	18.52	14.81	1.48	1.48	100
Motors, Engines & Parts	143	12.59	48.95	14.69	15.38	5.59	2.8	100
Optics	96	13.54	44.79	21.88	16.67	2.08	1.04	100
Transportation	70	24.29	35.71	22.86	11.43	4.29	1.43	100
Miscellaneous Mechanical	120	18.33	55.83	18.33	5.83	0.83	0.83	100
Agriculture, Husbandry, Food	85	14.12	56.47	22.35	3.53	2.35	1.18	100
Apparel & Textile	77	29.87	51.95	11.69	6.49	0	0	100
Earth Working & Wells	20	10	70	15	5	0	0	100
Furniture, House Fixtures	48	25	54.17	12.5	6.25	0	2.08	100
Heating	84	14.29	50	14.29	19.05	1.19	1.19	100
Pipes & Joints	63	17.46	63.49	11.11	7.94	0	0	100
Receptacles	53	28.3	52.83	11.32	5.66	0	1.89	100
Miscellaneous-Others	221	14.48	55.66	14.03	13.57	1.81	0.45	100
JP weighted		16.84	49.54	16.58	12.64	2.66	1.73	100

Japan (1/2)

Question 4-16 How many man-months did the research leading to the patent require, including those of co-inventors? (当該発明の研究の開始から特許出願までの研究期間)

	All	less than 3 man-months	4-6 man-months	7-12 man-months	13-24 man-months	25-48 man-months	49-72 man-months	73-96 man-months	97 man-months or more	No response
All	3658	682	570	599	715	513	201	64	220	94
Agriculture, Food, Textiles	60	6	4	15	13	12	4	2	4	0
Coating	80	9	15	12	21	11	6	0	4	2
Gas	45	6	7	10	8	5	5	1	1	2
Organic Compounds	120	16	16	16	28	22	9	0	6	7
Resins	125	19	15	17	31	29	4	2	4	4
Miscellaneous-chemical	208	32	32	26	46	36	15	2	11	8
Communications	160	28	28	26	35	22	4	2	12	3
Computer Hardware	59	15	17	9	10	4	2	1	1	0
Computer Software	123	24	19	20	29	13	4	3	9	2
Computer Peripherals	76	16	9	9	16	7	7	0	10	2
Information Storage	120	29	25	17	20	11	7	1	9	1
Drugs	127	7	18	17	22	23	13	7	16	4
Surgery & Medical Instruments	85	19	10	14	18	9	7	2	2	4
Biotechnology	87	10	4	11	19	18	5	9	6	5
Miscellaneous-Drug&Med	45	9	16	11	3	3	2	0	0	1
Electrical Devices	91	24	19	18	13	13	1	2	1	0
Electrical Lighting	96	20	9	17	23	12	5	1	9	0
Measuring & Testing	111	19	16	24	12	27	6	0	6	1
Nuclears & X-rays	72	22	10	16	7	5	3	4	3	2
Power Systems	172	25	28	30	28	28	12	5	13	3
Semiconductor Devices	129	21	19	23	33	15	6	1	10	1
Miscellaneous-Elec.	120	23	22	18	24	14	8	2	8	1
Materials Processing & Handling	103	25	10	19	22	11	4	0	6	6
Metal Working	137	22	14	20	32	23	12	3	8	3
Motors, Engines & Parts	145	26	23	24	30	13	9	1	17	2
Optics	100	21	16	14	18	12	5	0	10	4
Transportation	73	18	13	6	14	7	6	2	3	4
Miscellaneous Mechanical	124	29	22	23	18	17	5	0	6	4
Agriculture, Husbandry, Food	87	14	13	15	17	13	4	2	7	2
Apparel & Textile	77	23	16	14	8	10	3	0	3	0
Earth Working & Wells	20	5	2	4	4	2	0	1	1	1
Furniture, House Fixtures	51	16	8	7	8	7	1	0	1	3
Heating	84	13	11	16	20	10	5	3	5	1
Pipes & Joints	66	15	17	8	16	4	0	1	1	4
Receptacles	55	15	7	10	12	8	1	0	0	2
Miscellaneous-Others	225	41	40	43	37	37	11	4	7	5

%	N	less than 3 man-months	4-6 man-months	7-12 man-months	13-24 man-months	25-48 man-months	49-72 man-months	73-96 man-months	97 man-months or more	Total
All	3564	19.14	15.99	16.81	20.06	14.39	5.64	1.8	6.17	100
Agriculture, Food, Textiles	60	10	6.67	25	21.67	20	6.67	3.33	6.67	100
Coating	78	11.54	19.23	15.38	26.92	14.1	7.69	0	5.13	100
Gas	43	13.95	16.28	23.26	18.6	11.63	11.63	2.33	2.33	100
Organic Compounds	113	14.16	14.16	14.16	24.78	19.47	7.96	0	5.31	100
Resins	121	15.7	12.4	14.05	25.62	23.97	3.31	1.65	3.31	100
Miscellaneous-chemical	200	16	16	13	23	18	7.5	1	5.5	100
Communications	157	17.83	17.83	16.56	22.29	14.01	2.55	1.27	7.64	100
Computer Hardware	59	25.42	28.81	15.25	16.95	6.78	3.39	1.69	1.69	100
Computer Software	121	19.83	15.7	16.53	23.97	10.74	3.31	2.48	7.44	100
Computer Peripherals	74	21.62	12.16	12.16	21.62	9.46	9.46	0	13.51	100
Information Storage	119	24.37	21.01	14.29	16.81	9.24	5.88	0.84	7.56	100
Drugs	123	5.69	14.63	13.82	17.89	18.7	10.57	5.69	13.01	100
Surgery & Medical Instruments	81	23.46	12.35	17.28	22.22	11.11	8.64	2.47	2.47	100
Biotechnology	82	12.2	4.88	13.41	23.17	21.95	6.1	10.98	7.32	100
Miscellaneous-Drug&Med	44	20.45	36.36	25	6.82	6.82	4.55	0	0	100
Electrical Devices	91	26.37	20.88	19.78	14.29	14.29	1.1	2.2	1.1	100
Electrical Lighting	96	20.83	9.38	17.71	23.96	12.5	5.21	1.04	9.38	100
Measuring & Testing	110	17.27	14.55	21.82	10.91	24.55	5.45	0	5.45	100
Nuclears & X-rays	70	31.43	14.29	22.86	10	7.14	4.29	5.71	4.29	100
Power Systems	169	14.79	16.57	17.75	16.57	16.57	7.1	2.96	7.69	100
Semiconductor Devices	128	16.41	14.84	17.97	25.78	11.72	4.69	0.78	7.81	100
Miscellaneous-Elec.	119	19.33	18.49	15.13	20.17	11.76	6.72	1.68	6.72	100
Materials Processing & Handling	97	25.77	10.31	19.59	22.68	11.34	4.12	0	6.19	100
Metal Working	134	16.42	10.45	14.93	23.88	17.16	8.96	2.24	5.97	100
Motors, Engines & Parts	143	18.18	16.08	16.78	20.98	9.09	6.29	0.7	11.89	100
Optics	96	21.88	16.67	14.58	18.75	12.5	5.21	0	10.42	100
Transportation	69	26.09	18.84	8.7	20.29	10.14	8.7	2.9	4.35	100
Miscellaneous Mechanical	120	24.17	18.33	19.17	15	14.17	4.17	0	5	100
Agriculture, Husbandry, Food	85	16.47	15.29	17.65	20	15.29	4.71	2.35	8.24	100
Apparel & Textile	77	29.87	20.78	18.18	10.39	12.99	3.9	0	3.9	100
Earth Working & Wells	19	26.32	10.53	21.05	21.05	10.53	0	5.26	5.26	100
Furniture, House Fixtures	48	33.33	16.67	14.58	16.67	14.58	2.08	0	2.08	100
Heating	83	15.66	13.25	19.28	24.1	12.05	6.02	3.61	6.02	100
Pipes & Joints	62	24.19	27.42	12.9	25.81	6.45	0	1.61	1.61	100
Receptacles	53	28.3	13.21	18.87	22.64	15.09	1.89	0	0	100
Miscellaneous-Others	220	18.64	18.18	19.55	16.82	16.82	5	1.82	3.18	100
US-JP weighted		18.73	15.96	16.42	20.37	14.58	5.68	1.76	6.49	100
JP weighted		19.04	16.17	16.39	20.22	14.59	5.5	1.64	6.46	100

US (1/2)

Question 4-16 How many man-months did the research leading to the patent require, including those of co-inventors? (当該発明の研究の開始から特許出願までの研究期間)

NBER	A.9 How many man-months did the research leading to the patent require, including those of co-inventors? [An example: if you worked under the research for a half of three years and your collaborator for one third of two years for the research project, the answer would be 18 man-months + 8 man-months= 26 man-months.]	all	Less than one man-month	1-3 man-month	4-6 man months	7-12 man months	13-24 man months	25-48 man months	49-72 man months	73-96man months	97 man months or more	Don't Know	Missing
11	All	1,919	129	243	323	341	324	234	81	26	73	10	135
12	Agriculture, Food, Textiles	8	0	1	1	2	1	2	1	0	0	0	0
13	Coating	34	1	2	3	5	9	7	2	0	1	1	3
14	Gas	11	0	2	4	2	2	1	0	0	0	0	0
15	Organic Compounds	61	3	4	8	6	15	14	5	0	2	0	4
19	Resins	84	0	4	16	18	17	16	5	1	2	0	5
21	Miscellaneous-chemical	233	6	27	40	43	44	29	13	4	12	1	14
22	Communications	149	16	29	30	23	15	13	3	1	6	0	13
23	Computer Hardware	42	3	8	3	9	11	3	2	0	1	0	2
77	Computer Software	93	8	12	14	17	16	10	3	2	4	2	5
24	Computer Peripherals	33	2	6	6	6	5	3	0	0	2	0	3
31	Information Storage	42	2	9	12	9	2	3	3	0	0	0	2
32	Drugs	101	2	7	5	13	15	20	6	4	16	0	13
33	Surgery & Medical Instruments	123	11	17	18	23	17	15	7	4	4	2	5
39	Biotechnology	41	0	2	4	9	12	2	3	0	1	1	7
41	Miscellaneous-Drug&Med	29	3	4	3	6	4	1	1	2	3	0	2
42	Electrical Devices	45	4	6	9	10	6	5	1	0	1	0	3
43	Electrical Lighting	33	1	3	7	6	4	6	2	1	2	0	1
44	Measuring & Testing	62	2	9	14	10	12	7	2	1	3	0	2
45	Nuclears & X-rays	39	4	8	8	5	6	4	1	2	0	0	1
46	Power Systems	89	10	16	22	9	12	12	2	0	2	0	4
49	Semiconductor Devices	55	3	10	11	11	4	7	2	0	1	1	5
51	Miscellaneous-Elec.	32	1	4	6	9	4	6	1	0	1	0	0
52	Materials Processing & Handling	56	4	5	6	15	11	4	4	0	1	0	6
53	Metal Working	49	5	4	8	11	7	5	2	1	1	0	5
54	Motors, Engines & Parts	56	2	11	5	14	13	3	1	0	1	1	5
55	Optics	43	7	7	10	3	7	3	0	1	2	1	2
59	Transportation	33	0	6	8	3	8	4	1	0	1	0	2
61	Miscellaneous Mechanical	42	6	3	7	13	4	3	2	0	1	0	3
63	Agriculture, Husbandry, Food	14	3	0	1	2	5	2	0	0	0	0	1
64	Apparel & Textile	9	2	1	3	1	1	1	0	0	0	0	0
65	Earth Working & Wells	5	1	0	0	0	0	2	1	0	0	0	1
66	Furniture, House Fixtures	9	0	1	4	2	1	1	0	0	0	0	0
67	Heating	8	0	1	3	2	2	0	0	0	0	0	0
68	Pipes & Joints	13	1	4	1	3	3	1	0	0	0	0	0
69	Receptacles	20	6	0	3	4	5	0	0	0	0	0	2
	Miscellaneous-Others	123	10	10	20	17	24	19	5	2	2	0	14

	%	N	Less than one man-month	1-3 man-month	4-6 man months	7-12 man months	13-24 man months	25-48 man months	49-72 man months	73-96man months	97 man months or more	Total
NBER	All	1774	7.27	13.70	18.21	19.22	18.26	13.19	4.57	1.47	4.11	100
11	Agriculture, Food, Textiles	8	0.00	12.50	12.50	25.00	12.50	25.00	12.50	0.00	0.00	100
12	Coating	30	3.33	6.67	10.00	16.67	30.00	23.33	6.67	0.00	3.33	100
13	Gas	11	0.00	18.18	36.36	18.18	18.18	9.09	0.00	0.00	0.00	100
14	Organic Compounds	57	5.26	7.02	14.04	10.53	26.32	24.56	8.77	0.00	3.51	100
15	Resins	79	0.00	5.06	20.25	22.78	21.52	20.25	6.33	1.27	2.53	100
19	Miscellaneous-chemical	218	2.75	12.39	18.35	19.72	20.18	13.30	5.96	1.83	5.50	100
21	Communications	136	11.76	21.32	22.06	16.91	11.03	9.56	2.21	0.74	4.41	100
22	Computer Hardware	40	7.50	20.00	7.50	22.50	27.50	7.50	5.00	0.00	2.50	100
77	Computer Software	86	9.30	13.95	16.28	19.77	18.60	11.63	3.49	2.33	4.65	100
23	Computer Peripherals	30	6.67	20.00	20.00	20.00	16.67	10.00	0.00	0.00	6.67	100
24	Information Storage	40	5.00	22.50	30.00	22.50	5.00	7.50	7.50	0.00	0.00	100
31	Drugs	88	2.27	7.95	5.68	14.77	17.05	22.73	6.82	4.55	18.18	100
32	Surgery & Medical Instruments	116	9.48	14.66	15.52	19.83	14.66	12.93	6.03	3.45	3.45	100
33	Biotechnology	33	0.00	6.06	12.12	27.27	36.36	6.06	9.09	0.00	3.03	100
39	Miscellaneous-Drug&Med	27	11.11	14.81	11.11	22.22	14.81	3.70	3.70	7.41	11.11	100
41	Electrical Devices	42	9.52	14.29	21.43	23.81	14.29	11.90	2.38	0.00	2.38	100
42	Electrical Lighting	32	3.13	9.38	21.88	18.75	12.50	18.75	6.25	3.13	6.25	100
43	Measuring & Testing	60	3.33	15.00	23.33	16.67	20.00	11.67	3.33	1.67	5.00	100
44	Nuclears & X-rays	38	10.53	21.05	21.05	13.16	15.79	10.53	2.63	5.26	0.00	100
45	Power Systems	85	11.76	18.82	25.88	10.59	14.12	14.12	2.35	0.00	2.35	100
46	Semiconductor Devices	49	6.12	20.41	22.45	22.45	8.16	14.29	4.08	0.00	2.04	100
49	Miscellaneous-Elec.	32	3.13	12.50	18.75	28.13	12.50	18.75	3.13	0.00	3.13	100
51	Materials Processing & Handling	50	8.00	10.00	12.00	30.00	22.00	8.00	8.00	0.00	2.00	100
52	Metal Working	44	11.36	9.09	18.18	25.00	15.91	11.36	4.55	2.27	2.27	100
53	Motors, Engines & Parts	50	4.00	22.00	10.00	28.00	26.00	6.00	2.00	0.00	2.00	100
54	Optics	40	17.50	17.50	25.00	7.50	17.50	7.50	0.00	2.50	5.00	100
55	Transportation	31	0.00	19.35	25.81	9.68	25.81	12.90	3.23	0.00	3.23	100
59	Miscellaneous Mechanical	39	15.38	7.69	17.95	33.33	10.26	7.69	5.13	0.00	2.56	100
61	Agriculture, Husbandry, Food	13	23.08	0.00	7.69	15.38	38.46	15.38	0.00	0.00	0.00	100
63	Apparel & Textile	9	22.22	11.11	33.33	11.11	11.11	11.11	0.00	0.00	0.00	100
64	Earth Working & Wells	4	25.00	0.00	0.00	0.00	0.00	50.00	25.00	0.00	0.00	100
65	Furniture, House Fixtures	9	0.00	11.11	44.44	22.22	11.11	11.11	0.00	0.00	0.00	100
66	Heating	8	0.00	12.50	37.50	25.00	25.00	0.00	0.00	0.00	0.00	100
67	Pipes & Joints	13	7.69	30.77	7.69	23.08	23.08	7.69	0.00	0.00	0.00	100
68	Receptacles	18	33.33	0.00	16.67	22.22	27.78	0.00	0.00	0.00	0.00	100
69	Miscellaneous-Others	109	9.17	9.17	18.35	15.60	22.02	17.43	4.59	1.83	1.83	100
	US-JP weighted		**7.16**	**13.97**	**18.30**	**19.29**	**17.71**	**13.17**	**4.61**	**1.47**	**4.31**	100

Japan (2/2)

Question 4-16 How many man-months did the research leading to the patent require, including those of co-inventors? (当該発明の研究の開始から特許出願までの研究期間)

	Mean	Sd	N	Median	P90	Inter Quartile Range
All	25.41	35.1	3564	9.5	60.5	31.5
Agriculture, Food, Textiles	30.55	36.04	60	18.5	72.5	27
Coating	24.71	32.12	78	18.5	60.5	31.5
Gas	23.24	28.09	43	9.5	60.5	31.5
Organic Compounds	26.37	32.44	113	18.5	60.5	31.5
Resins	23.8	27.89	121	18.5	36.5	31.5
Miscellaneous-chemical	26.35	33.42	200	18.5	60.5	31.5
Communications	25.52	37.25	157	9.5	60.5	31.5
Computer Hardware	14.79	23.5	59	5	36.5	17
Computer Software	25.74	37.58	121	9.5	60.5	13.5
Computer Peripherals	34.59	46.44	74	18.5	143	31.5
Information Storage	24.34	37.96	119	9.5	60.5	13.5
Drugs	42.07	45.02	123	18.5	143	51
Surgery & Medical Instruments	21.62	27.98	81	9.5	60.5	13.5
Biotechnology	37.43	38.81	82	18.5	84.5	27
Miscellaneous-Drug&Med	11	14	44	5	36.5	4.5
Electrical Devices	15.27	21.37	91	9.5	36.5	17
Electrical Lighting	28.9	40.39	96	18.5	84.5	31.5
Measuring & Testing	25.14	32.88	110	9.5	60.5	31.5
Nuclears & X-rays	21.36	33.99	70	9.5	72.5	17
Power Systems	29.64	38.37	169	18.5	84.5	31.5
Semiconductor Devices	26.41	37.46	128	18.5	60.5	22.5
Miscellaneous-Elec.	25.78	36.5	119	9.5	60.5	31.5
Materials Processing & Handling	22.44	34.26	97	9.5	60.5	17
Metal Working	28.72	34.93	134	18.5	60.5	31.5
Motors, Engines & Parts	31.27	44.27	143	9.5	143	31.5
Optics	28.63	42.05	96	9.5	143	31.5
Transportation	23.54	33.07	69	9.5	60.5	35
Miscellaneous Mechanical	20.72	31.89	120	9.5	36.5	13.5
Agriculture, Husbandry, Food	28.58	38.96	85	18.5	84.5	31.5
Apparel & Textile	17.81	29.4	77	5	36.5	17
Earth Working & Wells	22.63	35.21	19	9.5	84.5	17
Furniture, House Fixtures	15.36	23.39	48	7.25	36.5	17
Heating	26.9	35.58	83	18.5	60.5	31.5
Pipes & Joints	13.76	21.36	62	5	18.5	13.5
Receptacles	13.72	13.56	53	9.5	36.5	17
Miscellaneous-Others	21.41	28.52	220	9.5	48.5	31.5
US-JP weighted	25.94					
JP weighted	25.66					

Note: As to choice (1)-(7) of Question 4-16, we use mean values of each range as scale scores.
As to choice (8), we calculated the scale score supposing log normanl distribution.

US (2/2)

Question 4-16 How many man-months did the research leading to the patent require, including those of co-inventors? (当該発明の研究の開始から特許出願までの研究期間)

NBER	A9	mean	sd	N	median	p90	Inter-Quartile Range
All	All	19.09	23.09	1774	9.50	60.50	13.5
11	Agriculture, Food, Textiles	22.25	20.41	8	14.00	60.50	29.25
12	Coating	23.57	21.18	30	18.50	48.50	27
13	Gas	10.59	10.35	11	5.00	18.50	13.5
14	Organic Compounds	24.41	22.24	57	18.50	60.50	31.5
15	Resins	21.89	20.90	79	18.50	60.50	31.5
19	Miscellaneous-chemical	21.97	25.08	218	9.50	60.50	31.5
21	Communications	14.89	22.49	136	5.00	36.50	16.5
22	Computer Hardware	16.23	19.53	40	9.50	36.50	16.5
23	Computer Software	19.07	24.09	86	9.50	60.50	13.5
77	Computer Peripherals	16.53	24.24	30	9.50	36.50	16.5
24	Information Storage	12.31	16.60	40	5.00	36.50	7.5
31	Drugs	38.48	33.53	88	36.50	97.00	51
32	Surgery & Medical Instruments	20.01	24.26	116	9.50	60.50	31.5
33	Biotechnology	20.70	20.88	33	18.50	60.50	9
39	Miscellaneous-Drug&Med	25.69	33.20	27	9.50	97.00	34.5
41	Electrical Devices	14.40	18.62	42	9.50	36.50	13.5
42	Electrical Lighting	24.42	27.10	32	9.50	60.50	31.5
43	Measuring & Testing	19.14	23.97	60	9.50	48.50	13.5
44	Nuclears & X-rays	15.08	19.68	38	5.00	36.50	16.5
45	Power Systems	14.21	19.06	85	5.00	36.50	16.5
46	Semiconductor Devices	14.87	19.31	49	9.50	36.50	16.5
49	Miscellaneous-Elec.	17.95	20.55	32	9.50	36.50	22.5
51	Materials Processing & Handling	17.46	19.91	50	9.50	48.50	13.5
52	Metal Working	17.27	21.29	44	9.50	36.50	13.5
53	Motors, Engines & Parts	13.77	16.58	50	9.50	27.50	16.5
54	Optics	15.34	23.89	40	5.00	36.50	16.5
55	Transportation	17.16	20.41	31	9.50	36.50	13.5
59	Miscellaneous Mechanical	14.59	19.97	39	9.50	36.50	13.5
61	Agriculture, Husbandry, Food	14.69	12.16	13	18.50	36.50	13.5
63	Apparel & Textile	9.17	11.66	9	5.00	36.50	7.5
64	Earth Working & Wells	33.50	24.74	4	36.50	60.50	30
65	Furniture, House Fixtures	10.67	10.81	9	5.00	36.50	4.5
66	Heating	9.13	6.30	8	7.25	18.50	9
67	Pipes & Joints	10.31	10.37	13	9.50	18.50	16.5
68	Receptacles	8.25	7.37	18	7.25	18.50	18
69	Miscellaneous-Others	19.00	20.33	109	9.50	36.50	31.5
	US-JP weighted	**19.23**	**23.34**				

US (4/5)

Question 4-16(2) At the time of the invention, about how many hours did you work in a typical week?(発明時における週当たり労働時間数)

	C.2 Working hours (mean)	All	mean(hours)	S.D	N	median	p90	interquartile range	Missing
NBER	All	1,919	48.75	11.27	1817	50	60	15	102
11	Agriculture, Food, Textiles	8	50.00	9.64	8	50	70	10	0
12	Coating	34	48.13	11.20	32	50	60	7.5	2
13	Gas	11	48.18	6.81	11	45	60	5	0
14	Organic Compounds	61	47.41	11.23	61	50	60	10	0
15	Resins	84	45.04	10.92	80	45	54.5	10	4
19	Miscellaneous-chemical	233	48.17	11.11	223	50	60	10	10
21	Communications	149	49.17	10.52	138	50	60	15	11
22	Computer Hardware	42	47.80	7.71	40	45	60	10	2
77	Computer Software	93	50.36	8.81	90	50	60	15	3
23	Computer Peripherals	33	46.13	7.48	32	45	55	10	1
24	Information Storage	42	46.59	10.67	39	50	60	10	3
31	Drugs	101	49.17	12.17	92	50	60	15	9
32	Surgery & Medical Instruments	123	49.05	11.66	118	50	60	15	5
33	Biotechnology	41	57.69	19.96	39	50	70	20	2
39	Miscellaneous-Drug&Med	29	46.32	14.03	25	50	60	10	4
41	Electrical Devices	45	47.60	10.70	45	50	60	5	0
42	Electrical Lighting	33	48.03	11.91	31	48	60	10	2
43	Measuring & Testing	62	47.43	10.96	60	45	60	10	2
44	Nuclears & X-rays	39	51.51	7.90	39	50	60	15	0
45	Power Systems	89	50.40	8.78	87	50	60	10	2
46	Semiconductor Devices	55	48.40	11.38	53	50	60	8	2
49	Miscellaneous-Elec.	32	49.80	9.13	30	50	60	20	2
51	Materials Processing & Handling	56	50.22	9.24	50	50	60	15	6
52	Metal Working	49	50.00	19.25	46	50	60	10	3
53	Motors, Engines & Parts	56	48.39	10.94	51	50	60	15	5
54	Optics	43	49.38	10.00	42	50	60	10	1
55	Transportation	33	50.44	10.56	32	49	60	17.5	1
59	Miscellaneous Mechanical	42	47.35	8.90	37	45	60	10	5
61	Agriculture, Husbandry, Food	14	48.14	13.48	14	50	60	2	0
63	Apparel & Textile	9	47.78	9.39	9	50	60	5	0
64	Earth Working & Wells	5	46.25	12.50	4	47.5	60	17.5	1
65	Furniture, House Fixtures	9	48.75	7.91	8	47.5	60	12.5	1
66	Heating	8	47.50	6.55	8	47.5	60	7.5	0
67	Pipes & Joints	13	49.17	8.21	12	50	60	17.5	1
68	Receptacles	20	47.16	17.89	19	50	65	15	1
69	Miscellaneous-Others	123	48.44	10.64	112	50	60	5	11
	US-JP weighted		**48.68**	**11.13**					

US (5/5)

Question 4-16(3) Please tell us the share of overall working time that you spent on ""inventing"" or on R&D actives at the time of the invention.(労働時間中、発明に要した時間の割合)

	C.3 % of working time on inventing or R&D (mean %)	All	mean(% hours)	S.D	N	median	p90	interquartile range	Missing
NBER	All	1,919	48.55	32.00	1813	50	99	60	106
11	Agriculture, Food, Textiles	8	68.75	35.63	8	85	100	42.5	0
12	Coating	34	55.78	30.61	32	50	100	55	2
13	Gas	11	28.64	21.57	11	20	50	40	0
14	Organic Compounds	61	61.80	33.48	61	75	100	60	0
15	Resins	84	59.66	31.03	79	60	100	60	5
19	Miscellaneous-chemical	233	51.48	29.29	224	50	90	55	9
21	Communications	149	43.55	30.70	139	35	90	60	10
22	Computer Hardware	42	52.49	31.72	39	50	100	55	3
77	Computer Software	93	39.92	32.23	91	30	90	60	2
23	Computer Peripherals	33	57.66	34.90	32	60	100	70	1
24	Information Storage	42	41.87	32.64	39	30	100	60	3
31	Drugs	101	58.64	35.08	89	63	100	70	12
32	Surgery & Medical Instruments	123	43.31	32.81	116	37.5	95	67.5	7
33	Biotechnology	41	49.97	31.18	39	50	100	60	2
39	Miscellaneous-Drug&Med	29	36.60	30.88	25	20	85	40	4
41	Electrical Devices	45	49.00	31.33	45	50	100	55	0
42	Electrical Lighting	33	58.55	29.78	31	50	100	60	2
43	Measuring & Testing	62	50.05	30.02	61	50	99	55	1
44	Nuclears & X-rays	39	46.97	31.41	39	50	100	55	0
45	Power Systems	89	43.57	31.55	87	50	90	45	2
46	Semiconductor Devices	55	46.40	31.91	53	50	90	60	2
49	Miscellaneous-Elec.	32	48.57	30.40	30	50	90	55	2
51	Materials Processing & Handling	56	57.26	31.27	50	52.5	100	55	6
52	Metal Working	49	42.18	30.08	45	33	90	40	4
53	Motors, Engines & Parts	56	36.94	27.66	50	25	80	35	6
54	Optics	43	36.81	30.86	42	22.5	80	40	1
55	Transportation	33	51.03	36.39	31	50	100	70	2
59	Miscellaneous Mechanical	42	46.78	33.10	37	40	95	60	5
61	Agriculture, Husbandry, Food	14	49.23	35.99	13	50	100	65	1
63	Apparel & Textile	9	31.67	28.72	9	20	90	40	0
64	Earth Working & Wells	5	36.25	43.85	4	20	100	57.5	1
65	Furniture, House Fixtures	9	55.63	32.01	8	60	100	47.5	1
66	Heating	8	47.38	35.95	8	45	100	59.5	0
67	Pipes & Joints	13	50.83	37.59	12	50	100	77.5	1
68	Receptacles	20	46.58	34.20	19	30	100	60	1
69	Miscellaneous-Others	123	48.43	30.52	115	50	90	55	8
	US-JP weighted		**48.59**	**32.11**					

Japan (1/2)

Question 4-17 Funding sources (incidence) You can check all relevant boxes. (当該研究のための費用の資金源(重複回答あり))

	All	Internal funds 発明者所属企業の内部資金	Government funds 政府からの資金	Other companies 発明者所属企業以外の企業からの資金	Customers or product users クライアントまたは顧客からの資金	Suppliers 設備、材料、部品、ソフトウェア等サプライヤー企業	Venture capital or angels ベンチャーキャピトル、エンジェルなどからの投資資金	other その他	no response 無回答
All	3658	3488	161	109	139	103	10	53	81
Agriculture, Food, Textiles	60	58	3	1	6	5	0	1	1
Coating	80	74	4	1	2	9	0	0	5
Gas	45	42	3	2	1	2	0	0	2
Organic Compounds	120	105	7	2	0	0	0	1	9
Resins	125	119	5	4	0	5	0	0	5
Miscellaneous-chemical	208	195	14	7	5	8	1	3	7
Communications	160	154	9	5	6	3	2	0	3
Computer Hardware	59	58	2	0	1	1	0	1	0
Computer Software	123	117	3	5	5	0	0	3	3
Computer Peripherals	76	74	2	1	4	1	0	0	2
Information Storage	120	117	5	1	3	1	0	0	2
Drugs	127	120	7	6	2	3	0	2	3
Surgery & Medical Instruments	85	80	5	6	5	3	0	3	0
Biotechnology	87	81	21	4	3	2	1	2	1
Miscellaneous-Drug&Med	45	43	1	3	1	3	1	2	0
Electrical Devices	91	91	1	0	4	1	0	1	0
Electrical Lighting	96	93	2	2	1	2	0	1	1
Measuring & Testing	111	105	6	5	7	3	1	5	1
Nuclears & X-rays	72	69	6	2	2	1	1	3	0
Power Systems	172	166	5	2	0	3	1	4	2
Semiconductor Devices	129	122	9	6	2	4	0	3	3
Miscellaneous-Elec.	120	118	2	6	9	3	0	0	1
Materials Processing & Handling	103	98	6	4	2	3	1	2	3
Metal Working	137	132	8	2	7	4	0	2	4
Motors, Engines & Parts	145	143	2	7	5	6	0	1	1
Optics	100	92	4	0	2	3	0	2	6
Transportation	73	66	1	1	6	0	0	1	2
Miscellaneous Mechanical	124	114	2	3	6	1	0	2	5
Agriculture, Husbandry, Food	87	84	4	1	5	2	1	1	0
Apparel & Textile	77	73	1	0	2	3	0	3	0
Earth Working & Wells	20	19	1	2	0	0	0	0	0
Furniture, House Fixtures	51	47	0	2	4	1	0	1	2
Heating	84	84	2	5	6	1	0	1	0
Pipes & Joints	66	62	2	4	8	2	0	0	4
Receptacles	55	51	0	4	4	4	0	1	1
Miscellaneous-Others	225	222	6	3	13	10	0	1	2

%	N	Internal funds	Government funds	Other companies	Customers or product users	Suppliers	Venture capital or angels	other
All	3577	97.51	4.50	3.05	3.89	2.88	0.28	1.48
Agriculture,Food,Textiles	59	98.31	5.08	1.69	10.17	8.47	0.00	1.69
Coating	75	98.67	5.33	1.33	2.67	12.00	0.00	0.00
Gas	43	97.67	6.98	4.65	2.33	4.65	0.00	0.00
Organic Compounds	111	94.59	6.31	1.80	0.00	0.00	0.00	0.90
Resins	120	99.17	4.17	3.33	0.00	4.17	0.00	0.00
Miscellaneous chemical	201	97.01	6.97	3.48	2.49	3.98	0.50	1.49
Communications	157	98.09	5.73	3.18	3.82	1.91	1.27	0.00
Computer Hardware	59	98.31	3.39	0.00	1.69	1.69	0.00	1.69
Computer Software	120	97.50	2.50	4.17	4.17	0.00	0.00	2.50
Computer Peripherals	74	100.00	2.70	1.35	5.41	1.35	0.00	0.00
Information Storage	118	99.15	4.24	0.85	2.54	0.85	0.00	0.00
Drugs	124	96.77	5.65	4.84	1.61	2.42	0.00	1.61
Surgery & Med Inst.	85	94.12	5.88	7.06	5.88	3.53	0.00	3.53
Biotechnology	86	94.19	24.42	4.65	3.49	2.33	1.16	2.33
Miscellaneous-Drug&Med	45	95.56	2.22	6.67	2.22	6.67	2.22	4.44
Electrical Devices	91	100.00	1.10	0.00	4.40	1.10	0.00	1.10
Electrical Lighting	95	97.89	2.11	2.11	1.05	2.11	0.00	1.05
Measuring & Testing	110	95.45	5.45	4.55	6.36	2.73	0.91	4.55
Nuclears & X-rays	72	95.83	8.33	2.78	2.78	1.39	1.39	4.17
Power Systems	170	97.65	2.94	1.18	0.00	1.76	0.59	2.35
Semiconductor Devices	126	96.83	7.14	4.76	1.59	3.17	0.00	2.38
Miscellaneous-Elec.	119	99.16	1.68	5.04	7.56	2.52	0.00	0.00
Materials Processing & Handling	100	98.00	6.00	4.00	2.00	3.00	1.00	2.00
Metal Working	133	99.25	6.02	1.50	5.26	3.01	0.00	1.50
Motors, Engines & Parts	144	99.31	1.39	4.86	3.47	4.17	0.00	0.69
Optics	94	97.87	4.26	0.00	2.13	3.19	0.00	2.13
Transportation	71	92.96	1.41	1.41	8.45	0.00	0.00	1.41
Miscellaneous Mechanical	119	95.80	1.68	2.52	5.04	0.84	0.00	1.68
Agriculture, Husbandry, Food	87	96.55	4.60	1.15	5.75	2.30	1.15	1.15
Apparel & Textile	77	94.81	1.30	0.00	2.60	3.90	0.00	3.90
Earth Working & Wells	20	95.00	5.00	10.00	0.00	0.00	0.00	0.00
Furniture, House Fixtures	49	95.92	0.00	4.08	8.16	2.04	0.00	2.04
Heating	84	100.00	2.38	5.95	7.14	1.19	0.00	1.19
Pipes & Joints	62	100.00	3.23	6.45	12.90	3.23	0.00	0.00
Receptacles	54	94.44	0.00	7.41	7.41	7.41	0.00	1.85
Miscellaneous-Others	223	99.55	2.69	1.35	5.83	4.48	0.00	0.45
US-JP weighted		97.57	4.66	3.05	3.48	2.73	0.31	1.44
JP weighted		97.74	4.39	2.69	3.67	2.73	0.31	1.31

US (1/2)

Question 4-17 Funding sources (Incidence) You can check all relevant boxes. (当該研究のための費用の資金源(重複回答あり))

What are the sources of the funds for the research leading to this patent, including that for personnel?

A.10 What are the sources (shares in %) of the funds for the research leading to this patent, including that for personnel?	All	Internal funds (including subsidiaries	Government Research Programs or other government fund	Customers or product users	Suppliers for parts, materials, equipments, software etc	Funds from venture capital or angels	Other companies	Other	missing
		N/ % of any funding coming from the institutes below							
NBER All	1919	1,678	103	92	45	55	32	10	140
11 Agriculture, Food, Textiles	8	8	0	0	0	0	0	0	0
12 Coating	34	31	1	2	1	0	0	0	3
13 Gas	11	10	0	1	0	0	0	0	0
14 Organic Compounds	61	54	4	2	0	0	1	0	3
15 Resins	84	79	1	4	4	0	1	0	4
19 Miscellaneous-chemical	232	209	16	13	4	9	8	1	11
21 Communications	149	129	4	4	0	5	0	1	13
22 Computer Hardware	42	38	3	3	0	1	0	1	2
77 Computer Software	93	82	4	4	1	4	1	0	5
23 Computer Peripherals	33	29	0	1	0	0	0	0	3
24 Information Storage	42	39	2	1	0	1	1	1	2
31 Drugs	101	80	9	1	1	5	2	1	13
32 Surgery & Medical Instruments	123	105	5	6	8	11	1	2	6
33 Biotechnology	41	30	9	2	0	2	3	0	6
39 Miscellaneous-Drug&Med	29	25	0	1	0	4	0	0	2
41 Electrical Devices	46	38	2	3	1	1	1	0	5
42 Electrical Lighting	33	31	1	2	0	0	0	0	1
43 Measuring & Testing	62	58	4	5	1	1	2	1	3
44 Nuclears & X-rays	39	38	5	4	0	1	1	0	0
45 Power Systems	89	79	10	6	3	1	2	0	3
46 Semiconductor Devices	55	49	6	5	0	0	0	0	5
49 Miscellaneous-Elec.	32	27	1	1	0	3	0	0	2
51 Materials Processing & Handling	56	47	0	4	5	0	2	0	7
52 Metal Working	49	42	4	1	2	0	0	0	5
53 Motors, Engines & Parts	56	47	4	3	1	1	1	1	5
54 Optics	43	36	3	4	0	2	0	0	2
55 Transportation	33	29	0	0	2	2	1	0	3
59 Miscellaneous Mechanical	42	36	1	3	1	0	1	1	3
61 Agriculture, Husbandry, Food	14	12	0	1	2	0	1	0	2
63 Apparel & Textile	9	7	0	0	0	0	0	0	1
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	9	0	0	1	0	0	0	0
66 Heating	8	8	0	1	0	0	0	0	0
67 Pipes & Joints	13	13	0	0	1	0	0	0	0
68 Receptacles	20	17	0	1	0	0	1	0	2
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	XX

%	N	Internal funds (including subsidiaries	Government Research Programs or other government fund	Customers or product users	Suppliers for parts, materials, equipments, software etc	Funds from venture capital or angels	Other companies	Other
NBER All	1779	94.32	5.79	5.17	2.53	3.09	1.80	0.56
11 Agriculture, Food, Textiles	8	100.00	0.00	0.00	0.00	0.00	0.00	0.00
12 Coating	31	100.00	3.23	6.45	3.23	0.00	0.00	0.00
13 Gas	11	90.91	0.00	9.09	0.00	0.00	0.00	0.00
14 Organic Compounds	58	93.10	6.90	3.45	0.00	0.00	1.72	0.00
15 Resins	80	98.75	1.25	5.00	5.00	0.00	1.25	0.00
19 Miscellaneous-chemical	221	94.57	7.24	5.88	1.81	4.07	3.62	0.45
21 Communications	136	94.85	2.94	2.94	0.00	3.68	0.00	0.74
22 Computer Hardware	40	95.00	7.50	7.50	0.00	2.50	0.00	2.50
77 Computer Software	88	93.18	4.55	4.55	1.14	4.55	1.14	0.00
23 Computer Peripherals	30	96.67	0.00	3.33	0.00	0.00	0.00	0.00
24 Information Storage	40	97.50	5.00	2.50	0.00	2.50	2.50	2.50
31 Drugs	88	90.91	10.23	1.14	1.14	5.68	2.27	1.14
32 Surgery & Medical Instruments	117	89.74	4.27	5.13	6.84	9.40	0.85	1.71
33 Biotechnology	35	85.71	25.71	5.71	0.00	5.71	8.57	0.00
39 Miscellaneous-Drug&Med	27	92.59	0.00	3.70	0.00	14.81	0.00	0.00
41 Electrical Devices	41	92.68	4.88	7.32	2.44	2.44	2.44	0.00
42 Electrical Lighting	32	96.88	3.13	6.25	0.00	0.00	0.00	0.00
43 Measuring & Testing	59	98.31	6.78	8.47	1.69	1.69	3.39	1.69
44 Nuclears & X-rays	39	97.44	12.82	10.26	0.00	2.56	2.56	0.00
45 Power Systems	86	91.86	11.63	6.98	3.49	1.16	2.33	0.00
46 Semiconductor Devices	50	98.00	12.00	10.00	0.00	0.00	0.00	0.00
49 Miscellaneous-Elec.	30	90.00	3.33	3.33	0.00	10.00	0.00	0.00
51 Materials Processing & Handling	49	95.92	0.00	8.16	10.20	0.00	4.08	0.00
52 Metal Working	44	95.45	9.09	2.27	4.55	0.00	0.00	0.00
53 Motors, Engines & Parts	51	92.16	7.84	5.88	1.96	1.96	1.96	1.96
54 Optics	41	87.80	7.32	9.76	0.00	4.88	0.00	0.00
55 Transportation	30	96.67	0.00	0.00	6.67	6.67	3.33	0.00
59 Miscellaneous Mechanical	39	92.31	2.56	7.69	2.56	0.00	2.56	2.56
61 Agriculture, Husbandry, Food	12	100.00	0.00	8.33	16.67	0.00	8.33	0.00
63 Apparel & Textile	8	87.50	0.00	0.00	0.00	0.00	0.00	0.00
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	100.00	0.00	0.00	11.11	0.00	0.00	0.00
66 Heating	8	100.00	0.00	12.50	0.00	0.00	0.00	0.00
67 Pipes & Joints	13	100.00	0.00	0.00	7.69	0.00	0.00	0.00
68 Receptacles	18	94.44	0.00	5.56	0.00	0.00	5.56	0.00
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX
US-JP weighted		**94.47**	**5.45**	**5.03**	**2.52**	**3.12**	**1.73**	**0.61**

Japan (2/2)

Question 4-17 Funding sources. (Incidence) You can check all relevant boxes. (当該研究のための費用の資金源(重複回答あり))

Mean Share	N	Internal funds	Government funds	Other companies	Customers or product users	Suppliers	Venture capital or angels	other	No response
All	3525	93.73	1.87	1.32	1.33	0.56	0.06	1.12	96
Agriculture, Food, Textiles	59	93.39	1.02	0.68	2.93	1.64	0	0.34	1
Coating	74	94.11	2.6	1.33	0.4	1.56	0	0	5
Gas	43	94.05	1.42	2.79	0.47	1.28	0	0	2
Organic Compounds	111	93.51	5.14	0.45	0	0	0	0.9	9
Resins	119	96.81	1.85	0.76	0	0.59	0	0	6
Miscellaneous-chemical	197	93.25	1.53	2.04	1.15	0.47	0.15	1.4	8
Communications	156	93.82	2.83	1.4	1.34	0.45	0.16	0	3
Computer Hardware	59	96.19	1.69	0	0.08	0.34	0	1.69	0
Computer Software	120	93.58	0.75	2	1.58	0	0	2.08	3
Computer Peripherals	74	97.16	0.54	0.27	1.35	0.68	0	0	2
Information Storage	118	97.63	0.68	0.42	1.02	0.25	0	0	2
Drugs	122	93.41	2.03	2.6	0.12	0.69	0	1.14	4
Surgery & Medical Instruments	80	89.82	2.2	4.05	2.26	0.36	0	1.31	1
Biotechnology	82	81.74	12.5	1.8	0.41	1.05	1.05	1.45	1
Miscellaneous-Drug&Med	42	91.51	0	3.95	0	2.21	0	2.33	2
Electrical Devices	91	97.42	0.55	0	0.93	0.22	0	0.88	0
Electrical Lighting	95	97.05	0.32	1.11	0.32	0.16	0	1.05	1
Measuring & Testing	110	88.36	2.27	2.77	2.14	0.91	0.09	3.45	1
Nuclears & X-rays	69	92.77	2.44	0.28	0.28	0	0	4.23	1
Power Systems	169	94.65	1.88	0.47	0	0.53	0.41	2.06	2
Semiconductor Devices	126	91.43	3.25	1.43	0.71	0.79	0	2.38	3
Miscellaneous-Elec.	117	95.13	1.28	1.28	1.88	0.43	0	0	3
Materials Processing & Handling	96	92.37	2.12	1.46	0.91	1.11	0	2.02	4
Metal Working	131	94.89	2.35	0.3	1.82	0.49	0	0.15	5
Motors, Engines & Parts	142	95.14	0.14	2.38	1.47	0.66	0	0.21	2
Optics	93	95.43	1.17	0	1.6	0.53	0	1.28	6
Transportation	68	91.13	0.42	0.85	6.2	0	0	1.41	2
Miscellaneous Mechanical	119	94.12	1.68	0.76	1.93	0.08	0	1.43	5
Agriculture, Husbandry, Food	85	94.65	1.28	0.47	2.09	0.35	0	1.16	1
Apparel & Textile	77	93.25	1.3	0	1.04	0.52	0	3.9	0
Earth Working & Wells	19	91.5	5	3.5	0	0	0	0	0
Furniture, House Fixtures	48	91.02	0	2.65	3.67	0.61	0	2.04	2
Heating	83	94.69	1.9	0.92	2.35	0.02	0	0.12	0
Pipes & Joints	61	92.55	0.98	2.74	3.47	0.26	0	0	4
Receptacles	53	88.43	0	4.44	3.15	2.13	0	1.85	1
Miscellaneous-Others	217	96.15	0.9	0.54	1.61	0.75	0	0.05	4
US-JP weighted		93.86	1.87	1.37	1.2	0.54	0.07	1.09	
JP weighted		94.14	1.78	1.16	1.31	0.54	0.07	1.01	

Mean Share weighted by man-month	N	Internal funds	Government funds	Other companies	Customers or product users	Suppliers	Venture capital or angels	other	No response
All	3525	92.81	2.5	1.15	1.5	0.81	0.17	1.06	133
Agriculture, Food, Textiles	59	94.65	1.48	0.21	2.28	0.98	0	0.4	1
Coating	74	90.57	5.61	0.99	0.59	2.24	0	0	6
Gas	43	92.9	0.7	0.87	1.21	4.32	0	0	2
Organic Compounds	111	95.41	3.88	0.08	0	0	0	0.63	9
Resins	119	95.78	2.31	1.19	0	0.72	0	0	6
Miscellaneous-chemical	197	90.28	2.33	4.1	1.19	1.3	0.11	0.69	11
Communications	156	89.58	4.18	3.2	2.19	0.48	0.38	0	4
Computer Hardware	59	97.49	2.12	0	0.11	0.11	0	0.17	0
Computer Software	120	94.85	0.49	2.07	2.23	0	0	0.36	3
Computer Peripherals	74	95.36	0.71	0.47	0.66	2.79	0	0	2
Information Storage	118	99.2	0.59	0.03	0.13	0.05	0	0	2
Drugs	122	94.48	1.1	1.02	0.05	0.9	0	2.44	5
Surgery & Medical Instruments	80	92.77	0.72	2.25	0.55	0.24	0	3.47	5
Biotechnology	82	78.36	16.19	0.58	0.9	1.23	1.07	1.67	5
Miscellaneous-Drug&Med	42	96.93	0	2.46	0	0.3	0	0.32	3
Electrical Devices	91	94.53	3.04	0	1.82	0.53	0	0.09	0
Electrical Lighting	95	98.74	0.14	0.35	0.2	0.52	0	0.05	1
Measuring & Testing	110	90.33	3.71	3.02	1.2	0.17	0.07	1.51	1
Nuclears & X-rays	69	87.71	0.57	0.81	1.13	0	0	9.77	3
Power Systems	169	88.13	3.05	0.04	0	0.68	2	6.1	3
Semiconductor Devices	126	91.14	4.77	2.77	0.41	0.78	0	0.13	3
Miscellaneous-Elec.	117	94.26	0.35	1.32	4	0.06	0	0	3
Materials Processing & Handling	96	93	1.8	1.02	0.9	2.35	0	0.93	7
Metal Working	131	92.99	3.59	0.57	2.14	0.59	0	0.12	6
Motors, Engines & Parts	142	96.43	0.02	0.81	1.89	0.84	0	0.01	3
Optics	93	94.12	1.31	0	0.44	1.73	0	2.39	7
Transportation	68	84.35	1.56	1.35	12.64	0	0	0.09	5
Miscellaneous Mechanical	119	97.49	0.62	0.6	0.73	0.01	0	0.55	5
Agriculture, Husbandry, Food	85	97.08	0.23	0.3	1.15	1.18	0	0.06	2
Apparel & Textile	77	94.04	4.41	0	0.26	0.12	0	1.17	0
Earth Working & Wells	19	78.38	19.65	1.97	0	0	0	0	1
Furniture, House Fixtures	48	87.43	0	0.59	11.72	0.06	0	0.2	3
Heating	83	93.11	1.04	0.44	4.76	0.02	0	0.64	1
Pipes & Joints	61	90.4	2.62	2.76	2.69	1.52	0	0	5
Receptacles	53	93.52	0	0.78	2.37	3.11	0	0.21	2
Miscellaneous-Others	217	95.07	1.57	0.24	2.22	0.87	0	0.02	8
US-JP weighed		92.75	2.41	1.41	1.31	0.83	0.19	1.1	
JP weighted		92.81	2.32	1.24	1.51	0.86	0.17	1.09	

US (2/2)

Question 4-17 Funding sources. (% in shares) You can check all relevant boxes. (当該研究のための費用の資金源(重複回答あり))

What are the sources (shares in %) of the funds for the research leading to this patent, including that for personnel?

A.10 (mean %)	N	Internal funds (including subsidiaries	Government Research Programs or other government fund	Customers or product users	Suppliers for parts, materials, equipments, software etc	Funds from venture capital or angels	Other companies	Other	Missing
NBER All	1779	89.91	3.29	2.51	0.52	2.36	0.81	0.35	140
11 Agriculture, Food, Textiles	8	100	0	0	0	0	0	0	0
12 Coating	31	97.58	0.65	1.29	0.48	0	0	0	3
13 Gas	11	90.91	0	9.09	0	0	0	0	0
14 Organic Compounds	58	91.47	5.6	2.59	0	0	0.34	0	3
15 Resins	80	96.56	0.88	1.69	0.5	0	0.38	0	4
19 Miscellaneous-chemical	221	89.12	3.51	2.1	0.59	2.33	1.9	0.45	12
21 Communications	136	92.61	1.1	1.47	0	3.31	0	0.74	13
22 Computer Hardware	40	86.25	6.13	4.63	0	0.5	0	2.5	2
77 Computer Software	88	90.11	2.61	2.95	0.23	3.98	0.11	0	5
23 Computer Peripherals	30	96.67	0	3.33	0	0	0	0	3
24 Information Storage	40	91.5	2.5	2	0	2.5	1.25	0.25	2
31 Drugs	88	85.8	6.82	1.14	0.57	4.55	0.68	0.45	13
32 Surgery & Medical Instruments	117	84.07	2.99	2.48	1.09	8.26	0.6	0.51	6
33 Biotechnology	35	76.14	12.86	3.71	0	2.86	4.43	0	6
39 Miscellaneous-Drug&Med	27	86.67	0	0.19	0	13.15	0	0	2
41 Electrical Devices	41	88.17	2.44	1.71	0.12	2.44	0.12	0	4
42 Electrical Lighting	32	94.06	0.94	5	0	0	0	0	1
43 Measuring & Testing	59	91.78	2.8	2.88	0.17	0.17	1.86	0.34	3
44 Nuclears & X-rays	39	85.77	5.38	6.54	0	1.28	1.03	0	0
45 Power Systems	86	87.27	8.26	2.79	0.17	0.58	0.93	0	3
46 Semiconductor Devices	50	89.4	6.6	4	0	0	0	0	5
49 Miscellaneous-Elec.	30	88	1.67	0.33	0	10	0	0	2
51 Materials Processing & Handling	49	93.06	0	4.41	2.27	0	0.29	0	7
52 Metal Working	44	92.05	5	0.45	2.5	0	0	0	5
53 Motors, Engines & Parts	51	86.27	4.51	3.14	0.39	1.96	1.76	1.96	5
54 Optics	41	81.95	5.85	7.32	0	4.88	0	0	2
55 Transportation	30	95	0	0	0.67	4	0.33	0	3
59 Miscellaneous Mechanical	39	90	0.51	3.08	1.28	0	2.56	2.56	3
61 Agriculture, Husbandry, Food	12	97.08	0	0.83	1.25	0	0.83	0	2
63 Apparel & Textile	8	87.5	0	0	0	0	0	0	1
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	97.78	0	0	2.22	0	0	0	0
66 Heating	8	93.75	0	6.25	0	0	0	0	0
67 Pipes & Joints	13	98.85	0	0	1.15	0	0	0	0
68 Receptacles	18	90.28	0	5.56	0	0	4.17	0	2
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	XX
US-JP weighted		**90/18**	**3.1**	**2.49**	**0.52**	**2.45**	**0.73**	**0.34**	

A.10 (mean %) (weight by man-month-A9)	N	Internal funds (including subsidiaries	Government Research Programs or other government fund	Customers or product users	Suppliers for parts, materials, equipments, software etc	Funds from venture capital or angels	Other companies	Other	Missing
NBER All	1,753	86.19	5.51	2.87	0.52	3.29	1.35	0.25	166
11 Agriculture, Food, Textiles	8	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0
12 Coating	30	95.45	1.03	2.74	0.77	0.00	0.00	0.00	4
13 Gas	11	98.28	0.00	1.72	0.00	0.00	0.00	0.00	0
14 Organic Compounds	57	89.54	8.20	1.99	0.00	0.00	0.27	0.00	4
15 Resins	79	97.05	0.20	2.00	0.66	0.00	0.09	0.00	5
19 Miscellaneous-chemical	216	85.14	5.21	2.57	0.38	2.84	3.48	0.39	17
21 Communications	135	91.91	1.39	2.18	0.00	4.48	0.00	0.02	14
22 Computer Hardware	40	84.55	6.98	5.13	0.00	1.86	0.00	1.46	2
77 Computer Software	86	82.46	5.70	7.08	0.06	4.10	0.59	0.00	7
23 Computer Peripherals	29	98.08	0.00	1.92	0.00	0.00	0.00	0.00	4
24 Information Storage	40	95.91	1.29	1.54	0.00	1.02	0.20	0.04	2
31 Drugs	87	85.40	9.65	0.15	0.27	3.17	0.93	0.43	14
32 Surgery & Medical Instruments	115	76.51	6.36	4.06	1.04	11.40	0.56	0.08	8
33 Biotechnology	33	72.35	17.14	0.70	0.00	2.05	7.76	0.00	8
39 Miscellaneous-Drug&Med	27	66.34	0.00	0.70	0.00	32.96	0.00	0.00	2
41 Electrical Devices	41	81.51	4.69	4.93	0.83	6.22	0.83	0.00	4
42 Electrical Lighting	32	96.54	0.36	3.10	0.00	0.00	0.00	0.00	1
43 Measuring & Testing	59	87.34	2.76	2.49	0.85	0.85	4.03	1.69	3
44 Nuclears & X-rays	38	82.81	11.75	2.53	0.00	1.61	1.29	0.00	1
45 Power Systems	85	75.56	16.26	6.86	0.27	0.39	0.67	0.00	4
46 Semiconductor Devices	49	77.65	15.54	6.81	0.00	0.00	0.00	0.00	6
49 Miscellaneous-Elec.	30	82.29	3.86	0.20	0.00	13.65	0.00	0.00	2
51 Materials Processing & Handling	48	87.47	0.00	9.86	2.18	0.00	0.51	0.00	8
52 Metal Working	43	93.35	4.77	0.49	1.38	0.00	0.00	0.00	6
53 Motors, Engines & Parts	50	76.79	4.76	1.95	1.06	2.69	12.68	0.07	6
54 Optics	39	86.16	12.43	0.25	0.00	1.16	0.00	0.00	4
55 Transportation	30	92.57	0.00	0.00	1.84	4.90	0.69	0.00	3
59 Miscellaneous Mechanical	39	80.20	0.07	10.81	5.32	0.00	0.35	3.25	3
61 Agriculture, Husbandry, Food	12	96.25	0.00	1.07	1.61	0.00	1.07	0.00	2
63 Apparel & Textile	8	99.32	0.00	0.00	0.00	0.00	0.00	0.00	1
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	98.02	0.00	0.00	1.98	0.00	0.00	0.00	0
66 Heating	8	96.58	0.00	3.42	0.00	0.00	0.00	0.00	0
67 Pipes & Joints	13	99.44	0.00	0.00	0.56	0.00	0.00	0.00	0
68 Receptacles	18	85.02	0.00	12.46	0.00	0.00	2.53	0.00	2
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX	XX	XX
US-JP weighted		**86.74**	**5.21**	**2.79**	**0.53**	**3.25**	**1.21**	**0.26**	

Japan

Question 4-18 Did the availability of funds constrain the research leading to the invention? You can check all relevant boxes. (リスク資金の利用可能性が制約となったか(重複回答あり))

	All	リスク資金不足のために望んでいた研究の範囲を実質的に縮小した The scope of the research was significantly narrowed	リスク資金不足のために研究開始・完了が実質的に遅れた Either the startup or the completion of the research was significantly delayed	リスク資金が制約にならなかったが、事業化への投資が制約された Research was not constrained but the follow-up investment for its commercialization was constrained	リスク資金は研究開発にも事業化への投資にも制約にならなかった Not constrained either in its research or in the follow-up investment for commercialization	その他 Other	無回答 no response
All	3658	263	196	855	2203	92	130
Agriculture, Food, Textiles	60	7	3	17	29	4	2
Coating	80	3	6	23	42	3	4
Gas	45	8	5	13	19	2	3
Organic Compounds	120	6	2	25	77	2	9
Resins	125	7	8	27	77	3	5
Miscellaneous-chemical	208	12	13	57	122	3	9
Communications	160	15	10	40	89	6	4
Computer Hardware	59	4	6	8	40	2	2
Computer Software	123	9	5	27	81	2	3
Computer Peripherals	76	5	3	16	48	2	2
Information Storage	120	9	2	31	76	2	2
Drugs	127	19	5	37	64	4	3
Surgery & Medical Instruments	85	7	7	16	54	1	3
Biotechnology	87	10	8	18	46	6	3
Miscellaneous-Drug&Med	45	3	1	6	32	1	2
Electrical Devices	91	6	2	14	66	3	0
Electrical Lighting	96	4	6	21	59	1	5
Measuring & Testing	111	9	12	26	60	3	4
Nuclears & X-rays	72	6	5	22	36	7	1
Power Systems	172	12	7	43	101	7	5
Semiconductor Devices	129	13	10	46	56	1	5
Miscellaneous-Elec.	120	8	10	32	69	1	2
Materials Processing & Handling	103	3	2	22	66	1	9
Metal Working	137	9	11	36	76	3	7
Motors, Engines & Parts	145	7	4	33	94	4	4
Optics	100	3	3	22	66	0	7
Transportation	73	5	3	18	46	1	1
Miscellaneous Mechanical	124	8	5	26	82	2	5
Agriculture, Husbandry, Food	87	8	3	22	55	0	1
Apparel & Textile	77	3	0	12	55	6	1
Earth Working & Wells	20	3	0	6	10	1	1
Furniture, House Fixtures	51	4	0	9	34	1	3
Heating	84	13	8	20	44	1	2
Pipes & Joints	66	3	6	11	43	0	3
Receptacles	55	2	1	12	38	0	3
Miscellaneous-Others	225	10	14	41	151	6	5

%	N	The scope of the research was significantly narrowed	Either the startup or the completion of the research was significantly delayed	Research was not constrained but the follow-up investment for its commercialization was constrained	Not constrained either in its research or in the follow-up investment for commercialization	Other
All	3528	7.45	5.56	24.23	62.44	2.61
Agriculture, Food, Textiles	58	12.07	5.17	29.31	50.00	6.90
Coating	76	3.95	7.89	30.26	55.26	3.95
Gas	42	19.05	11.90	30.95	45.24	4.76
Organic Compounds	111	5.41	1.80	22.52	69.37	1.80
Resins	120	5.83	6.67	22.50	64.17	2.50
Miscellaneous-chemical	199	6.03	6.53	28.64	61.31	1.51
Communications	156	9.62	6.41	25.64	57.05	3.85
Computer Hardware	57	7.02	10.53	14.04	70.18	3.51
Computer Software	120	7.50	4.17	22.50	67.50	1.67
Computer Peripherals	74	6.76	4.05	21.62	64.86	2.70
Information Storage	118	7.63	1.69	26.27	64.41	1.69
Drugs	124	15.32	4.03	29.84	51.61	3.23
Surgery & Medical Instruments	82	8.54	8.54	19.51	65.85	1.22
Biotechnology	84	11.90	9.52	21.43	54.76	7.14
Miscellaneous-Drug&Med	43	6.98	2.33	13.95	74.42	2.33
Electrical Devices	91	6.59	2.20	15.38	72.53	3.30
Electrical Lighting	91	4.40	6.59	23.08	64.84	1.10
Measuring & Testing	107	8.41	11.21	24.30	56.07	2.80
Nuclears & X-rays	71	8.45	7.04	30.99	50.70	9.86
Power Systems	167	7.19	4.19	25.75	60.48	4.19
Semiconductor Devices	124	10.48	8.06	37.10	45.16	0.81
Miscellaneous-Elec.	118	6.78	8.47	27.12	58.47	0.85
Materials Processing & Handling	94	3.19	2.13	23.40	70.21	1.06
Metal Working	130	6.92	8.46	27.69	58.46	2.31
Motors, Engines & Parts	141	4.96	2.84	23.40	66.67	2.84
Optics	93	3.23	3.23	23.66	70.97	0.00
Transportation	72	6.94	4.17	25.00	63.89	1.39
Miscellaneous Mechanical	119	6.72	4.20	21.85	68.91	1.68
Agriculture, Husbandry, Food	86	9.30	3.49	25.58	63.95	0.00
Apparel & Textile	76	3.95	0.00	15.79	72.37	7.89
Earth Working & Wells	19	15.79	0.00	31.58	52.63	5.26
Furniture, House Fixtures	48	8.33	0.00	18.75	70.83	2.08
Heating	82	15.85	9.76	24.39	53.66	1.22
Pipes & Joints	63	4.76	9.52	17.46	68.25	0.00
Receptacles	52	3.85	1.92	23.08	73.08	0.00
Miscellaneous-Others	220	4.55	6.36	18.64	68.64	2.73
JP weighted		6.93	5.43	24.27	62.95	2.48

Japan

(1/5)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

科学技術の進歩への貢献による満足度
Satisfaction from the contribution to the progress of science and technology

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	194	297	881	1526	669	91
Agriculture, Food, Textiles	60	3	9	10	25	13	0
Coating	80	2	8	16	39	12	3
Gas	45	4	1	13	16	9	2
Organic Compounds	120	2	12	18	56	30	2
Resins	125	5	14	21	60	22	3
Miscellaneous-chemical	208	9	12	57	91	35	4
Communications	160	8	9	45	67	29	2
Computer Hardware	59	5	5	15	20	11	3
Computer Software	123	6	13	36	38	29	1
Computer Peripherals	76	3	9	13	32	19	0
Information Storage	120	10	12	29	45	23	1
Drugs	127	2	5	21	60	38	1
Surgery & Medical Instruments	85	2	12	17	37	16	1
Biotechnology	87	1	4	13	39	29	1
Miscellaneous-Drug&Med	45	2	2	11	20	9	1
Electrical Devices	91	2	7	24	46	12	0
Electrical Lighting	96	4	6	18	47	17	4
Measuring & Testing	111	8	11	31	33	27	1
Nuclears & X-rays	72	4	7	18	30	11	2
Power Systems	172	6	7	50	77	30	2
Semiconductor Devices	129	8	6	31	60	24	0
Miscellaneous-Elec.	120	1	8	31	49	29	2
Materials Processing & Handling	103	9	6	27	41	14	6
Metal Working	137	6	6	34	56	29	6
Motors, Engines & Parts	145	8	17	29	60	30	1
Optics	100	5	10	23	42	16	4
Transportation	73	8	5	21	31	4	4
Miscellaneous Mechanical	124	11	12	35	58	5	3
Agriculture, Husbandry, Food	87	5	9	13	42	13	5
Apparel & Textile	77	9	9	21	24	8	6
Earth Working & Wells	20	1	0	5	9	1	4
Furniture, House Fixtures	51	6	1	15	16	9	4
Heating	84	7	10	22	34	10	1
Pipes & Joints	66	3	9	13	25	10	6
Receptacles	55	4	3	17	19	10	2
Miscellaneous-Others	225	15	21	68	82	36	3

%	N	1	2	3	4	5	Total
All	3567	5.44	8.33	24.7	42.78	18.76	100
Agriculture, Food, Textiles	60	5	15	16.67	41.67	21.67	100
Coating	77	2.6	10.39	20.78	50.65	15.58	100
Gas	43	9.3	2.33	30.23	37.21	20.93	100
Organic Compounds	118	1.69	10.17	15.25	47.46	25.42	100
Resins	122	4.1	11.48	17.21	49.18	18.03	100
Miscellaneous-chemical	204	4.41	5.88	27.94	44.61	17.16	100
Communications	158	5.06	5.7	28.48	42.41	18.35	100
Computer Hardware	56	8.93	8.93	26.79	35.71	19.64	100
Computer Software	122	4.92	10.66	29.51	31.15	23.77	100
Computer Peripherals	76	3.95	11.84	17.11	42.11	25	100
Information Storage	119	8.4	10.08	24.37	37.82	19.33	100
Drugs	126	1.59	3.97	16.67	47.62	30.16	100
Surgery & Medical Instruments	84	2.38	14.29	20.24	44.05	19.05	100
Biotechnology	86	1.16	4.65	15.12	45.35	33.72	100
Miscellaneous-Drug&Med	44	4.55	4.55	25	45.45	20.45	100
Electrical Devices	91	2.2	7.69	26.37	50.55	13.19	100
Electrical Lighting	92	4.35	6.52	19.57	51.09	18.48	100
Measuring & Testing	110	7.27	10	28.18	30	24.55	100
Nuclears & X-rays	70	5.71	10	25.71	42.86	15.71	100
Power Systems	170	3.53	4.12	29.41	45.29	17.65	100
Semiconductor Devices	129	6.2	4.65	24.03	46.51	18.6	100
Miscellaneous-Elec.	118	0.85	6.78	26.27	41.53	24.58	100
Materials Processing & Handling	97	9.28	6.19	27.84	42.27	14.43	100
Metal Working	131	4.58	4.58	25.95	42.75	22.14	100
Motors, Engines & Parts	144	5.56	11.81	20.14	41.67	20.83	100
Optics	96	5.21	10.42	23.96	43.75	16.67	100
Transportation	69	11.59	7.25	30.43	44.93	5.8	100
Miscellaneous Mechanical	121	9.09	9.92	28.93	47.93	4.13	100
Agriculture, Husbandry, Food	82	6.1	10.98	15.85	51.22	15.85	100
Apparel & Textile	71	12.68	12.68	29.58	33.8	11.27	100
Earth Working & Wells	16	6.25	0	31.25	56.25	6.25	100
Furniture, House Fixtures	47	12.77	2.13	31.91	34.04	19.15	100
Heating	83	8.43	12.05	26.51	40.96	12.05	100
Pipes & Joints	60	5	15	21.67	41.67	16.67	100
Receptacles	53	7.55	5.66	32.08	35.85	18.87	100
Miscellaneous-Others	222	6.76	9.46	30.63	36.94	16.22	100
US-JP weighted	3567	5.03	8.1	24.86	42.85	19.16	100
JP weighted	3567	5.22	8.09	25.56	42.38	18.76	100

チャレンジングな技術課題を解決すること自体への興味
Satisfaction from solving technical problems

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	50	61	231	1749	1508	59
Agriculture, Food, Textiles	60	1	1	5	32	21	0
Coating	80	1	1	5	35	37	1
Gas	45	1	0	1	22	20	1
Organic Compounds	120	0	2	7	60	50	1
Resins	125	0	5	5	59	54	2
Miscellaneous-chemical	208	2	3	17	109	73	4
Communications	160	1	1	6	83	68	1
Computer Hardware	59	0	1	3	28	27	0
Computer Software	123	2	4	5	52	59	1
Computer Peripherals	76	1	1	3	32	39	0
Information Storage	120	3	2	9	53	53	0
Drugs	127	0	1	11	56	57	2
Surgery & Medical Instruments	85	0	6	3	49	26	1
Biotechnology	87	1	2	9	39	33	3
Miscellaneous-Drug&Med	45	0	0	6	23	15	1
Electrical Devices	91	0	0	6	48	37	0
Electrical Lighting	96	0	1	4	52	38	1
Measuring & Testing	111	4	4	7	37	58	1
Nuclears & X-rays	72	1	1	11	35	23	1
Power Systems	172	4	1	8	90	69	0
Semiconductor Devices	129	3	2	9	57	58	0
Miscellaneous-Elec.	120	0	2	6	57	55	0
Materials Processing & Handling	103	4	1	6	56	31	5
Metal Working	137	2	1	8	61	58	7
Motors, Engines & Parts	145	4	2	4	55	80	0
Optics	100	0	3	7	46	41	3
Transportation	73	2	1	3	35	30	2
Miscellaneous Mechanical	124	2	5	9	67	39	2
Agriculture, Husbandry, Food	87	1	0	6	49	29	2
Apparel & Textile	77	2	1	7	32	33	2
Earth Working & Wells	20	1	0	0	6	10	3
Furniture, House Fixtures	51	4	0	4	23	18	2
Heating	84	1	1	10	44	28	0
Pipes & Joints	66	0	2	4	25	29	6
Receptacles	55	0	1	3	28	22	1
Miscellaneous-Others	225	2	2	14	114	90	3

%	N	1	2	3	4	5	Total
All	3599	1.39	1.69	6.42	48.6	41.9	100
Agriculture, Food, Textiles	60	1.67	1.67	8.33	53.33	35	100
Coating	79	1.27	1.27	6.33	44.3	46.84	100
Gas	44	2.27	0	2.27	50	45.45	100
Organic Compounds	119	0	1.68	5.88	50.42	42.02	100
Resins	123	0	4.07	4.07	47.97	43.9	100
Miscellaneous-chemical	204	0.98	1.47	8.33	53.43	35.78	100
Communications	159	0.63	0.63	3.77	52.2	42.77	100
Computer Hardware	59	0	1.69	5.08	47.46	45.76	100
Computer Software	122	1.64	3.28	4.1	42.62	48.36	100
Computer Peripherals	76	1.32	1.32	3.95	42.11	51.32	100
Information Storage	120	2.5	1.67	7.5	44.17	44.17	100
Drugs	125	0	0.8	8.8	44.8	45.6	100
Surgery & Medical Instruments	84	0	7.14	3.57	58.33	30.95	100
Biotechnology	84	1.19	2.38	10.71	46.43	39.29	100
Miscellaneous-Drug&Med	44	0	0	13.64	52.27	34.09	100
Electrical Devices	91	0	0	6.59	52.75	40.66	100
Electrical Lighting	95	0	1.05	4.21	54.74	40	100
Measuring & Testing	110	3.64	3.64	6.36	33.64	52.73	100
Nuclears & X-rays	71	1.41	1.41	15.49	49.3	32.39	100
Power Systems	172	2.33	0.58	4.65	52.33	40.12	100
Semiconductor Devices	129	2.33	1.55	6.98	44.19	44.96	100
Miscellaneous-Elec.	120	0	1.67	5	47.5	45.83	100
Materials Processing & Handling	98	4.08	1.02	6.12	57.14	31.63	100
Metal Working	130	1.54	0.77	6.15	46.92	44.62	100
Motors, Engines & Parts	145	2.76	1.38	2.76	37.93	55.17	100
Optics	97	0	3.09	7.22	47.42	42.27	100
Transportation	71	2.82	1.41	4.23	49.3	42.25	100
Miscellaneous Mechanical	122	1.64	4.1	7.38	54.92	31.97	100
Agriculture, Husbandry, Food	85	1.18	0	7.06	57.65	34.12	100
Apparel & Textile	75	2.67	1.33	9.33	42.67	44	100
Earth Working & Wells	17	5.88	0	0	35.29	58.82	100
Furniture, House Fixtures	49	8.16	0	8.16	46.94	36.73	100
Heating	84	1.19	1.19	11.9	52.38	33.33	100
Pipes & Joints	60	0	3.33	6.67	41.67	48.33	100
Receptacles	54	0	1.85	5.56	51.85	40.74	100
Miscellaneous-Others	222	0.9	0.9	6.31	51.35	40.54	100
US-JP weighted	3599	1.23	1.79	6.1	48.9	41.98	100
JP weighted	3599	1.26	1.69	6.1	48.61	42.32	100

US (1/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

C.5_B Satisfaction from contributing to the progress of science and technology

	all	1	2	3	4	5	missing
NBER All	1,919	110	179	390	517	598	125
11 Agriculture, Food, Textiles	8	0	0	6	0	2	0
12 Coating	34	4	4	7	5	12	2
13 Gas	11	0	0	4	5	2	0
14 Organic Compounds	61	1	5	15	18	22	0
15 Resins	84	0	7	16	26	31	4
19 Miscellaneous-chemical	233	12	34	42	69	66	10
21 Communications	149	9	17	32	37	41	13
22 Computer Hardware	42	5	3	6	10	15	3
77 Computer Software	93	6	4	29	29	23	2
23 Computer Peripherals	33	1	4	5	8	14	1
24 Information Storage	42	3	1	9	10	14	5
31 Drugs	101	1	1	13	29	46	11
32 Surgery & Medical Instruments	123	5	8	24	34	44	8
33 Biotechnology	41	2	1	2	7	27	2
39 Miscellaneous-Drug&Med	29	2	2	3	9	9	4
41 Electrical Devices	45	5	4	7	14	10	5
42 Electrical Lighting	33	0	4	7	11	8	3
43 Measuring & Testing	62	3	9	13	16	19	2
44 Nuclears & X-rays	39	2	4	7	13	13	0
45 Power Systems	89	6	6	17	26	30	4
46 Semiconductor Devices	55	0	6	10	17	19	3
49 Miscellaneous-Elec.	32	3	3	6	8	10	2
51 Materials Processing & Handling	56	4	5	10	11	19	7
52 Metal Working	49	5	6	11	18	6	3
53 Motors, Engines & Parts	56	7	7	12	16	9	5
54 Optics	43	4	3	10	14	11	1
55 Transportation	33	2	3	5	7	14	2
59 Miscellaneous Mechanical	42	3	3	11	11	10	4
61 Agriculture, Husbandry, Food	14	3	1	1	4	4	1
63 Apparel & Textile	9	2	2	1	1	3	0
64 Earth Working & Wells	5	0	0	3	1	0	1
65 Furniture, House Fixtures	9	0	1	5	2	0	1
66 Heating	8	1	2	0	1	3	1
67 Pipes & Joints	13	0	3	3	3	3	1
68 Receptacles	20	0	4	5	3	4	4
69 Miscellaneous-Others	123	9	12	33	24	35	10

%	N	1	2	3	4	5	Total
NBER All	1794	6.13	9.98	21.74	28.82	33.33	100
11 Agriculture, Food, Textiles	8	0	0	75	0	25	100
12 Coating	32	12.5	12.5	21.88	15.63	37.5	100
13 Gas	11	0	0	36.36	45.45	18.18	100
14 Organic Compounds	61	1.64	8.2	24.59	29.51	36.07	100
15 Resins	80	0	8.75	20	32.5	38.75	100
19 Miscellaneous-chemical	223	5.38	15.25	18.83	30.94	29.6	100
21 Communications	136	6.62	12.5	23.53	27.21	30.15	100
22 Computer Hardware	39	12.82	7.69	15.38	25.64	38.46	100
77 Computer Software	91	6.59	4.4	31.87	31.87	25.27	100
23 Computer Peripherals	32	3.13	12.5	15.63	25	43.75	100
24 Information Storage	37	8.11	2.7	24.32	27.03	37.84	100
31 Drugs	90	1.11	1.11	14.44	32.22	51.11	100
32 Surgery & Medical Instruments	115	4.35	6.96	20.87	29.57	38.26	100
33 Biotechnology	39	5.13	2.56	5.13	17.95	69.23	100
39 Miscellaneous-Drug&Med	25	8	8	12	36	36	100
41 Electrical Devices	40	12.5	10	17.5	35	25	100
42 Electrical Lighting	30	0	13.33	23.33	36.67	26.67	100
43 Measuring & Testing	60	5	15	21.67	26.67	31.67	100
44 Nuclears & X-rays	39	5.13	10.26	17.95	33.33	33.33	100
45 Power Systems	85	7.06	7.06	20	30.59	35.29	100
46 Semiconductor Devices	52	0	11.54	19.23	32.69	36.54	100
49 Miscellaneous-Elec.	30	10	10	20	26.67	33.33	100
51 Materials Processing & Handling	49	8.16	10.2	20.41	22.45	38.78	100
52 Metal Working	46	10.87	13.04	23.91	39.13	13.04	100
53 Motors, Engines & Parts	51	13.73	13.73	23.53	31.37	17.65	100
54 Optics	42	9.52	7.14	23.81	33.33	26.19	100
55 Transportation	31	6.45	9.68	16.13	22.58	45.16	100
59 Miscellaneous Mechanical	38	7.89	7.89	28.95	28.95	26.32	100
61 Agriculture, Husbandry, Food	13	23.08	7.69	7.69	30.77	30.77	100
63 Apparel & Textile	9	22.22	22.22	11.11	11.11	33.33	100
64 Earth Working & Wells	4	0	0	75	25	0	100
65 Furniture, House Fixtures	8	0	12.5	62.5	25	0	100
66 Heating	7	14.29	28.57	0	14.29	42.86	100
67 Pipes & Joints	12	0	25	25	25	25	100
68 Receptacles	16	0	25	31.25	18.75	25	100
69 Miscellaneous-Others	113	7.96	10.62	29.2	21.24	30.97	100
US-JP weighted	**1794**	**6.06**	**9.75**	**21.81**	**28.86**	**33.52**	100

C.5_A Satisfaction from solving technical problems

	all	1	2	3	4	5	missing
NBER All	1,919	25	44	180	577	983	110
11 Agriculture, Food, Textiles	8	0	0	2	3	3	0
12 Coating	34	0	0	4	7	22	1
13 Gas	11	0	0	2	2	7	0
14 Organic Compounds	61	1	0	9	19	32	0
15 Resins	84	0	2	7	27	43	5
19 Miscellaneous-chemical	233	3	6	21	72	120	11
21 Communications	149	2	2	13	42	79	11
22 Computer Hardware	42	2	1	1	12	24	2
77 Computer Software	93	1	3	13	22	52	2
23 Computer Peripherals	33	0	0	1	8	23	1
24 Information Storage	42	0	1	4	10	22	5
31 Drugs	101	3	2	15	32	38	11
32 Surgery & Medical Instruments	123	2	1	12	37	62	9
33 Biotechnology	41	2	3	6	5	23	2
39 Miscellaneous-Drug&Med	29	0	2	2	5	16	4
41 Electrical Devices	45	0	0	3	18	23	1
42 Electrical Lighting	33	0	1	3	12	13	4
43 Measuring & Testing	62	0	1	6	21	33	1
44 Nuclears & X-rays	39	0	0	3	13	23	0
45 Power Systems	89	0	1	4	32	49	3
46 Semiconductor Devices	55	0	1	3	19	29	3
49 Miscellaneous-Elec.	32	1	2	1	9	17	2
51 Materials Processing & Handling	56	1	0	7	11	32	5
52 Metal Working	49	0	3	3	20	20	3
53 Motors, Engines & Parts	56	1	3	6	20	21	5
54 Optics	43	0	1	2	20	19	1
55 Transportation	33	0	1	3	7	21	1
59 Miscellaneous Mechanical	42	1	1	2	14	20	4
61 Agriculture, Husbandry, Food	14	0	1	3	2	6	2
63 Apparel & Textile	9	0	2	0	1	6	0
64 Earth Working & Wells	5	0	0	0	2	2	1
65 Furniture, House Fixtures	9	0	0	2	4	2	1
66 Heating	8	1	0	0	1	6	0
67 Pipes & Joints	13	0	0	2	1	9	1
68 Receptacles	20	0	0	3	5	10	2
69 Miscellaneous-Others	123	4	3	12	42	56	6

%	N	1	2	3	4	5	Total
NBER All	1809	1.38	2.43	9.95	31.9	54.34	100
11 Agriculture, Food, Textiles	8	0	0	25	37.5	37.5	100
12 Coating	33	0	0	12.12	21.21	66.67	100
13 Gas	11	0	0	18.18	18.18	63.64	100
14 Organic Compounds	61	1.64	0	14.75	31.15	52.46	100
15 Resins	79	0	2.53	8.86	34.18	54.43	100
19 Miscellaneous-chemical	222	1.35	2.7	9.46	32.43	54.05	100
21 Communications	138	1.45	1.45	9.42	30.43	57.25	100
22 Computer Hardware	40	5	2.5	2.5	30	60	100
77 Computer Software	91	1.1	3.3	14.29	24.18	57.14	100
23 Computer Peripherals	32	0	0	3.13	25	71.88	100
24 Information Storage	37	0	2.7	10.81	27.03	59.46	100
31 Drugs	90	3.33	2.22	16.67	35.56	42.22	100
32 Surgery & Medical Instruments	114	1.75	0.88	10.53	32.46	54.39	100
33 Biotechnology	39	5.13	7.69	15.38	12.82	58.97	100
39 Miscellaneous-Drug&Med	25	0	8	8	20	64	100
41 Electrical Devices	44	0	0	6.82	40.91	52.27	100
42 Electrical Lighting	29	0	3.45	10.34	41.38	44.83	100
43 Measuring & Testing	61	0	1.64	9.84	34.43	54.1	100
44 Nuclears & X-rays	39	0	0	7.69	33.33	58.97	100
45 Power Systems	86	0	1.16	4.65	37.21	56.98	100
46 Semiconductor Devices	52	0	1.92	5.77	36.54	55.77	100
49 Miscellaneous-Elec.	30	3.33	6.67	3.33	30	56.67	100
51 Materials Processing & Handling	51	1.96	0	13.73	21.57	62.75	100
52 Metal Working	46	0	6.52	6.52	43.48	43.48	100
53 Motors, Engines & Parts	51	1.96	5.88	11.76	39.22	41.18	100
54 Optics	42	0	2.38	4.76	47.62	45.24	100
55 Transportation	32	0	3.13	9.38	21.88	65.63	100
59 Miscellaneous Mechanical	38	2.63	2.63	5.26	36.84	52.63	100
61 Agriculture, Husbandry, Food	12	0	8.33	25	16.67	50	100
63 Apparel & Textile	9	0	22.22	0	11.11	66.67	100
64 Earth Working & Wells	4	0	0	0	50	50	100
65 Furniture, House Fixtures	8	0	0	25	50	25	100
66 Heating	8	12.5	0	0	12.5	75	100
67 Pipes & Joints	12	0	0	16.67	8.33	75	100
68 Receptacles	18	0	0	16.67	27.78	55.56	100
69 Miscellaneous-Others	117	3.42	2.56	10.26	35.9	47.86	100
US-JP weighted	1809	**1.31**	**2.44**	**10.1**	**31.68**	**54.47**	100

Japan (2/5)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

所属組織のパフォーマンス向上
Improvement of the performance of the organization I work for

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	173	227	865	1817	473	103
Agriculture, Food, Textiles	60	1	9	12	28	8	2
Coating	80	4	8	22	29	14	3
Gas	45	2	4	12	18	7	2
Organic Compounds	120	4	6	30	62	16	2
Resins	125	0	7	25	72	17	4
Miscellaneous-chemical	208	13	14	52	97	26	6
Communications	160	4	3	45	85	22	1
Computer Hardware	59	3	4	11	31	8	2
Computer Software	123	9	8	26	62	17	1
Computer Peripherals	76	1	3	24	40	8	0
Information Storage	120	7	6	33	64	8	2
Drugs	127	5	6	27	60	26	3
Surgery & Medical Instruments	85	6	10	26	32	9	2
Biotechnology	87	5	2	13	53	10	4
Miscellaneous-Drug&Med	45	0	5	14	22	3	1
Electrical Devices	91	4	7	30	43	7	0
Electrical Lighting	96	2	8	18	59	7	2
Measuring & Testing	111	4	11	34	48	13	1
Nuclears & X-rays	72	2	3	11	41	11	4
Power Systems	172	10	14	36	79	32	1
Semiconductor Devices	129	7	11	26	67	18	0
Miscellaneous-Elec.	120	11	4	31	54	19	1
Materials Processing & Handling	103	5	5	18	57	11	7
Metal Working	137	8	7	30	68	16	8
Motors, Engines & Parts	145	5	4	31	86	19	0
Optics	100	2	3	30	48	14	3
Transportation	73	3	4	20	37	7	2
Miscellaneous Mechanical	124	10	10	24	65	11	4
Agriculture, Husbandry, Food	87	2	4	18	46	12	5
Apparel & Textile	77	3	5	16	35	10	8
Earth Working & Wells	20	2	3	4	5	2	4
Furniture, House Fixtures	51	6	3	11	18	8	5
Heating	84	8	7	15	41	11	2
Pipes & Joints	66	1	3	16	33	6	7
Receptacles	55	3	5	10	30	5	2
Miscellaneous-Others	225	11	11	64	102	35	2

%	N	1	2	3	4	5	Total
All	3555	4.87	6.39	24.33	51.11	13.31	100
Agriculture, Food, Textiles	58	1.72	15.52	20.69	48.28	13.79	100
Coating	77	5.19	10.39	28.57	37.66	18.18	100
Gas	43	4.65	9.3	27.91	41.86	16.28	100
Organic Compounds	118	3.39	5.08	25.42	52.54	13.56	100
Resins	121	0	5.79	20.66	59.5	14.05	100
Miscellaneous-chemical	202	6.44	6.93	25.74	48.02	12.87	100
Communications	159	2.52	1.89	28.3	53.46	13.84	100
Computer Hardware	57	5.26	7.02	19.3	54.39	14.04	100
Computer Software	122	7.38	6.56	21.31	50.82	13.93	100
Computer Peripherals	76	1.32	3.95	31.58	52.63	10.53	100
Information Storage	118	5.93	5.08	27.97	54.24	6.78	100
Drugs	124	4.03	4.84	21.77	48.39	20.97	100
Surgery & Medical Instruments	83	7.23	12.05	31.33	38.55	10.84	100
Biotechnology	83	6.02	2.41	15.66	63.86	12.05	100
Miscellaneous-Drug&Med	44	0	11.36	31.82	50	6.82	100
Electrical Devices	91	4.4	7.69	32.97	47.25	7.69	100
Electrical Lighting	94	2.13	8.51	19.15	62.77	7.45	100
Measuring & Testing	110	3.64	10	30.91	43.64	11.82	100
Nuclears & X-rays	68	2.94	4.41	16.18	60.29	16.18	100
Power Systems	171	5.85	8.19	21.05	46.2	18.71	100
Semiconductor Devices	129	5.43	8.53	20.16	51.94	13.95	100
Miscellaneous-Elec.	119	9.24	3.36	26.05	45.38	15.97	100
Materials Processing & Handling	96	5.21	5.21	18.75	59.38	11.46	100
Metal Working	129	6.2	5.43	23.26	52.71	12.4	100
Motors, Engines & Parts	145	3.45	2.76	21.38	59.31	13.1	100
Optics	97	2.06	3.09	30.93	49.48	14.43	100
Transportation	71	4.23	5.63	28.17	52.11	9.86	100
Miscellaneous Mechanical	120	8.33	8.33	20	54.17	9.17	100
Agriculture, Husbandry, Food	82	2.44	4.88	21.95	56.1	14.63	100
Apparel & Textile	69	4.35	7.25	23.19	50.72	14.49	100
Earth Working & Wells	16	12.5	18.75	25	31.25	12.5	100
Furniture, House Fixtures	46	13.04	6.52	23.91	39.13	17.39	100
Heating	82	9.76	8.54	18.29	50	13.41	100
Pipes & Joints	59	1.69	5.08	27.12	55.93	10.17	100
Receptacles	53	5.66	9.43	18.87	56.6	9.43	100
Miscellaneous-Others	223	4.93	4.93	28.7	45.74	15.7	100
US-JP weighted	3555	4.72	6.06	24.88	50.93	13.4	100
JP weighted	3555	4.73	5.68	24.48	51.66	13.45	100

キャリア向上、より良い仕事に就く機会拡大
Career advances and opportunities for new/better jobs

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	499	710	1306	867	160	116
Agriculture, Food, Textiles	60	6	23	15	11	5	0
Coating	80	10	17	29	20	1	3
Gas	45	8	9	17	7	2	2
Organic Compounds	120	15	24	48	25	4	4
Resins	125	11	27	37	39	8	3
Miscellaneous-chemical	208	37	44	70	40	8	9
Communications	160	13	34	60	40	10	3
Computer Hardware	59	8	13	18	14	3	3
Computer Software	123	19	27	41	28	7	1
Computer Peripherals	76	9	18	32	16	1	0
Information Storage	120	12	31	42	28	5	2
Drugs	127	11	19	45	39	8	5
Surgery & Medical Instruments	85	7	21	26	23	5	3
Biotechnology	87	9	11	34	22	7	4
Miscellaneous-Drug&Med	45	11	9	16	5	3	1
Electrical Devices	91	7	18	41	24	1	0
Electrical Lighting	96	16	12	45	19	1	3
Measuring & Testing	111	22	23	38	23	4	1
Nuclears & X-rays	72	16	11	23	17	2	3
Power Systems	172	24	27	60	47	13	1
Semiconductor Devices	129	22	32	45	23	7	0
Miscellaneous-Elec.	120	16	22	44	30	6	2
Materials Processing & Handling	103	14	17	34	30	1	7
Metal Working	137	22	29	44	29	6	7
Motors, Engines & Parts	145	17	23	54	45	6	0
Optics	100	10	20	41	22	4	3
Transportation	73	9	13	31	13	2	5
Miscellaneous Mechanical	124	17	21	48	29	4	5
Agriculture, Husbandry, Food	87	11	12	33	22	2	7
Apparel & Textile	77	10	19	27	14	2	5
Earth Working & Wells	20	5	5	3	2	0	5
Furniture, House Fixtures	51	13	5	11	14	3	5
Heating	84	14	17	27	21	3	2
Pipes & Joints	66	8	10	23	14	4	7
Receptacles	55	17	8	15	12	1	2
Miscellaneous-Others	225	23	39	89	60	11	3

	N	1	2	3	4	5	Total
All	3542	14.09	20.05	36.87	24.48	4.52	100
Agriculture, Food, Textiles	60	10	38.33	25	18.33	8.33	100
Coating	77	12.99	22.08	37.66	25.97	1.3	100
Gas	43	18.6	20.93	39.53	16.28	4.65	100
Organic Compounds	116	12.93	20.69	41.38	21.55	3.45	100
Resins	122	9.02	22.13	30.33	31.97	6.56	100
Miscellaneous-chemical	199	18.59	22.11	35.18	20.1	4.02	100
Communications	157	8.28	21.66	38.22	25.48	6.37	100
Computer Hardware	56	14.29	23.21	32.14	25	5.36	100
Computer Software	122	15.57	22.13	33.61	22.95	5.74	100
Computer Peripherals	76	11.84	23.68	42.11	21.05	1.32	100
Information Storage	118	10.17	26.27	35.59	23.73	4.24	100
Drugs	122	9.02	15.57	36.89	31.97	6.56	100
Surgery & Medical Instruments	82	8.54	25.61	31.71	28.05	6.1	100
Biotechnology	83	10.84	13.25	40.96	26.51	8.43	100
Miscellaneous-Drug&Med	44	25	20.45	36.36	11.36	6.82	100
Electrical Devices	91	7.69	19.78	45.05	26.37	1.1	100
Electrical Lighting	93	17.2	12.9	48.39	20.43	1.08	100
Measuring & Testing	110	20	20.91	34.55	20.91	3.64	100
Nuclears & X-rays	69	23.19	15.94	33.33	24.64	2.9	100
Power Systems	171	14.04	15.79	35.09	27.49	7.6	100
Semiconductor Devices	129	17.05	24.81	34.88	17.83	5.43	100
Miscellaneous-Elec.	118	13.56	18.64	37.29	25.42	5.08	100
Materials Processing & Handling	96	14.58	17.71	35.42	31.25	1.04	100
Metal Working	130	16.92	22.31	33.85	22.31	4.62	100
Motors, Engines & Parts	145	11.72	15.86	37.24	31.03	4.14	100
Optics	97	10.31	20.62	42.27	22.68	4.12	100
Transportation	68	13.24	19.12	45.59	19.12	2.94	100
Miscellaneous Mechanical	119	14.29	17.65	40.34	24.37	3.36	100
Agriculture, Husbandry, Food	80	13.75	15	41.25	27.5	2.5	100
Apparel & Textile	72	13.89	26.39	37.5	19.44	2.78	100
Earth Working & Wells	15	33.33	33.33	20	13.33	0	100
Furniture, House Fixtures	46	28.26	10.87	23.91	30.43	6.52	100
Heating	82	17.07	20.73	32.93	25.61	3.66	100
Pipes & Joints	59	13.56	16.95	38.98	23.73	6.78	100
Receptacles	53	32.08	15.09	28.3	22.64	1.89	100
Miscellaneous-Others	222	10.36	17.57	40.09	27.03	4.95	100
US-JP weighted	3542	13.33	20.18	37.05	24.79	4.65	100
JP weighted	3542	13.13	19.92	37.29	25.04	4.62	100

US (2/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

C.5_D Generating value for my firm/improving my firm's performance

	all	1	2	3	4	5	missing
NBER All	1,919	63	69	263	633	779	112
11 Agriculture, Food, Textiles	8	0	0	1	1	6	0
12 Coating	34	0	0	2	14	17	1
13 Gas	11	0	0	4	4	3	0
14 Organic Compounds	61	3	3	9	24	22	0
15 Resins	84	2	0	7	37	33	5
19 Miscellaneous-chemical	233	7	3	30	77	106	10
21 Communications	149	3	9	21	56	49	11
22 Computer Hardware	42	0	1	4	18	16	3
77 Computer Software	93	3	7	16	29	36	2
23 Computer Peripherals	33	0	1	4	13	14	1
24 Information Storage	42	1	0	9	9	19	4
31 Drugs	101	3	3	11	20	54	10
32 Surgery & Medical Instruments	123	10	4	12	41	47	9
33 Biotechnology	41	4	2	7	13	12	3
39 Miscellaneous-Drug&Med	29	1	1	2	10	11	4
41 Electrical Devices	45	1	0	7	13	21	3
42 Electrical Lighting	33	0	0	5	12	14	2
43 Measuring & Testing	62	2	3	16	21	18	2
44 Nuclears & X-rays	39	1	6	8	10	14	0
45 Power Systems	89	10	5	9	30	32	3
46 Semiconductor Devices	55	1	2	13	20	16	3
49 Miscellaneous-Elec.	32	2	0	2	10	16	2
51 Materials Processing & Handling	56	3	2	4	16	26	5
52 Metal Working	49	0	1	12	14	19	3
53 Motors, Engines & Parts	56	1	3	11	16	20	5
54 Optics	43	0	3	9	14	16	1
55 Transportation	33	0	2	5	10	14	2
59 Miscellaneous Mechanical	42	1	0	6	14	17	4
61 Agriculture, Husbandry, Food	14	1	1	0	3	8	1
63 Apparel & Textile	9	0	0	2	1	6	0
64 Earth Working & Wells	5	0	0	0	1	3	1
65 Furniture, House Fixtures	9	0	0	0	2	6	1
66 Heating	8	0	0	0	1	7	0
67 Pipes & Joints	13	0	0	0	6	6	1
68 Receptacles	20	0	0	2	6	9	3
69 Miscellaneous-Others	123	3	7	13	47	46	7

C.5_E Career advances and opportunities for new/better jobs

	all	1	2	3	4	5	missing
NBER All	1,919	327	361	506	398	196	131
11 Agriculture, Food, Textiles	8	0	1	5	2	0	0
12 Coating	34	6	5	7	6	8	2
13 Gas	11	2	2	4	1	1	1
14 Organic Compounds	61	7	11	25	13	5	0
15 Resins	84	9	10	28	18	14	5
19 Miscellaneous-chemical	233	37	46	67	43	30	10
21 Communications	149	19	32	41	36	10	11
22 Computer Hardware	42	8	13	7	8	3	3
77 Computer Software	93	17	21	25	20	8	2
23 Computer Peripherals	33	5	5	10	10	2	1
24 Information Storage	42	6	5	11	8	6	6
31 Drugs	101	8	16	24	28	14	11
32 Surgery & Medical Instruments	123	28	21	21	27	15	11
33 Biotechnology	41	9	7	8	13	2	2
39 Miscellaneous-Drug&Med	29	8	3	8	4	2	4
41 Electrical Devices	45	3	9	13	10	5	5
42 Electrical Lighting	33	2	8	10	7	2	4
43 Measuring & Testing	62	8	14	17	11	10	2
44 Nuclears & X-rays	39	8	10	13	8	0	0
45 Power Systems	89	17	19	24	13	12	4
46 Semiconductor Devices	55	5	9	14	20	4	3
49 Miscellaneous-Elec.	32	7	4	9	8	2	2
51 Materials Processing & Handling	56	8	12	14	9	5	8
52 Metal Working	49	9	11	14	8	3	4
53 Motors, Engines & Parts	56	16	11	12	9	3	5
54 Optics	43	6	6	13	13	4	1
55 Transportation	33	9	8	9	0	5	2
59 Miscellaneous Mechanical	42	8	11	8	9	2	4
61 Agriculture, Husbandry, Food	14	6	1	3	0	2	2
63 Apparel & Textile	9	3	1	3	1	1	0
64 Earth Working & Wells	5	0	1	1	2	0	1
65 Furniture, House Fixtures	9	2	3	0	3	0	1
66 Heating	8	1	1	4	0	1	1
67 Pipes & Joints	13	1	2	3	6	0	1
68 Receptacles	20	5	6	4	1	1	3
69 Miscellaneous-Others	123	34	16	27	23	14	9

%	N	1	2	3	4	5	Total
NBER All	1807	3.49	3.82	14.55	35.03	43.11	100
11 Agriculture, Food, Textiles	8	0	0	12.5	12.5	75	100
12 Coating	33	0	0	6.06	42.42	51.52	100
13 Gas	11	0	0	36.36	36.36	27.27	100
14 Organic Compounds	61	4.92	4.92	14.75	39.34	36.07	100
15 Resins	79	2.53	0	8.86	46.84	41.77	100
19 Miscellaneous-chemical	223	3.14	1.35	13.45	34.53	47.53	100
21 Communications	138	2.17	6.52	15.22	40.58	35.51	100
22 Computer Hardware	39	0	2.56	10.26	46.15	41.03	100
77 Computer Software	91	3.3	7.69	17.58	31.87	39.56	100
23 Computer Peripherals	32	0	3.13	12.5	40.63	43.75	100
24 Information Storage	38	2.63	0	23.68	23.68	50	100
31 Drugs	91	3.3	3.3	12.09	21.98	59.34	100
32 Surgery & Medical Instruments	114	8.77	3.51	10.53	35.96	41.23	100
33 Biotechnology	38	10.53	5.26	18.42	34.21	31.58	100
39 Miscellaneous-Drug&Med	25	4	4	8	40	44	100
41 Electrical Devices	42	2.38	0	16.67	30.95	50	100
42 Electrical Lighting	31	0	0	16.13	38.71	45.16	100
43 Measuring & Testing	60	3.33	5	26.67	35	30	100
44 Nuclears & X-rays	39	2.56	15.38	20.51	25.64	35.9	100
45 Power Systems	86	11.63	5.81	10.47	34.88	37.21	100
46 Semiconductor Devices	52	1.92	3.85	25	38.46	30.77	100
49 Miscellaneous-Elec.	30	6.67	0	6.67	33.33	53.33	100
51 Materials Processing & Handling	51	5.88	3.92	7.84	31.37	50.98	100
52 Metal Working	46	0	2.17	26.09	30.43	41.3	100
53 Motors, Engines & Parts	51	1.96	5.88	21.57	31.37	39.22	100
54 Optics	42	0	7.14	21.43	33.33	38.1	100
55 Transportation	31	0	6.45	16.13	32.26	45.16	100
59 Miscellaneous Mechanical	38	2.63	0	15.79	36.84	44.74	100
61 Agriculture, Husbandry, Food	13	7.69	7.69	0	23.08	61.54	100
63 Apparel & Textile	9	0	0	22.22	11.11	66.67	100
64 Earth Working & Wells	4	0	0	0	25	75	100
65 Furniture, House Fixtures	8	0	0	0	25	75	100
66 Heating	8	0	0	0	12.5	87.5	100
67 Pipes & Joints	12	0	0	0	50	50	100
68 Receptacles	17	0	0	11.76	35.29	52.94	100
69 Miscellaneous-Others	116	2.59	6.03	11.21	40.52	39.66	100
US-JP weighted	**1807**	3.31	3.77	14.85	34.44	43.62	100

	N	1	2	3	4	5	Total
NBER All	1788	18.29	20.19	28.3	22.26	10.96	100
11 Agriculture, Food, Textiles	8	0	12.5	62.5	25	0	100
12 Coating	32	18.75	15.63	21.88	18.75	25	100
13 Gas	10	20	20	40	10	10	100
14 Organic Compounds	61	11.48	18.03	40.98	21.31	8.2	100
15 Resins	79	11.39	12.66	35.44	22.78	17.72	100
19 Miscellaneous-chemical	223	16.59	20.63	30.04	19.28	13.45	100
21 Communications	138	13.77	23.19	29.71	26.09	7.25	100
22 Computer Hardware	39	20.51	33.33	17.95	20.51	7.69	100
77 Computer Software	91	18.68	23.08	27.47	21.98	8.79	100
23 Computer Peripherals	32	15.63	15.63	31.25	31.25	6.25	100
24 Information Storage	36	16.67	13.89	30.56	22.22	16.67	100
31 Drugs	90	8.89	17.78	26.67	31.11	15.56	100
32 Surgery & Medical Instruments	112	25	18.75	18.75	24.11	13.39	100
33 Biotechnology	39	23.08	17.95	20.51	33.33	5.13	100
39 Miscellaneous-Drug&Med	25	32	12	32	16	8	100
41 Electrical Devices	40	7.5	22.5	32.5	25	12.5	100
42 Electrical Lighting	29	6.9	27.59	34.48	24.14	6.9	100
43 Measuring & Testing	60	13.33	23.33	28.33	18.33	16.67	100
44 Nuclears & X-rays	39	20.51	25.64	33.33	20.51	0	100
45 Power Systems	85	20	22.35	28.24	15.29	14.12	100
46 Semiconductor Devices	52	9.62	17.31	26.92	38.46	7.69	100
49 Miscellaneous-Elec.	30	23.33	13.33	30	26.67	6.67	100
51 Materials Processing & Handling	48	16.67	25	29.17	18.75	10.42	100
52 Metal Working	45	20	24.44	31.11	17.78	6.67	100
53 Motors, Engines & Parts	51	31.37	21.57	23.53	17.65	5.88	100
54 Optics	42	14.29	14.29	30.95	30.95	9.52	100
55 Transportation	31	29.03	25.81	29.03	0	16.13	100
59 Miscellaneous Mechanical	38	21.05	28.95	21.05	23.68	5.26	100
61 Agriculture, Husbandry, Food	12	50	8.33	25	0	16.67	100
63 Apparel & Textile	9	33.33	11.11	33.33	11.11	11.11	100
64 Earth Working & Wells	4	0	25	25	50	0	100
65 Furniture, House Fixtures	8	25	37.5	0	37.5	0	100
66 Heating	7	14.29	14.29	57.14	0	14.29	100
67 Pipes & Joints	12	8.33	16.67	25	50	0	100
68 Receptacles	17	29.41	35.29	23.53	5.88	5.88	100
69 Miscellaneous-Others	114	29.82	14.04	23.68	20.18	12.28	100
US-JP weighted	**1788**	**17.76**	**20.08**	**28.57**	**22.5**	**11.07**	100

Japan

(3/5)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

名声・評判
Prestige/reputation

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	649	831	1366	600	91	121
Agriculture, Food, Textiles	60	7	26	14	11	1	1
Coating	80	10	16	32	16	3	3
Gas	45	11	10	12	8	1	3
Organic Compounds	120	22	29	49	13	3	4
Resins	125	17	31	40	30	4	3
Miscellaneous-chemical	208	47	42	68	34	9	8
Communications	160	24	28	68	30	7	3
Computer Hardware	59	9	9	25	11	2	3
Computer Software	123	27	28	45	22	0	1
Computer Peripherals	76	12	24	23	16	1	0
Information Storage	120	25	32	38	20	3	2
Drugs	127	26	24	38	30	4	5
Surgery & Medical Instruments	85	16	29	28	10	0	2
Biotechnology	87	7	16	35	18	5	6
Miscellaneous-Drug&Med	45	11	8	16	6	3	1
Electrical Devices	91	13	25	35	17	1	0
Electrical Lighting	96	18	20	40	12	3	3
Measuring & Testing	111	20	26	44	18	2	1
Nuclears & X-rays	72	20	15	26	6	1	4
Power Systems	172	29	38	75	22	6	2
Semiconductor Devices	129	27	35	52	13	2	0
Miscellaneous-Elec.	120	23	31	44	17	3	2
Materials Processing & Handling	103	16	26	41	12	1	7
Metal Working	137	24	28	48	29	1	7
Motors, Engines & Parts	145	25	35	58	24	3	0
Optics	100	12	25	41	16	3	3
Transportation	73	14	16	25	11	2	5
Miscellaneous Mechanical	124	20	30	45	22	2	5
Agriculture, Husbandry, Food	87	11	17	35	16	1	7
Apparel & Textile	77	10	18	33	10	1	5
Earth Working & Wells	20	5	4	3	3	0	5
Furniture, House Fixtures	51	12	7	15	11	1	5
Heating	84	16	19	35	11	1	2
Pipes & Joints	66	13	9	21	12	4	7
Receptacles	55	16	11	17	8	1	2
Miscellaneous-Others	225	34	44	102	35	6	4

%	N	1	2	3	4	5	Total
All	3537	18.35	23.49	38.62	16.96	2.57	100
Agriculture, Food, Textiles	59	11.86	44.07	23.73	18.64	1.69	100
Coating	77	12.99	20.78	41.56	20.78	3.9	100
Gas	42	26.19	23.81	28.57	19.05	2.38	100
Organic Compounds	116	18.97	25	42.24	11.21	2.59	100
Resins	122	13.93	25.41	32.79	24.59	3.28	100
Miscellaneous-chemical	200	23.5	21	34	17	4.5	100
Communications	157	15.29	17.83	43.31	19.11	4.46	100
Computer Hardware	56	16.07	16.07	44.64	19.64	3.57	100
Computer Software	122	22.13	22.95	36.89	18.03	0	100
Computer Peripherals	76	15.79	31.58	30.26	21.05	1.32	100
Information Storage	118	21.19	27.12	32.2	16.95	2.54	100
Drugs	122	21.31	19.67	31.15	24.59	3.28	100
Surgery & Medical Instruments	83	19.28	34.94	33.73	12.05	0	100
Biotechnology	81	8.64	19.75	43.21	22.22	6.17	100
Miscellaneous-Drug&Med	44	25	18.18	36.36	13.64	6.82	100
Electrical Devices	91	14.29	27.47	38.46	18.68	1.1	100
Electrical Lighting	93	19.35	21.51	43.01	12.9	3.23	100
Measuring & Testing	110	18.18	23.64	40	16.36	1.82	100
Nuclears & X-rays	68	29.41	22.06	38.24	8.82	1.47	100
Power Systems	170	17.06	22.35	44.12	12.94	3.53	100
Semiconductor Devices	129	20.93	27.13	40.31	10.08	1.55	100
Miscellaneous-Elec.	118	19.49	26.27	37.29	14.41	2.54	100
Materials Processing & Handling	96	16.67	27.08	42.71	12.5	1.04	100
Metal Working	130	18.46	21.54	36.92	22.31	0.77	100
Motors, Engines & Parts	145	17.24	24.14	40	16.55	2.07	100
Optics	97	12.37	25.77	42.27	16.49	3.09	100
Transportation	68	20.59	23.53	36.76	16.18	2.94	100
Miscellaneous Mechanical	119	16.81	25.21	37.82	18.49	1.68	100
Agriculture, Husbandry, Food	80	13.75	21.25	43.75	20	1.25	100
Apparel & Textile	72	13.89	25	45.83	13.89	1.39	100
Earth Working & Wells	15	33.33	26.67	20	20	0	100
Furniture, House Fixtures	46	26.09	15.22	32.61	23.91	2.17	100
Heating	82	19.51	23.17	42.68	13.41	1.22	100
Pipes & Joints	59	22.03	15.25	35.59	20.34	6.78	100
Receptacles	53	30.19	20.75	32.08	15.09	1.89	100
Miscellaneous-Others	221	15.38	19.91	46.15	15.84	2.71	100
US-JP weighted	3537	18.28	23.38	38.57	17.12	2.66	100
JP weighted	3537	18	23.21	38.81	17.24	2.74	100

研究予算の拡大など研究条件での便益
Benefits in terms of working condition as a reward by the employer such as research budget available

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	661	750	1369	679	81	118
Agriculture, Food, Textiles	60	10	14	19	16	1	0
Coating	80	17	12	30	14	4	3
Gas	45	8	9	14	9	3	2
Organic Compounds	120	15	23	53	23	1	5
Resins	125	16	23	48	31	4	3
Miscellaneous-chemical	208	40	43	72	37	8	8
Communications	160	26	25	64	38	4	3
Computer Hardware	59	15	10	17	14	0	3
Computer Software	123	31	20	42	25	3	2
Computer Peripherals	76	14	15	33	13	1	0
Information Storage	120	19	29	40	30	0	2
Drugs	127	9	26	52	30	5	5
Surgery & Medical Instruments	85	13	25	29	15	1	2
Biotechnology	87	6	18	29	25	6	3
Miscellaneous-Drug&Med	45	8	11	19	5	1	1
Electrical Devices	91	15	29	36	10	1	0
Electrical Lighting	96	18	14	33	26	1	4
Measuring & Testing	111	20	22	39	25	4	1
Nuclears & X-rays	72	19	16	19	13	3	2
Power Systems	172	30	29	68	38	5	2
Semiconductor Devices	129	26	28	55	19	1	0
Miscellaneous-Elec.	120	23	19	51	24	1	2
Materials Processing & Handling	103	19	23	38	15	1	7
Metal Working	137	24	23	56	27	0	7
Motors, Engines & Parts	145	30	34	59	20	2	0
Optics	100	12	25	39	19	2	3
Transportation	73	18	13	29	7	1	5
Miscellaneous Mechanical	124	27	33	48	11	1	4
Agriculture, Husbandry, Food	87	17	18	25	16	4	7
Apparel & Textile	77	17	17	27	9	0	7
Earth Working & Wells	20	5	2	5	3	0	5
Furniture, House Fixtures	51	19	6	16	5	0	5
Heating	84	18	17	34	13	0	2
Pipes & Joints	66	8	10	27	11	3	7
Receptacles	55	10	14	18	10	1	2
Miscellaneous-Others	225	39	55	86	33	8	4

%	N	1	2	3	4	5	Total
All	3540	18.67	21.19	38.67	19.18	2.29	100
Agriculture, Food, Textiles	60	16.67	23.33	31.67	26.67	1.67	100
Coating	77	22.08	15.58	38.96	18.18	5.19	100
Gas	43	18.6	20.93	32.56	20.93	6.98	100
Organic Compounds	115	13.04	20	46.09	20	0.87	100
Resins	122	13.11	18.85	39.34	25.41	3.28	100
Miscellaneous-chemical	200	20	21.5	36	18.5	4	100
Communications	157	16.56	15.92	40.76	24.2	2.55	100
Computer Hardware	56	26.79	17.86	30.36	25	0	100
Computer Software	121	25.62	16.53	34.71	20.66	2.48	100
Computer Peripherals	76	18.42	19.74	43.42	17.11	1.32	100
Information Storage	118	16.1	24.58	33.9	25.42	0	100
Drugs	122	7.38	21.31	42.62	24.59	4.1	100
Surgery & Medical Instruments	83	15.66	30.12	34.94	18.07	1.2	100
Biotechnology	84	7.14	21.43	34.52	29.76	7.14	100
Miscellaneous-Drug&Med	44	18.18	25	43.18	11.36	2.27	100
Electrical Devices	91	16.48	31.87	39.56	10.99	1.1	100
Electrical Lighting	92	19.57	15.22	35.87	28.26	1.09	100
Measuring & Testing	110	18.18	20	35.45	22.73	3.64	100
Nuclears & X-rays	70	27.14	22.86	27.14	18.57	4.29	100
Power Systems	170	17.65	17.06	40	22.35	2.94	100
Semiconductor Devices	129	20.16	21.71	42.64	14.73	0.78	100
Miscellaneous-Elec.	118	19.49	16.1	43.22	20.34	0.85	100
Materials Processing & Handling	96	19.79	23.96	39.58	15.63	1.04	100
Metal Working	130	18.46	17.69	43.08	20.77	0	100
Motors, Engines & Parts	145	20.69	23.45	40.69	13.79	1.38	100
Optics	97	12.37	25.77	40.21	19.59	2.06	100
Transportation	68	26.47	19.12	42.65	10.29	1.47	100
Miscellaneous Mechanical	120	22.5	27.5	40	9.17	0.83	100
Agriculture, Husbandry, Food	80	21.25	22.5	31.25	20	5	100
Apparel & Textile	70	24.29	24.29	38.57	12.86	0	100
Earth Working & Wells	15	33.33	13.33	33.33	20	0	100
Furniture, House Fixtures	46	41.3	13.04	34.78	10.87	0	100
Heating	82	21.95	20.73	41.46	15.85	0	100
Pipes & Joints	59	13.56	16.95	45.76	18.64	5.08	100
Receptacles	53	18.87	26.42	33.96	18.87	1.89	100
Miscellaneous-Others	221	17.65	24.89	38.91	14.93	3.62	100
US-JP weighted	3540	18.15	21.2	38.81	19.46	2.39	100
JP weighted	3540	18.4	21.03	38.81	19.44	2.31	100

US (3/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

	C.5_F Prestige / reputation							C.5_I Beneficial working conditions from my company (e.g., increased research budget)						
		all	1	2	3	4	5	missing	all	1	2	3	4	5	missing
NBER	All	1,919	266	341	534	430	227	121	1,919	647	415	418	214	86	139
11	Agriculture, Food, Textiles	8	0	3	4	1	0	0	8	2	0	2	4	0	0
12	Coating	34	6	6	7	8	5	2	34	10	10	7	5	0	2
13	Gas	11	1	3	2	3	1	1	11	3	4	2	1	0	1
14	Organic Compounds	61	8	14	16	18	4	1	61	24	14	13	7	3	0
15	Resins	84	7	14	20	23	15	5	84	16	16	25	14	6	7
19	Miscellaneous-chemical	233	28	54	65	46	30	10	233	73	53	57	25	14	11
21	Communications	149	22	23	38	38	17	11	149	55	32	26	15	9	12
22	Computer Hardware	42	3	10	10	11	5	3	42	14	9	8	6	1	4
77	Computer Software	93	14	24	23	16	14	2	93	40	20	22	6	2	3
23	Computer Peripherals	33	6	6	7	9	4	1	33	9	9	12	1	1	1
24	Information Storage	42	9	4	12	9	3	5	42	11	8	13	1	3	6
31	Drugs	101	11	18	26	24	11	11	101	26	19	20	17	8	11
32	Surgery & Medical Instruments	123	14	20	33	26	23	7	123	42	32	25	9	4	11
33	Biotechnology	41	6	8	13	8	3	3	41	16	9	7	4	2	3
39	Miscellaneous-Drug&Med	29	5	4	9	3	4	4	29	10	6	6	2	1	4
41	Electrical Devices	45	5	10	13	10	3	4	45	10	13	10	3	4	5
42	Electrical Lighting	33	2	5	13	7	3	3	33	9	8	8	4	1	3
43	Measuring & Testing	62	6	11	15	19	9	2	62	24	15	14	6	1	2
44	Nuclears & X-rays	39	5	7	15	8	4	0	39	15	8	9	5	2	0
45	Power Systems	89	13	11	30	18	14	3	89	42	15	16	11	1	4
46	Semiconductor Devices	55	3	7	12	25	5	3	55	11	12	19	10	0	3
49	Miscellaneous-Elec.	32	5	7	11	4	3	2	32	12	8	5	3	2	2
51	Materials Processing & Handling	56	10	10	12	11	6	7	56	17	12	11	3	5	8
52	Metal Working	49	8	7	15	12	4	3	49	18	9	12	5	1	4
53	Motors, Engines & Parts	56	11	6	13	17	4	5	56	24	12	4	8	3	5
54	Optics	43	4	4	22	6	6	1	43	17	6	11	7	0	2
55	Transportation	33	5	7	10	2	7	2	33	8	12	6	3	2	2
59	Miscellaneous Mechanical	42	5	8	10	9	6	4	42	12	11	6	7	2	4
61	Agriculture, Husbandry, Food	14	4	2	3	4	0	1	14	6	3	2	1	0	2
63	Apparel & Textile	9	2	3	3	1	0	0	9	6	1	2	0	0	0
64	Earth Working & Wells	5	1	2	1	0	0	1	5	1	1	0	1	1	1
65	Furniture, House Fixtures	9	2	1	5	0	0	1	9	3	1	1	2	1	1
66	Heating	8	1	1	1	4	0	1	8	1	2	4	0	0	1
67	Pipes & Joints	13	3	2	2	5	0	1	13	6	2	2	1	1	1
68	Receptacles	20	3	6	5	1	2	3	20	10	2	3	2	0	3
69	Miscellaneous-Others	123	28	13	38	24	12	8	123	44	21	28	15	5	10

	%	all	1	2	3	4	5	Total	N	1	2	3	4	5	Total
NBER	All	1798	14.79	18.97	29.7	23.92	12.63	100	1780	36.35	23.31	23.48	12.02	4.83	100
11	Agriculture, Food, Textiles	8	0	37.5	50	12.5	0	100	8	25	0	25	50	0	100
12	Coating	32	18.75	18.75	21.88	25	15.63	100	32	31.25	31.25	21.88	15.63	0	100
13	Gas	10	10	30	20	30	10	100	10	30	40	20	10	0	100
14	Organic Compounds	60	13.33	23.33	26.67	30	6.67	100	61	39.34	22.95	21.31	11.48	4.92	100
15	Resins	79	8.86	17.72	25.32	29.11	18.99	100	77	20.78	20.78	32.47	18.18	7.79	100
19	Miscellaneous-chemical	223	12.56	24.22	29.15	20.63	13.45	100	222	32.88	23.87	25.68	11.26	6.31	100
21	Communications	138	15.94	16.67	27.54	27.54	12.32	100	137	40.15	23.36	18.98	10.95	6.57	100
22	Computer Hardware	39	7.69	25.64	25.64	28.21	12.82	100	38	36.84	23.68	21.05	15.79	2.63	100
77	Computer Software	91	15.38	26.37	25.27	17.58	15.38	100	90	44.44	22.22	24.44	6.67	2.22	100
23	Computer Peripherals	32	18.75	18.75	21.88	28.13	12.5	100	32	28.13	28.13	37.5	3.13	3.13	100
24	Information Storage	37	24.32	10.81	32.43	24.32	8.11	100	36	30.56	22.22	36.11	2.78	8.33	100
31	Drugs	90	12.22	20	28.89	26.67	12.22	100	90	28.89	21.11	22.22	18.89	8.89	100
32	Surgery & Medical Instruments	116	12.07	17.24	28.45	22.41	19.83	100	112	37.5	28.57	22.32	8.04	3.57	100
33	Biotechnology	38	15.79	21.05	34.21	21.05	7.89	100	38	42.11	23.68	18.42	10.53	5.26	100
39	Miscellaneous-Drug&Med	25	20	16	36	12	16	100	25	40	24	24	8	4	100
41	Electrical Devices	41	12.2	24.39	31.71	24.39	7.32	100	40	25	32.5	25	7.5	10	100
42	Electrical Lighting	30	6.67	16.67	43.33	23.33	10	100	30	30	26.67	26.67	13.33	3.33	100
43	Measuring & Testing	60	10	18.33	25	31.67	15	100	60	40	25	23.33	10	1.67	100
44	Nuclears & X-rays	39	12.82	17.95	38.46	20.51	10.26	100	39	38.46	20.51	23.08	12.82	5.13	100
45	Power Systems	86	15.12	12.79	34.88	20.93	16.28	100	85	49.41	17.65	18.82	12.94	1.18	100
46	Semiconductor Devices	52	5.77	13.46	23.08	48.08	9.62	100	52	21.15	23.08	36.54	19.23	0	100
49	Miscellaneous-Elec.	30	16.67	23.33	36.67	13.33	10	100	30	40	26.67	16.67	10	6.67	100
51	Materials Processing & Handling	49	20.41	20.41	24.49	22.45	12.24	100	48	35.42	25	22.92	6.25	10.42	100
52	Metal Working	46	17.39	15.22	32.61	26.09	8.7	100	45	40	20	26.67	11.11	2.22	100
53	Motors, Engines & Parts	51	21.57	11.76	25.49	33.33	7.84	100	51	47.06	23.53	7.84	15.69	5.88	100
54	Optics	42	9.52	9.52	52.38	14.29	14.29	100	41	41.46	14.63	26.83	17.07	0	100
55	Transportation	31	16.13	22.58	32.26	6.45	22.58	100	31	25.81	38.71	19.35	9.68	6.45	100
59	Miscellaneous Mechanical	38	13.16	21.05	26.32	23.68	15.79	100	38	31.58	28.95	15.79	18.42	5.26	100
61	Agriculture, Husbandry, Food	13	30.77	15.38	23.08	30.77	0	100	12	50	25	16.67	8.33	0	100
63	Apparel & Textile	9	22.22	33.33	33.33	11.11	0	100	9	66.67	11.11	22.22	0	0	100
64	Earth Working & Wells	4	25	50	25	0	0	100	4	25	25	0	25	25	100
65	Furniture, House Fixtures	8	25	12.5	62.5	0	0	100	8	37.5	12.5	12.5	25	12.5	100
66	Heating	7	14.29	14.29	14.29	57.14	0	100	7	14.29	28.57	57.14	0	0	100
67	Pipes & Joints	12	25	16.67	16.67	41.67	0	100	12	50	16.67	16.67	8.33	8.33	100
68	Receptacles	17	17.65	35.29	29.41	5.88	11.76	100	17	58.82	11.76	17.65	11.76	0	100
69	Miscellaneous-Others	115	24.35	11.3	33.04	20.87	10.43	100	113	38.94	18.58	24.78	13.27	4.42	100
	US-JP weighted	**1798**	**14.88**	**18.77**	**29.6**	**24.16**	**12.59**	100	**1780**	**35.99**	**23.43**	**23.79**	**11.83**	**4.96**	100

Japan (4/5)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

金銭的報酬
Monetary rewards

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	557	773	1390	706	117	115
Agriculture, Food, Textiles	60	8	21	16	14	1	0
Coating	80	10	16	34	14	3	3
Gas	45	8	12	14	8	1	2
Organic Compounds	120	22	24	51	17	2	4
Resins	125	20	28	54	19	1	3
Miscellaneous-chemical	208	33	53	74	32	7	9
Communications	160	13	27	65	44	8	3
Computer Hardware	59	9	7	21	18	1	3
Computer Software	123	19	29	41	29	3	2
Computer Peripherals	76	11	15	31	16	3	0
Information Storage	120	12	14	42	42	8	2
Drugs	127	20	29	45	27	1	5
Surgery & Medical Instruments	85	10	28	24	18	3	2
Biotechnology	87	17	19	35	8	3	5
Miscellaneous-Drug&Med	45	7	13	13	10	1	1
Electrical Devices	91	5	23	38	22	3	0
Electrical Lighting	96	18	21	35	17	3	2
Measuring & Testing	111	17	24	39	26	4	1
Nuclears & X-rays	72	12	13	24	16	3	4
Power Systems	172	19	34	72	39	6	2
Semiconductor Devices	129	22	23	55	27	2	0
Miscellaneous-Elec.	120	15	22	49	23	9	2
Materials Processing & Handling	103	16	24	39	16	1	7
Metal Working	137	27	37	50	14	2	7
Motors, Engines & Parts	145	25	27	58	32	3	0
Optics	100	9	21	35	30	3	2
Transportation	73	12	14	25	17	2	3
Miscellaneous Mechanical	124	21	29	47	19	3	5
Agriculture, Husbandry, Food	87	9	18	36	16	2	6
Apparel & Textile	77	13	14	34	10	0	6
Earth Working & Wells	20	5	2	6	0	3	4
Furniture, House Fixtures	51	13	9	20	4	0	5
Heating	84	19	21	27	13	2	2
Pipes & Joints	66	13	9	21	13	3	7
Receptacles	55	12	11	27	2	1	2
Miscellaneous-Others	225	36	42	93	34	16	4

others

	All	非常に重要である	無回答
	All	**5**	**no response**
All	3658	3	3655
Agriculture, Food, Textiles	60	0	60
Coating	80	0	80
Gas	45	0	45
Organic Compounds	120	0	120
Resins	125	0	125
Miscellaneous-chemical	208	0	208
Communications	160	0	160
Computer Hardware	59	0	59
Computer Software	123	0	123
Computer Peripherals	76	0	76
Information Storage	120	0	120
Drugs	127	0	127
Surgery & Medical Instruments	85	0	85
Biotechnology	87	0	87
Miscellaneous-Drug&Med	45	1	44
Electrical Devices	91	0	91
Electrical Lighting	96	0	96
Measuring & Testing	111	0	111
Nuclears & X-rays	72	0	72
Power Systems	172	0	172
Semiconductor Devices	129	0	129
Miscellaneous-Elec.	120	0	120
Materials Processing & Handling	103	0	103
Metal Working	137	0	137
Motors, Engines & Parts	145	0	145
Optics	100	0	100
Transportation	73	1	72
Miscellaneous Mechanical	124	0	124
Agriculture, Husbandry, Food	87	0	87
Apparel & Textile	77	0	77
Earth Working & Wells	20	1	19
Furniture, House Fixtures	51	0	51
Heating	84	0	84
Pipes & Joints	66	0	66
Receptacles	55	0	55
Miscellaneous-Others	225	0	225

%	N	**1**	**2**	**3**	**4**	**5**	**Total**
All	3543	15.72	21.82	39.23	19.93	3.3	100
Agriculture, Food, Textiles	60	13.33	35	26.67	23.33	1.67	100
Coating	77	12.99	20.78	44.16	18.18	3.9	100
Gas	43	18.6	27.91	32.56	18.6	2.33	100
Organic Compounds	116	18.97	20.69	43.97	14.66	1.72	100
Resins	122	16.39	22.95	44.26	15.57	0.82	100
Miscellaneous-chemical	199	16.58	26.63	37.19	16.08	3.52	100
Communications	157	8.28	17.2	41.4	28.03	5.1	100
Computer Hardware	56	16.07	12.5	37.5	32.14	1.79	100
Computer Software	121	15.7	23.97	33.88	23.97	2.48	100
Computer Peripherals	76	14.47	19.74	40.79	21.05	3.95	100
Information Storage	118	10.17	11.86	35.59	35.59	6.78	100
Drugs	122	16.39	23.77	36.89	22.13	0.82	100
Surgery & Medical Instruments	83	12.05	33.73	28.92	21.69	3.61	100
Biotechnology	82	20.73	23.17	42.68	9.76	3.66	100
Miscellaneous-Drug&Med	44	15.91	29.55	29.55	22.73	2.27	100
Electrical Devices	91	5.49	25.27	41.76	24.18	3.3	100
Electrical Lighting	94	19.15	22.34	37.23	18.09	3.19	100
Measuring & Testing	110	15.45	21.82	35.45	23.64	3.64	100
Nuclears & X-rays	68	17.65	19.12	35.29	23.53	4.41	100
Power Systems	170	11.18	20	42.35	22.94	3.53	100
Semiconductor Devices	129	17.05	17.83	42.64	20.93	1.55	100
Miscellaneous-Elec.	118	12.71	18.64	41.53	19.49	7.63	100
Materials Processing & Handling	96	16.67	25	40.63	16.67	1.04	100
Metal Working	130	20.77	28.46	38.46	10.77	1.54	100
Motors, Engines & Parts	145	17.24	18.62	40	22.07	2.07	100
Optics	98	9.18	21.43	35.71	30.61	3.06	100
Transportation	70	17.14	20	35.71	24.29	2.86	100
Miscellaneous Mechanical	119	17.65	24.37	39.5	15.97	2.52	100
Agriculture, Husbandry, Food	81	11.11	22.22	44.44	19.75	2.47	100
Apparel & Textile	71	18.31	19.72	47.89	14.08	0	100
Earth Working & Wells	16	31.25	12.5	37.5	0	18.75	100
Furniture, House Fixtures	46	28.26	19.57	43.48	8.7	0	100
Heating	82	23.17	25.61	32.93	15.85	2.44	100
Pipes & Joints	59	22.03	15.25	35.59	22.03	5.08	100
Receptacles	53	22.64	20.75	50.94	3.77	1.89	100
Miscellaneous-Others	221	16.29	19	42.08	15.38	7.24	100
US-JP weighted	3543	14.86	21.89	39.12	20.73	3.39	100
JP weighted	3543	14.61	21.36	39.49	21.01	3.53	100

others

	N	**5**	**Total**
All	3	100	100
Miscellaneous-Drug&Med	1	100	100
Transportation	1	100	100
Earth Working & Wells	1	100	100

US (4/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

C.5_J Monetary rewards

		all	1	2	3	4	5	missing
NBER	All	1,919	569	430	408	239	150	123
11	Agriculture, Food, Textiles	8	2	1	4	1	0	0
12	Coating	34	12	5	9	3	3	2
13	Gas	11	1	2	3	3	1	1
14	Organic Compounds	61	26	15	13	5	2	0
15	Resins	84	27	23	15	6	6	7
19	Miscellaneous-chemical	233	65	56	55	26	20	11
21	Communications	149	40	32	28	27	11	11
22	Computer Hardware	42	10	11	12	5	1	3
77	Computer Software	93	25	16	25	19	6	2
23	Computer Peripherals	33	9	10	8	4	1	1
24	Information Storage	42	6	10	8	5	9	4
31	Drugs	101	31	19	17	17	5	12
32	Surgery & Medical Instruments	123	34	27	24	19	11	8
33	Biotechnology	41	19	6	11	3	0	2
39	Miscellaneous-Drug&Med	29	7	8	3	6	1	4
41	Electrical Devices	45	12	6	12	6	4	5
42	Electrical Lighting	33	8	11	6	2	3	3
43	Measuring & Testing	62	14	16	16	9	5	2
44	Nuclears & X-rays	39	9	10	12	4	4	0
45	Power Systems	89	34	12	22	9	8	4
46	Semiconductor Devices	55	10	14	16	7	5	3
49	Miscellaneous-Elec.	32	10	2	12	3	3	2
51	Materials Processing & Handling	56	20	16	5	5	3	7
52	Metal Working	49	15	7	14	7	3	3
53	Motors, Engines & Parts	56	20	14	12	2	3	5
54	Optics	43	9	16	7	7	3	1
55	Transportation	33	11	11	3	3	4	1
59	Miscellaneous Mechanical	42	12	11	7	6	2	4
61	Agriculture, Husbandry, Food	14	4	2	2	4	1	1
63	Apparel & Textile	9	3	4	2	0	0	0
64	Earth Working & Wells	5	1	0	2	0	1	1
65	Furniture, House Fixtures	9	2	2	1	0	3	1
66	Heating	8	2	3	1	1	0	1
67	Pipes & Joints	13	4	7	0	0	1	1
68	Receptacles	20	11	2	2	2	1	2
69	Miscellaneous-Others	123	44	23	19	13	16	8

C.5_C It's my job to invent

		all	1	2	3	4	5	missing
NBER	All	1,919	247	237	449	450	416	120
11	Agriculture, Food, Textiles	8	0	1	1	1	4	1
12	Coating	34	5	7	6	7	8	1
13	Gas	11	2	2	1	6	0	0
14	Organic Compounds	61	6	4	8	19	23	1
15	Resins	84	4	7	18	23	26	6
19	Miscellaneous-chemical	233	28	24	49	64	59	9
21	Communications	149	25	16	34	35	27	12
22	Computer Hardware	42	6	5	9	9	9	4
77	Computer Software	93	14	16	26	20	13	4
23	Computer Peripherals	33	2	2	10	6	12	1
24	Information Storage	42	6	7	7	10	7	5
31	Drugs	101	10	9	15	19	38	10
32	Surgery & Medical Instruments	123	20	15	22	25	35	6
33	Biotechnology	41	7	6	9	10	5	4
39	Miscellaneous-Drug&Med	29	4	4	7	6	4	4
41	Electrical Devices	45	4	5	14	10	10	2
42	Electrical Lighting	33	2	3	10	9	7	2
43	Measuring & Testing	62	4	10	22	14	9	3
44	Nuclears & X-rays	39	4	7	19	4	5	0
45	Power Systems	89	20	14	23	20	9	3
46	Semiconductor Devices	55	4	12	17	6	13	3
49	Miscellaneous-Elec.	32	5	1	8	13	3	2
51	Materials Processing & Handling	56	7	6	11	16	9	7
52	Metal Working	49	8	5	10	14	9	3
53	Motors, Engines & Parts	56	9	12	17	5	7	6
54	Optics	43	6	4	9	12	10	2
55	Transportation	33	1	6	10	7	8	1
59	Miscellaneous Mechanical	42	2	6	11	9	10	4
61	Agriculture, Husbandry, Food	14	4	2	2	3	2	1
63	Apparel & Textile	9	1	1	4	1	2	0
64	Earth Working & Wells	5	0	1	0	2	1	1
65	Furniture, House Fixtures	9	0	0	1	2	5	1
66	Heating	8	0	1	3	1	3	0
67	Pipes & Joints	13	0	1	4	4	3	1
68	Receptacles	20	2	3	4	5	4	2
69	Miscellaneous-Others	123	25	12	28	33	17	8

		%	N	1	2	3	4	5	Total
NBER	All		1796	31.68	23.94	22.72	13.31	8.35	100
11	Agriculture, Food, Textiles		8	25	12.5	50	12.5	0	100
12	Coating		32	37.5	15.63	28.13	9.38	9.38	100
13	Gas		10	10	20	30	30	10	100
14	Organic Compounds		61	42.62	24.59	21.31	8.2	3.28	100
15	Resins		77	35.06	29.87	19.48	7.79	7.79	100
19	Miscellaneous-chemical		222	29.28	25.23	24.77	11.71	9.01	100
21	Communications		138	28.99	23.19	20.29	19.57	7.97	100
22	Computer Hardware		39	25.64	28.21	30.77	12.82	2.56	100
77	Computer Software		91	27.47	17.58	27.47	20.88	6.59	100
23	Computer Peripherals		32	28.13	31.25	25	12.5	3.13	100
24	Information Storage		38	15.79	26.32	21.05	13.16	23.68	100
31	Drugs		89	34.83	21.35	19.1	19.1	5.62	100
32	Surgery & Medical Instruments		115	29.57	23.48	20.87	16.52	9.57	100
33	Biotechnology		39	48.72	15.38	28.21	7.69	0	100
39	Miscellaneous-Drug&Med		25	28	32	12	24	4	100
41	Electrical Devices		40	30	15	30	15	10	100
42	Electrical Lighting		30	26.67	36.67	20	6.67	10	100
43	Measuring & Testing		60	23.33	26.67	26.67	15	8.33	100
44	Nuclears & X-rays		39	23.08	25.64	30.77	10.26	10.26	100
45	Power Systems		85	40	14.12	25.88	10.59	9.41	100
46	Semiconductor Devices		52	19.23	26.92	30.77	13.46	9.62	100
49	Miscellaneous-Elec.		30	33.33	6.67	40	10	10	100
51	Materials Processing & Handling		49	40.82	32.65	10.2	10.2	6.12	100
52	Metal Working		46	32.61	15.22	30.43	15.22	6.52	100
53	Motors, Engines & Parts		51	39.22	27.45	23.53	3.92	5.88	100
54	Optics		42	21.43	38.1	16.67	16.67	7.14	100
55	Transportation		32	34.38	34.38	9.38	9.38	12.5	100
59	Miscellaneous Mechanical		38	31.58	28.95	18.42	15.79	5.26	100
61	Agriculture, Husbandry, Food		13	30.77	15.38	15.38	30.77	7.69	100
63	Apparel & Textile		9	33.33	44.44	22.22	0	0	100
64	Earth Working & Wells		4	25	0	50	0	25	100
65	Furniture, House Fixtures		8	25	25	12.5	0	37.5	100
66	Heating		7	28.57	42.86	14.29	14.29	0	100
67	Pipes & Joints		12	33.33	58.33	0	0	8.33	100
68	Receptacles		18	61.11	11.11	11.11	11.11	5.56	100
69	Miscellaneous-Others		115	38.26	20	16.52	11.3	13.91	100
		US-JP weighted	**1796**	**30.96**	**24.53**	**22.38**	**13.58**	**8.54**	100

		N	1	2	3	4	5	Total
NBER	All	1799	13.73	13.17	24.96	25.01	23.12	100
11	Agriculture, Food, Textiles	7	0	14.29	14.29	14.29	57.14	100
12	Coating	33	15.15	21.21	18.18	21.21	24.24	100
13	Gas	11	18.18	18.18	9.09	54.55	0	100
14	Organic Compounds	60	10	6.67	13.33	31.67	38.33	100
15	Resins	78	5.13	8.97	23.08	29.49	33.33	100
19	Miscellaneous-chemical	224	12.5	10.71	21.88	28.57	26.34	100
21	Communications	137	18.25	11.68	24.82	25.55	19.71	100
22	Computer Hardware	38	15.79	13.16	23.68	23.68	23.68	100
77	Computer Software	89	15.73	17.98	29.21	22.47	14.61	100
23	Computer Peripherals	32	6.25	6.25	31.25	18.75	37.5	100
24	Information Storage	37	16.22	18.92	18.92	27.03	18.92	100
31	Drugs	91	10.99	9.89	16.48	20.88	41.76	100
32	Surgery & Medical Instruments	117	17.09	12.82	18.8	21.37	29.91	100
33	Biotechnology	37	18.92	16.22	24.32	27.03	13.51	100
39	Miscellaneous-Drug&Med	25	16	16	28	24	16	100
41	Electrical Devices	43	9.3	11.63	32.56	23.26	23.26	100
42	Electrical Lighting	31	6.45	9.68	32.26	29.03	22.58	100
43	Measuring & Testing	59	6.78	16.95	37.29	23.73	15.25	100
44	Nuclears & X-rays	39	10.26	17.95	48.72	10.26	12.82	100
45	Power Systems	86	23.26	16.28	26.74	23.26	10.47	100
46	Semiconductor Devices	52	7.69	23.08	32.69	11.54	25	100
49	Miscellaneous-Elec.	30	16.67	3.33	26.67	43.33	10	100
51	Materials Processing & Handling	49	14.29	12.24	22.45	32.65	18.37	100
52	Metal Working	46	17.39	10.87	21.74	30.43	19.57	100
53	Motors, Engines & Parts	50	18	24	34	10	14	100
54	Optics	41	14.63	9.76	21.95	29.27	24.39	100
55	Transportation	32	3.13	18.75	31.25	21.88	25	100
59	Miscellaneous Mechanical	38	5.26	15.79	28.95	23.68	26.32	100
61	Agriculture, Husbandry, Food	13	30.77	15.38	15.38	23.08	15.38	100
63	Apparel & Textile	9	11.11	11.11	44.44	11.11	22.22	100
64	Earth Working & Wells	4	0	25	0	50	25	100
65	Furniture, House Fixtures	8	0	0	12.5	25	62.5	100
66	Heating	8	0	12.5	37.5	12.5	37.5	100
67	Pipes & Joints	12	0	8.33	33.33	33.33	25	100
68	Receptacles	18	11.11	16.67	22.22	27.78	22.22	100
69	Miscellaneous-Others	115	21.74	10.43	24.35	28.7	14.78	100
	US-JP weighted	**1799**	**13.36**	**13.26**	**24.94**	**25.05**	**23.4**	100

US (5/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

C.5_G Recognition from co-workers

	all	1	2	3	4	5	missing
NBER All	1,919	365	378	559	356	140	121
11 Agriculture, Food, Textiles	8	0	3	3	2	0	0
12 Coating	34	10	5	8	6	3	2
13 Gas	11	3	2	4	1	0	1
14 Organic Compounds	61	8	16	19	15	3	0
15 Resins	84	7	20	27	14	11	5
19 Miscellaneous-chemical	233	38	48	73	50	14	10
21 Communications	149	26	28	39	34	11	11
22 Computer Hardware	42	11	8	8	10	2	3
77 Computer Software	93	22	22	23	15	9	2
23 Computer Peripherals	33	7	6	12	5	2	1
24 Information Storage	42	12	3	13	7	3	4
31 Drugs	101	11	19	29	20	11	11
32 Surgery & Medical Instruments	123	24	21	36	21	12	9
33 Biotechnology	41	8	11	9	10	1	2
39 Miscellaneous-Drug&Med	29	6	5	9	3	2	4
41 Electrical Devices	45	11	11	11	4	4	4
42 Electrical Lighting	33	1	8	13	6	2	3
43 Measuring & Testing	62	8	13	22	10	7	2
44 Nuclears & X-rays	39	8	8	13	9	1	0
45 Power Systems	89	19	16	27	15	9	3
46 Semiconductor Devices	55	3	15	18	11	5	3
49 Miscellaneous-Elec.	32	10	7	8	3	2	2
51 Materials Processing & Handling	56	15	11	11	8	4	7
52 Metal Working	49	14	4	12	14	2	3
53 Motors, Engines & Parts	56	12	14	15	7	3	5
54 Optics	43	8	4	18	9	3	1
55 Transportation	33	5	8	11	4	3	2
59 Miscellaneous Mechanical	42	6	10	12	7	3	4
61 Agriculture, Husbandry, Food	14	4	3	1	4	0	2
63 Apparel & Textile	9	1	2	5	1	0	0
64 Earth Working & Wells	5	1	2	0	1	0	1
65 Furniture, House Fixtures	9	3	1	4	0	0	1
66 Heating	8	1	0	4	2	1	0
67 Pipes & Joints	13	4	4	4	0	0	1
68 Receptacles	20	5	5	6	1	0	3
69 Miscellaneous-Others	123	33	15	32	27	7	9

%	N	1	2	3	4	5	Total
NBER All	1798	20.3	21.02	31.09	19.8	7.79	100
11 Agriculture, Food, Textiles	8	0	37.5	37.5	25	0	100
12 Coating	32	31.25	15.63	25	18.75	9.38	100
13 Gas	10	30	20	40	10	0	100
14 Organic Compounds	61	13.11	26.23	31.15	24.59	4.92	100
15 Resins	79	8.86	25.32	34.18	17.72	13.92	100
19 Miscellaneous-chemical	223	17.04	21.52	32.74	22.42	6.28	100
21 Communications	138	18.84	20.29	28.26	24.64	7.97	100
22 Computer Hardware	39	28.21	20.51	20.51	25.64	5.13	100
77 Computer Software	91	24.18	24.18	25.27	16.48	9.89	100
23 Computer Peripherals	32	21.88	18.75	37.5	15.63	6.25	100
24 Information Storage	38	31.58	7.89	34.21	18.42	7.89	100
31 Drugs	90	12.22	21.11	32.22	22.22	12.22	100
32 Surgery & Medical Instruments	114	21.05	18.42	31.58	18.42	10.53	100
33 Biotechnology	39	20.51	28.21	23.08	25.64	2.56	100
39 Miscellaneous-Drug&Med	25	24	20	36	12	8	100
41 Electrical Devices	41	26.83	26.83	26.83	9.76	9.76	100
42 Electrical Lighting	30	3.33	26.67	43.33	20	6.67	100
43 Measuring & Testing	60	13.33	21.67	36.67	16.67	11.67	100
44 Nuclears & X-rays	39	20.51	20.51	33.33	23.08	2.56	100
45 Power Systems	86	22.09	18.6	31.4	17.44	10.47	100
46 Semiconductor Devices	52	5.77	28.85	34.62	21.15	9.62	100
49 Miscellaneous-Elec.	30	33.33	23.33	26.67	10	6.67	100
51 Materials Processing & Handling	49	30.61	22.45	22.45	16.33	8.16	100
52 Metal Working	46	30.43	8.7	26.09	30.43	4.35	100
53 Motors, Engines & Parts	51	23.53	27.45	29.41	13.73	5.88	100
54 Optics	42	19.05	9.52	42.86	21.43	7.14	100
55 Transportation	31	16.13	25.81	35.48	12.9	9.68	100
59 Miscellaneous Mechanical	38	15.79	26.32	31.58	18.42	7.89	100
61 Agriculture, Husbandry, Food	12	33.33	25	8.33	33.33	0	100
63 Apparel & Textile	9	11.11	22.22	55.56	11.11	0	100
64 Earth Working & Wells	4	25	50	0	25	0	100
65 Furniture, House Fixtures	8	37.5	12.5	50	0	0	100
66 Heating	8	12.5	0	50	25	12.5	100
67 Pipes & Joints	12	33.33	33.33	33.33	0	0	100
68 Receptacles	17	29.41	29.41	35.29	5.88	0	100
69 Miscellaneous-Others	114	28.95	13.16	28.07	23.68	6.14	100
US-JP weighted	**1798**	**20.19**	**20.85**	**31.3**	**19.65**	**8.01**	100

C.5_H Recognition from others in the same profession (outside the firm)

	all	1	2	3	4	5	missing
NBER All	1,919	475	410	449	320	134	131
11 Agriculture, Food, Textiles	8	1	4	3	0	0	0
12 Coating	34	8	5	8	9	2	2
13 Gas	11	1	3	4	2	0	1
14 Organic Compounds	61	13	17	15	12	4	0
15 Resins	84	15	19	29	9	7	5
19 Miscellaneous-chemical	233	59	49	59	36	19	11
21 Communications	149	43	30	31	26	8	11
22 Computer Hardware	42	13	8	7	10	1	3
77 Computer Software	93	27	23	21	13	7	2
23 Computer Peripherals	33	10	6	12	2	2	1
24 Information Storage	42	11	7	6	11	2	5
31 Drugs	101	10	18	27	26	8	12
32 Surgery & Medical Instruments	123	26	24	29	23	11	10
33 Biotechnology	41	9	9	9	8	3	3
39 Miscellaneous-Drug&Med	29	6	4	9	3	3	4
41 Electrical Devices	45	10	14	5	8	4	4
42 Electrical Lighting	33	5	12	7	4	2	3
43 Measuring & Testing	62	11	21	12	9	7	2
44 Nuclears & X-rays	39	10	7	12	8	1	1
45 Power Systems	89	23	11	28	11	11	5
46 Semiconductor Devices	55	5	10	20	13	4	3
49 Miscellaneous-Elec.	32	9	9	5	3	4	2
51 Materials Processing & Handling	56	20	9	10	5	5	7
52 Metal Working	49	18	5	13	9	1	3
53 Motors, Engines & Parts	56	21	12	7	10	1	5
54 Optics	43	14	6	9	11	2	1
55 Transportation	33	6	11	7	5	2	2
59 Miscellaneous Mechanical	42	7	15	7	5	2	6
61 Agriculture, Husbandry, Food	14	5	2	3	2	0	2
63 Apparel & Textile	9	4	2	1	2	0	0
64 Earth Working & Wells	5	1	2	1	0	0	1
65 Furniture, House Fixtures	9	2	4	2	0	0	1
66 Heating	8	1	1	2	2	1	1
67 Pipes & Joints	13	3	4	4	1	0	1
68 Receptacles	20	7	2	6	2	0	3
69 Miscellaneous-Others	123	41	25	19	20	10	8

	N	1	2	3	4	5	Total
NBER All	1788	26.57	22.93	25.11	17.9	7.49	100
11 Agriculture, Food, Textiles	8	12.5	50	37.5	0	0	100
12 Coating	32	25	15.63	25	28.13	6.25	100
13 Gas	10	10	30	40	20	0	100
14 Organic Compounds	61	21.31	27.87	24.59	19.67	6.56	100
15 Resins	79	18.99	24.05	36.71	11.39	8.86	100
19 Miscellaneous-chemical	222	26.58	22.07	26.58	16.22	8.56	100
21 Communications	138	31.16	21.74	22.46	18.84	5.8	100
22 Computer Hardware	39	33.33	20.51	17.95	25.64	2.56	100
77 Computer Software	91	29.67	25.27	23.08	14.29	7.69	100
23 Computer Peripherals	32	31.25	18.75	37.5	6.25	6.25	100
24 Information Storage	37	29.73	18.92	16.22	29.73	5.41	100
31 Drugs	89	11.24	20.22	30.34	29.21	8.99	100
32 Surgery & Medical Instruments	113	23.01	21.24	25.66	20.35	9.73	100
33 Biotechnology	38	23.68	23.68	23.68	21.05	7.89	100
39 Miscellaneous-Drug&Med	25	24	16	36	12	12	100
41 Electrical Devices	41	24.39	34.15	12.2	19.51	9.76	100
42 Electrical Lighting	30	16.67	40	23.33	13.33	6.67	100
43 Measuring & Testing	60	18.33	35	20	15	11.67	100
44 Nuclears & X-rays	38	26.32	18.42	31.58	21.05	2.63	100
45 Power Systems	84	27.38	13.1	33.33	13.1	13.1	100
46 Semiconductor Devices	52	9.62	19.23	38.46	25	7.69	100
49 Miscellaneous-Elec.	30	30	30	16.67	10	13.33	100
51 Materials Processing & Handling	49	40.82	18.37	20.41	10.2	10.2	100
52 Metal Working	46	39.13	10.87	28.26	19.57	2.17	100
53 Motors, Engines & Parts	51	41.18	23.53	13.73	19.61	1.96	100
54 Optics	42	33.33	14.29	21.43	26.19	4.76	100
55 Transportation	31	19.35	35.48	22.58	16.13	6.45	100
59 Miscellaneous Mechanical	36	19.44	41.67	19.44	13.89	5.56	100
61 Agriculture, Husbandry, Food	12	41.67	16.67	25	16.67	0	100
63 Apparel & Textile	9	44.44	22.22	11.11	22.22	0	100
64 Earth Working & Wells	4	25	50	25	0	0	100
65 Furniture, House Fixtures	8	25	50	25	0	0	100
66 Heating	7	14.29	14.29	28.57	28.57	14.29	100
67 Pipes & Joints	12	25	33.33	33.33	8.33	0	100
68 Receptacles	17	41.18	11.76	35.29	11.76	0	100
69 Miscellaneous-Others	115	35.65	21.74	16.52	17.39	8.7	100
US-JP weighted	**1788**	**26.33**	**23.12**	**24.99**	**18.13**	**7.44**	100

US (6/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

For societal good

	C.5_K For societal good	all	1	2	3	4	5	missing
NBER	All	1,919	514	376	405	284	210	130
11	Agriculture, Food, Textiles	8	0	0	5	3	0	0
12	Coating	34	11	7	6	6	2	2
13	Gas	11	0	3	3	4	0	1
14	Organic Compounds	61	18	12	16	7	7	1
15	Resins	84	20	23	10	19	7	5
19	Miscellaneous-chemical	233	72	51	45	30	23	12
21	Communications	149	42	35	29	17	15	11
22	Computer Hardware	42	10	11	9	5	3	4
77	Computer Software	93	30	28	18	9	6	2
23	Computer Peripherals	33	13	7	8	4	0	1
24	Information Storage	42	8	7	12	5	2	8
31	Drugs	101	10	10	14	24	31	12
32	Surgery & Medical Instruments	123	10	12	25	40	27	9
33	Biotechnology	41	7	4	10	7	11	2
39	Miscellaneous-Drug&Med	29	4	5	4	7	5	4
41	Electrical Devices	45	16	9	11	2	3	4
42	Electrical Lighting	33	5	11	7	5	2	3
43	Measuring & Testing	62	19	11	17	8	5	2
44	Nuclears & X-rays	39	10	10	14	3	1	1
45	Power Systems	89	27	15	17	14	13	3
46	Semiconductor Devices	55	16	11	15	7	3	3
49	Miscellaneous-Elec.	32	14	5	4	5	2	2
51	Materials Processing & Handling	56	22	8	9	4	6	7
52	Metal Working	49	17	5	16	7	1	3
53	Motors, Engines & Parts	56	21	13	9	4	4	5
54	Optics	43	13	12	6	9	2	1
55	Transportation	33	7	5	8	7	5	1
59	Miscellaneous Mechanical	42	9	11	9	3	4	6
61	Agriculture, Husbandry, Food	14	5	1	2	2	4	0
63	Apparel & Textile	9	5	2	2	0	0	0
64	Earth Working & Wells	5	1	0	2	1	0	1
65	Furniture, House Fixtures	9	0	2	4	1	1	1
66	Heating	8	1	0	2	3	1	1
67	Pipes & Joints	13	4	4	2	2	0	1
68	Receptacles	20	9	2	4	1	2	2
69	Miscellaneous-Others	123	38	24	31	9	12	9

	%	N	1	2	3	4	5	Total
NBER	All	1789	28.73	21.02	22.64	15.87	11.74	100
11	Agriculture, Food, Textiles	8	0	0	62.5	37.5	0	100
12	Coating	32	34.38	21.88	18.75	18.75	6.25	100
13	Gas	10	0	30	30	40	0	100
14	Organic Compounds	60	30	20	26.67	11.67	11.67	100
15	Resins	79	25.32	29.11	12.66	24.05	8.86	100
19	Miscellaneous-chemical	221	32.58	23.08	20.36	13.57	10.41	100
21	Communications	138	30.43	25.36	21.01	12.32	10.87	100
22	Computer Hardware	38	26.32	28.95	23.68	13.16	7.89	100
77	Computer Software	91	32.97	30.77	19.78	9.89	6.59	100
23	Computer Peripherals	32	40.63	21.88	25	12.5	0	100
24	Information Storage	34	23.53	20.59	35.29	14.71	5.88	100
31	Drugs	89	11.24	11.24	15.73	26.97	34.83	100
32	Surgery & Medical Instruments	114	8.77	10.53	21.93	35.09	23.68	100
33	Biotechnology	39	17.95	10.26	25.64	17.95	28.21	100
39	Miscellaneous-Drug&Med	25	16	20	16	28	20	100
41	Electrical Devices	41	39.02	21.95	26.83	4.88	7.32	100
42	Electrical Lighting	30	16.67	36.67	23.33	16.67	6.67	100
43	Measuring & Testing	60	31.67	18.33	28.33	13.33	8.33	100
44	Nuclears & X-rays	38	26.32	26.32	36.84	7.89	2.63	100
45	Power Systems	86	31.4	17.44	19.77	16.28	15.12	100
46	Semiconductor Devices	52	30.77	21.15	28.85	13.46	5.77	100
49	Miscellaneous-Elec.	30	46.67	16.67	13.33	16.67	6.67	100
51	Materials Processing & Handling	49	44.9	16.33	18.37	8.16	12.24	100
52	Metal Working	46	36.96	10.87	34.78	15.22	2.17	100
53	Motors, Engines & Parts	51	41.18	25.49	17.65	7.84	7.84	100
54	Optics	42	30.95	28.57	14.29	21.43	4.76	100
55	Transportation	32	21.88	15.63	25	21.88	15.63	100
59	Miscellaneous Mechanical	36	25	30.56	25	8.33	11.11	100
61	Agriculture, Husbandry, Food	14	35.71	7.14	14.29	14.29	28.57	100
63	Apparel & Textile	9	55.56	22.22	22.22	0	0	100
64	Earth Working & Wells	4	25	0	50	25	0	100
65	Furniture, House Fixtures	8	0	25	50	12.5	12.5	100
66	Heating	7	14.29	0	28.57	42.86	14.29	100
67	Pipes & Joints	12	33.33	33.33	16.67	16.67	0	100
68	Receptacles	18	50	11.11	22.22	5.56	11.11	100
69	Miscellaneous-Others	**114**	33.33	21.05	27.19	7.89	10.53	100
	US-JP weighted	1789	**28.54**	**20.87**	**22.61**	**16.24**	**11.74**	100

Japan (5/5)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

4 or 5

%	Satisfaction from the contribution to the progress of science and technology	Satisfaction from solving technical problems	Improvement of the performance of the organization I work for	Career advances and opportunities for new/better jobs	Prestige/reputation	Benefits in terms of working condition as a reward by the employer such as research budget available	Monetary rewards
All	61.54	90.50	64.42	28.99	19.54	21.47	23.23
Agriculture, Food, Textiles	63.33	88.33	62.07	26.67	20.34	28.33	25.00
Coating	66.23	91.14	55.84	27.27	24.68	23.38	22.08
Gas	58.14	95.45	58.14	20.93	21.43	27.91	20.93
Organic Compounds	72.88	92.44	66.10	25.00	13.79	20.87	16.38
Resins	67.21	91.87	73.55	38.52	27.87	28.69	16.39
Miscellaneous-chemical	61.76	89.22	60.89	24.12	21.50	22.50	19.60
Communications	60.76	94.97	67.30	31.85	23.57	26.75	33.12
Computer Hardware	55.36	93.22	68.42	30.36	23.21	25.00	33.93
Computer Software	54.92	90.98	64.75	28.69	18.03	23.14	26.45
Computer Peripherals	67.11	93.42	63.16	22.37	22.37	18.42	25.00
Information Storage	57.14	88.33	61.02	27.97	19.49	25.42	42.37
Drugs	77.78	90.40	69.35	38.52	27.87	28.69	22.95
Surgery & Medical Instruments	63.10	89.29	49.40	34.15	12.05	19.28	25.30
Biotechnology	79.07	85.71	75.90	34.94	28.40	36.90	13.41
Miscellaneous-Drug&Med	65.91	86.36	56.82	18.18	20.45	13.64	25.00
Electrical Devices	63.74	93.41	54.95	27.47	19.78	12.09	27.47
Electrical Lighting	69.57	94.74	70.21	21.51	16.13	29.35	21.28
Measuring & Testing	54.55	86.36	55.45	24.55	18.18	26.36	27.27
Nuclears & X-rays	58.57	81.69	76.47	27.54	10.29	22.86	27.94
Power Systems	62.94	92.44	64.91	35.09	16.47	25.29	26.47
Semiconductor Devices	65.12	89.15	65.89	23.26	11.63	15.50	22.48
Miscellaneous-Elec.	66.10	93.33	61.34	30.51	16.95	21.19	27.12
Materials Processing & Handling	56.70	88.78	70.83	32.29	13.54	16.67	17.71
Metal Working	64.89	91.54	65.12	26.92	23.08	20.77	12.31
Motors, Engines & Parts	62.50	93.10	72.41	35.17	18.62	15.17	24.14
Optics	60.42	89.69	63.92	26.80	19.59	21.65	33.67
Transportation	50.72	91.55	61.97	22.06	19.12	11.76	27.14
Miscellaneous Mechanical	52.07	86.89	63.33	27.73	20.17	10.00	18.49
Agriculture, Husbandry, Food	67.07	91.76	70.73	30.00	21.25	25.00	22.22
Apparel & Textile	45.07	86.67	65.22	22.22	15.28	12.86	14.08
Earth Working & Wells	62.50	94.12	43.75	13.33	20.00	20.00	18.75
Furniture, House Fixtures	53.19	83.67	56.52	36.96	26.09	10.87	8.70
Heating	53.01	85.71	63.41	29.27	14.63	15.85	18.29
Pipes & Joints	58.33	90.00	66.10	30.51	27.12	23.73	27.12
Receptacles	54.72	92.59	66.04	24.53	16.98	20.75	5.66
Miscellaneous-Others	53.15	91.89	61.43	31.98	18.55	18.55	22.62
US-JP weighted	62.01	90.88	64.33	29.44	19.78	21.85	24.12
JP weighted	61.14	90.93	65.11	29.66	19.98	21.75	24.54

US 7/7)

Question 5-1 How important were the following motivations for your invention? (*1 = not important, 5 = very important*) (当該特許につながる発明への動機の重要度)

4 or 5

	C5 (4 or 5) %	B Satidfaction from contributing to the progress of science and technology	A Satisfaction from solving technical problems	D Generating value for my firm/improving my firm's performance	E Career advances and opportunities for new/better jobs	F Prestige / reputation	I Beneficial working conditions from my company (e.g., increased research budget)	J Monetary rewards	C It's my job to invent	G Recognition from co-workers	H Recognition from others in the same profession (outside the firm)	K For societal good
NBER	All	62.15	86.24	78.14	33.22	36.54	16.85	21.66	48.14	27.59	25.39	27.61
11	Agriculture, Food, Textiles	25	75	87.5	25	12.5	50	12.5	71.43	25	0	37.5
12	Coating	53.13	87.88	93.94	43.75	40.63	15.63	18.75	45.45	28.13	34.38	25
13	Gas	63.64	81.82	63.64	20	40	10	40	54.55	10	20	40
14	Organic Compounds	65.57	83.61	75.41	29.51	36.67	16.39	11.48	70	29.51	26.23	23.33
15	Resins	71.25	88.61	88.61	40.51	48.1	25.97	15.58	62.82	31.65	20.25	32.91
19	Miscellaneous-chemical	60.54	86.49	82.06	32.74	34.08	17.57	20.72	54.91	28.7	24.77	23.98
21	Communications	57.35	87.68	76.09	33.33	39.86	17.52	27.54	45.26	32.61	24.64	23.19
22	Computer Hardware	64.1	90	87.18	28.21	41.03	18.42	15.38	47.37	30.77	28.21	21.05
77	Computer Software	57.14	81.32	71.43	30.77	32.97	8.89	27.47	37.08	26.37	21.98	16.48
23	Computer Peripherals	68.75	96.88	84.38	37.5	40.63	6.25	15.63	56.25	21.88	12.5	12.5
24	Information Storage	64.86	86.49	73.68	38.89	32.43	11.11	36.84	45.95	26.32	35.14	20.59
31	Drugs	83.33	77.78	81.32	46.67	38.89	27.78	24.72	62.64	34.44	38.2	61.8
32	Surgery & Medical Instrument	67.83	86.84	77.19	37.5	42.24	11.61	26.09	51.28	28.95	30.09	58.77
33	Biotechnology	87.18	71.79	65.79	38.46	28.95	15.79	7.69	40.54	28.21	28.95	46.15
39	Miscellaneous-Drug&Med	72	84	84	24	28	12	28	40	20	24	48
41	Electrical Devices	60	93.18	80.95	37.5	31.71	17.5	25	46.51	19.51	29.27	12.2
42	Electrical Lighting	63.33	86.21	83.87	31.03	33.33	16.67	16.67	51.61	26.67	20	23.33
43	Measuring & Testing	58.33	88.52	65	35	46.67	11.67	23.33	38.98	28.33	26.67	21.67
44	Nuclears & X-rays	66.67	92.31	61.54	20.51	30.77	17.95	20.51	23.08	25.64	23.68	10.53
45	Power Systems	65.88	94.19	72.09	29.41	37.21	14.12	20	33.72	27.91	26.19	31.4
46	Semiconductor Devices	69.23	92.31	69.23	46.15	57.69	19.23	23.08	36.54	30.77	32.69	19.23
49	Miscellaneous-Elec.	60	86.67	86.67	33.33	23.33	16.67	20	53.33	16.67	23.33	23.33
51	Materials Processing & Handl	61.22	84.31	82.35	29.17	34.69	16.67	16.33	51.02	24.49	20.41	20.41
52	Metal Working	52.17	86.96	71.74	24.44	34.78	13.33	21.74	50	34.78	21.74	17.39
53	Motors, Engines & Parts	49.02	80.39	70.59	23.53	41.18	21.57	9.8	24	19.61	21.57	15.69
54	Optics	59.52	92.86	71.43	40.48	28.57	17.07	23.81	53.66	28.57	30.95	26.19
55	Transportation	67.74	87.5	77.42	16.13	29.03	16.13	21.88	46.88	22.58	22.58	37.5
59	Miscellaneous Mechanical	55.26	89.47	81.58	28.95	39.47	23.68	21.05	50	26.32	19.44	19.44
61	Agriculture, Husbandry, Food	61.54	66.67	84.62	16.67	30.77	8.33	38.46	38.46	33.33	16.67	42.86
63	Apparel & Textile	44.44	77.78	77.78	22.22	11.11	0	0	33.33	11.11	22.22	0
64	Earth Working & Wells	25	100	100	50	0	50	25	75	25	0	25
65	Furniture, House Fixtures	25	75	100	37.5	0	37.5	37.5	87.5	0	0	25
66	Heating	57.14	87.5	100	14.29	57.14	0	14.29	50	37.5	42.86	57.14
67	Pipes & Joints	50	83.33	100	50	41.67	16.67	8.33	58.33	0	8.33	16.67
68	Receptacles	43.75	83.33	88.24	11.76	17.65	11.76	16.67	50	5.88	11.76	16.67
69	Miscellaneous-Others	52.21	83.76	80.17	32.46	31.3	17.7	25.22	43.48	29.82	26.09	18.42
	US-JP weighted	**62.38**	**86.15**	**78.06**	**33.58**	**36.75**	**16.78**	**22.13**	**48.45**	**27.65**	**25.57**	**27.98**

Japan

Question 6-1 economic value of the patent（当該発明の経済的価値の同時期の技術開発成果全体における地位）

当該発明の経済的価値（国内）
Economic value in Japan

	All	最上位10%	上位25%	中位	下位50%	不明	無回答
	All	**Top 10%**	**Top25%, but not top 10%**	**Top half, but not top 25%**	**Bottom half**	**Don't know**	**no response**
All	3658	288	671	1045	675	906	73
Agriculture, Food, Textiles	60	3	9	18	16	14	0
Coating	80	4	19	23	12	21	1
Gas	45	6	9	13	6	11	0
Organic Compounds	120	6	19	37	19	37	2
Resins	125	10	24	32	22	36	1
Miscellaneous-chemical	208	23	29	66	37	47	6
Communications	160	10	29	54	31	33	3
Computer Hardware	59	6	13	12	13	15	0
Computer Software	123	7	24	36	21	32	3
Computer Peripherals	76	4	15	23	12	19	3
Information Storage	120	6	30	24	34	25	1
Drugs	127	12	30	34	23	26	2
Surgery & Medical Instruments	85	7	12	24	21	19	2
Biotechnology	87	14	13	22	13	23	2
Miscellaneous-Drug&Med	45	6	9	9	9	12	0
Electrical Devices	91	4	14	26	11	35	1
Electrical Lighting	96	8	23	28	11	25	1
Measuring & Testing	111	6	26	29	20	28	2
Nuclears & X-rays	72	5	15	19	10	20	3
Power Systems	172	14	30	56	23	47	2
Semiconductor Devices	129	12	27	42	13	33	2
Miscellaneous-Elec.	120	7	23	46	18	25	1
Materials Processing & Handling	103	5	17	27	18	32	4
Metal Working	137	19	33	36	19	24	6
Motors, Engines & Parts	145	12	23	44	38	25	3
Optics	100	7	15	34	23	18	3
Transportation	73	7	14	15	16	19	2
Miscellaneous Mechanical	124	6	17	31	27	38	5
Agriculture, Husbandry, Food	87	10	16	25	16	20	0
Apparel & Textile	77	4	8	17	23	23	2
Earth Working & Wells	20	3	4	5	3	4	1
Furniture, House Fixtures	51	6	5	13	11	15	1
Heating	84	8	13	26	19	18	0
Pipes & Joints	66	4	8	20	14	16	4
Receptacles	55	3	11	12	7	21	1
Miscellaneous-Others	225	14	45	67	46	50	3

当該発明の経済的価値（世界）
Economic value in the world

	All	最上位10%	上位25%	中位	下位50%	不明	無回答
	All	**Top 10%**	**Top25%, but not top 10%**	**Top half, but not top 25%**	**Bottom half**	**Don't know**	**no response**
All	3658	223	617	961	659	1103	95
Agriculture, Food, Textiles	60	4	7	13	17	18	1
Coating	80	6	17	19	8	26	4
Gas	45	5	7	13	6	12	2
Organic Compounds	120	5	18	35	16	43	3
Resins	125	5	20	29	22	45	4
Miscellaneous-chemical	208	19	30	52	43	58	6
Communications	160	12	25	50	28	41	4
Computer Hardware	59	3	12	12	13	19	0
Computer Software	123	7	23	30	23	38	2
Computer Peripherals	76	5	13	23	13	19	3
Information Storage	120	4	29	24	33	29	1
Drugs	127	6	31	34	25	30	1
Surgery & Medical Instruments	85	5	9	23	21	24	3
Biotechnology	87	10	12	19	19	24	3
Miscellaneous-Drug&Med	45	7	5	12	9	12	0
Electrical Devices	91	3	14	25	11	37	1
Electrical Lighting	96	6	22	21	15	29	3
Measuring & Testing	111	4	25	26	21	33	2
Nuclears & X-rays	72	2	9	21	12	24	4
Power Systems	172	12	29	50	19	60	2
Semiconductor Devices	129	5	30	48	10	34	2
Miscellaneous-Elec.	120	8	18	42	19	31	2
Materials Processing & Handling	103	4	17	20	19	39	4
Metal Working	137	14	34	34	15	34	6
Motors, Engines & Parts	145	10	26	43	35	28	3
Optics	100	5	13	32	24	23	3
Transportation	73	6	10	18	14	23	2
Miscellaneous Mechanical	124	5	15	31	25	43	5
Agriculture, Husbandry, Food	87	7	17	14	16	29	4
Apparel & Textile	77	2	10	19	19	25	2
Earth Working & Wells	20	4	1	4	3	6	2
Furniture, House Fixtures	51	2	9	10	8	20	2
Heating	84	4	13	24	15	27	1
Pipes & Joints	66	2	7	13	18	22	4
Receptacles	55	3	6	12	9	24	1
Miscellaneous-Others	225	12	34	66	36	74	3

%	N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
All	2679	10.75	25.05	39.01	25.2	100
Agriculture, Food, Textiles	46	6.52	19.57	39.13	34.78	100
Coating	58	6.9	32.76	39.66	20.69	100
Gas	34	17.65	26.47	38.24	17.65	100
Organic Compounds	81	7.41	23.46	45.68	23.46	100
Resins	88	11.36	27.27	36.36	25	100
Miscellaneous-chemical	155	14.84	18.71	42.58	23.87	100
Communications	124	8.06	23.39	43.55	25	100
Computer Hardware	44	13.64	29.55	27.27	29.55	100
Computer Software	88	7.95	27.27	40.91	23.86	100
Computer Peripherals	54	7.41	27.78	42.59	22.22	100
Information Storage	94	6.38	31.91	25.53	36.17	100
Drugs	99	12.12	30.3	34.34	23.23	100
Surgery & Medical Instruments	64	10.94	18.75	37.5	32.81	100
Biotechnology	62	22.58	20.97	35.48	20.97	100
Miscellaneous-Drug&Med	33	18.18	27.27	27.27	27.27	100
Electrical Devices	55	7.27	25.45	47.27	20	100
Electrical Lighting	70	11.43	32.86	40	15.71	100
Measuring & Testing	81	7.41	32.1	35.8	24.69	100
Nuclears & X-rays	49	10.2	30.61	38.78	20.41	100
Power Systems	123	11.38	24.39	45.53	18.7	100
Semiconductor Devices	94	12.77	28.72	44.68	13.83	100
Miscellaneous-Elec.	94	7.45	24.47	48.94	19.15	100
Materials Processing & Handling	67	7.46	25.37	40.3	26.87	100
Metal Working	107	17.76	30.84	33.64	17.76	100
Motors, Engines & Parts	117	10.26	19.66	37.61	32.48	100
Optics	79	8.86	18.99	43.04	29.11	100
Transportation	52	13.46	26.92	28.85	30.77	100
Miscellaneous Mechanical	81	7.41	20.99	38.27	33.33	100
Agriculture, Husbandry, Food	67	14.93	23.88	37.31	23.88	100
Apparel & Textile	52	7.69	15.38	32.69	44.23	100
Earth Working & Wells	15	20	26.67	33.33	20	100
Furniture, House Fixtures	35	17.14	14.29	37.14	31.43	100
Heating	66	12.12	19.7	39.39	28.79	100
Pipes & Joints	46	8.7	17.39	43.48	30.43	100
Receptacles	33	9.09	33.33	36.36	21.21	100
Miscellaneous-Others	172	8.14	26.16	38.95	26.74	100
US-JP weighted		10.5	25.06	39.62	24.82	100
JP weighted		10.16	24.96	40.04	24.84	100

	N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
All	2460	9.07	25.08	39.07	26.79	100
Agriculture, Food, Textiles	41	9.76	17.07	31.71	41.46	100
Coating	50	12	34	38	16	100
Gas	31	16.13	22.58	41.94	19.35	100
Organic Compounds	74	6.76	24.32	47.3	21.62	100
Resins	76	6.58	26.32	38.16	28.95	100
Miscellaneous-chemical	144	13.19	20.83	36.11	29.86	100
Communications	115	10.43	21.74	43.48	24.35	100
Computer Hardware	40	7.5	30	30	32.5	100
Computer Software	83	8.43	27.71	36.14	27.71	100
Computer Peripherals	54	9.26	24.07	42.59	24.07	100
Information Storage	90	4.44	32.22	26.67	36.67	100
Drugs	96	6.25	32.29	35.42	26.04	100
Surgery & Medical Instruments	58	8.62	15.52	39.66	36.21	100
Biotechnology	60	16.67	20	31.67	31.67	100
Miscellaneous-Drug&Med	33	21.21	15.15	36.36	27.27	100
Electrical Devices	53	5.66	26.42	47.17	20.75	100
Electrical Lighting	64	9.38	34.38	32.81	23.44	100
Measuring & Testing	76	5.26	32.89	34.21	27.63	100
Nuclears & X-rays	44	4.55	20.45	47.73	27.27	100
Power Systems	110	10.91	26.36	45.45	17.27	100
Semiconductor Devices	93	5.38	32.26	51.61	10.75	100
Miscellaneous-Elec.	87	9.2	20.69	48.28	21.84	100
Materials Processing & Handling	60	6.67	28.33	33.33	31.67	100
Metal Working	97	14.43	35.05	35.05	15.46	100
Motors, Engines & Parts	114	8.77	22.81	37.72	30.7	100
Optics	74	6.76	17.57	43.24	32.43	100
Transportation	48	12.5	20.83	37.5	29.17	100
Miscellaneous Mechanical	76	6.58	19.74	40.79	32.89	100
Agriculture, Husbandry, Food	54	12.96	31.48	25.93	29.63	100
Apparel & Textile	50	4	20	38	38	100
Earth Working & Wells	12	33.33	8.33	33.33	25	100
Furniture, House Fixtures	29	6.9	31.03	34.48	27.59	100
Heating	56	7.14	23.21	42.86	26.79	100
Pipes & Joints	40	5	17.5	32.5	45	100
Receptacles	30	10	20	40	30	100
Miscellaneous-Others	148	8.11	22.97	44.59	24.32	100
		9.01	24.94	39.57	26.48	100
		8.93	24.9	40.06	26.1	100

US (1/2)

Question 6-1 economic value of the patent（当該発明の経済的価値の同時期の技術開発成果全体における地位）

B.2A Economic value in US

	all	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Don't know	Missing
NBER All	1,919	183	256	383	643	309	145
11 Agriculture, Food, Textiles	8	0	2	1	2	2	1
12 Coating	34	4	9	9	7	2	3
13 Gas	11	1	2	2	3	3	0
14 Organic Compounds	61	3	7	14	27	7	3
15 Resins	84	8	17	15	25	13	6
19 Miscellaneous-chemical	233	24	32	40	93	32	12
21 Communications	149	14	15	23	59	24	14
22 Computer Hardware	42	2	7	7	17	5	4
77 Computer Software	93	7	13	25	21	22	5
23 Computer Peripherals	33	3	1	10	12	5	2
24 Information Storage	42	3	9	12	10	5	3
31 Drugs	101	11	11	26	21	19	13
32 Surgery & Medical Instruments	123	14	12	26	44	18	9
33 Biotechnology	41	5	3	3	13	11	6
39 Miscellaneous-Drug&Med	29	5	3	4	8	6	3
41 Electrical Devices	45	3	7	7	18	8	2
42 Electrical Lighting	33	3	2	11	7	8	2
43 Measuring & Testing	62	2	8	12	23	13	4
44 Nuclears & X-rays	39	3	2	9	13	12	0
45 Power Systems	89	9	13	21	36	6	4
46 Semiconductor Devices	55	5	8	8	19	10	5
49 Miscellaneous-Elec.	32	2	8	8	11	3	0
51 Materials Processing & Handling	56	8	12	7	19	4	6
52 Metal Working	49	3	5	9	18	10	4
53 Motors, Engines & Parts	56	7	4	16	17	7	5
54 Optics	43	0	3	9	18	11	2
55 Transportation	33	5	7	2	11	6	2
59 Miscellaneous Mechanical	42	6	8	9	8	7	4
61 Agriculture, Husbandry, Food	14	3	4	2	2	1	2
63 Apparel & Textile	9	1	0	3	5	0	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	2	0	4	2	1	0
66 Heating	8	1	2	1	2	2	0
67 Pipes & Joints	13	0	1	3	5	3	1
68 Receptacles	20	0	3	4	9	2	2
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX

B.2B Economic value worldwide

	all	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Don't know	Missing
NBER All	1,919	159	220	335	621	389	195
11 Agriculture, Food, Textiles	8	0	1	2	2	1	2
12 Coating	34	3	8	10	6	4	3
13 Gas	11	1	2	1	2	5	0
14 Organic Compounds	61	3	5	11	28	10	4
15 Resins	84	7	12	16	27	16	6
19 Miscellaneous-chemical	233	22	31	34	89	42	15
21 Communications	149	13	13	22	55	27	19
22 Computer Hardware	42	3	6	6	15	7	5
77 Computer Software	93	8	12	18	23	24	8
23 Computer Peripherals	33	2	2	10	12	5	2
24 Information Storage	42	3	9	9	9	6	6
31 Drugs	101	9	10	26	21	18	17
32 Surgery & Medical Instruments	123	15	6	23	41	26	12
33 Biotechnology	41	3	3	3	13	11	8
39 Miscellaneous-Drug&Med	29	4	2	4	8	7	4
41 Electrical Devices	45	2	9	5	15	12	2
42 Electrical Lighting	33	2	4	5	8	13	1
43 Measuring & Testing	62	2	8	8	24	13	7
44 Nuclears & X-rays	39	2	2	10	10	12	3
45 Power Systems	89	7	11	17	32	13	9
46 Semiconductor Devices	55	5	5	9	19	11	6
49 Miscellaneous-Elec.	32	2	5	6	10	5	4
51 Materials Processing & Handling	56	10	8	5	23	4	6
52 Metal Working	49	1	5	9	15	14	5
53 Motors, Engines & Parts	56	6	4	14	17	10	5
54 Optics	43	0	3	7	18	11	4
55 Transportation	33	4	6	2	11	6	4
59 Miscellaneous Mechanical	42	4	7	10	6	10	5
61 Agriculture, Husbandry, Food	14	3	1	2	4	2	2
63 Apparel & Textile	9	0	1	1	4	3	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	0	1	2	3	3	0
66 Heating	8	0	2	3	0	2	1
67 Pipes & Joints	13	0	1	2	5	4	1
68 Receptacles	20	0	3	2	10	2	3
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX

%	N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
NBER All	1465	12.49	17.47	26.14	43.89	100
11 Agriculture, Food, Textiles	5	0	40	20	40	100
12 Coating	29	13.79	31.03	31.03	24.14	100
13 Gas	8	12.5	25	25	37.5	100
14 Organic Compounds	54	5.88	13.73	27.45	52.94	100
15 Resins	65	12.31	26.15	23.08	38.46	100
19 Miscellaneous-chemical	189	12.7	16.93	21.16	49.21	100
21 Communications	111	12.61	13.51	20.72	53.15	100
22 Computer Hardware	33	6.06	21.21	21.21	51.52	100
77 Computer Software	66	10.61	19.7	37.88	31.82	100
23 Computer Peripherals	26	11.54	3.85	38.46	46.15	100
24 Information Storage	34	8.82	26.47	35.29	29.41	100
31 Drugs	69	15.94	15.94	37.68	30.43	100
32 Surgery & Medical Instruments	96	14.58	12.5	27.08	45.83	100
33 Biotechnology	21	20.83	12.5	12.5	54.17	100
39 Miscellaneous-Drug&Med	20	25	15	20	40	100
41 Electrical Devices	35	8.57	20	20	51.43	100
42 Electrical Lighting	23	13.04	8.7	47.83	30.43	100
43 Measuring & Testing	45	4.44	17.78	26.67	51.11	100
44 Nuclears & X-rays	27	11.11	7.41	33.33	48.15	100
45 Power Systems	79	11.39	16.46	26.58	45.57	100
46 Semiconductor Devices	40	12.5	20	20	47.5	100
49 Miscellaneous-Elec.	29	6.9	27.59	27.59	37.93	100
51 Materials Processing & Handling	46	17.39	26.09	15.22	41.3	100
52 Metal Working	35	8.57	14.29	25.71	51.43	100
53 Motors, Engines & Parts	44	15.91	9.09	36.36	38.64	100
54 Optics	30	0	10	30	60	100
55 Transportation	25	20	28	8	44	100
59 Miscellaneous Mechanical	31	19.35	25.81	29.03	25.81	100
61 Agriculture, Husbandry, Food	11	27.27	36.36	18.18	18.18	100
63 Apparel & Textile	9	11.11	0	33.33	55.56	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	8	25	0	50	25	100
66 Heating	6	16.67	33.33	16.67	33.33	100
67 Pipes & Joints	9	0	11.11	33.33	55.56	100
68 Receptacles	16	0	18.75	25	56.25	100
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX
US-JP weighted		**12.6**	**17.85**	**26.65**	**43.15**	100

N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
1335	11.91	16.48	25.09	46.52	100
5	0	20	40	40	100
27	11.11	29.63	37.04	22.22	100
6	16.67	33.33	16.67	33.33	100
47	6.38	10.64	23.4	59.57	100
62	11.29	19.35	25.81	43.55	100
176	12.5	17.61	19.32	50.57	100
103	12.62	12.62	21.36	53.4	100
30	10	20	20	50	100
61	13.11	19.67	29.51	37.7	100
26	7.69	7.69	38.46	46.15	100
30	10	30	30	30	100
66	13.64	15.15	39.39	31.82	100
85	17.65	7.06	27.06	48.24	100
22	13.64	13.64	13.64	59.09	100
18	22.22	11.11	22.22	44.44	100
31	6.45	29.03	16.13	48.39	100
19	10.53	21.05	26.32	42.11	100
42	4.76	19.05	19.05	57.14	100
24	8.33	8.33	41.67	41.67	100
67	10.45	16.42	25.37	47.76	100
38	13.16	13.16	23.68	50	100
23	8.7	21.74	26.09	43.48	100
46	21.74	17.39	10.87	50	100
30	3.33	16.67	30	50	100
41	14.63	9.76	34.15	41.46	100
28	0	10.71	25	64.29	100
23	17.39	26.09	8.7	47.83	100
27	14.81	25.93	37.04	22.22	100
10	30	10	20	40	100
6	0	16.67	16.67	66.67	100
XX	XX	XX	XX	XX	XX
6	0	16.67	33.33	50	100
5	0	40	60	0	100
8	0	12.5	25	62.5	100
15	0	20	13.33	66.67	100
XX	XX	XX	XX	XX	XX
	11.95	**16.72**	**25.33**	**46.00**	100

US (2/2)

Question 6-1(2) Technical significance (当該発明の技術的な価値)

B.1A Technical significance in US

	all	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Don't know	Missing
NBER All	1,919	242	346	428	495	265	143
11 Agriculture, Food, Textiles	8	0	2	2	0	3	1
12 Coating	34	5	5	12	7	2	3
13 Gas	11	3	1	2	3	2	0
14 Organic Compounds	61	8	10	13	19	7	4
15 Resins	84	9	17	27	19	6	6
19 Miscellaneous-chemical	233	29	35	54	75	28	12
21 Communications	149	22	19	31	46	18	13
22 Computer Hardware	42	3	10	6	15	4	4
77 Computer Software	93	12	20	16	22	18	5
23 Computer Peripherals	33	2	6	8	10	5	2
24 Information Storage	42	5	13	10	7	4	3
31 Drugs	101	18	21	26	12	11	13
32 Surgery & Medical Instruments	123	14	23	23	33	20	10
33 Biotechnology	41	6	6	5	8	10	6
39 Miscellaneous-Drug&Med	29	3	6	6	4	7	3
41 Electrical Devices	45	2	8	11	12	9	3
42 Electrical Lighting	33	3	7	9	6	6	2
43 Measuring & Testing	62	10	8	17	12	12	3
44 Nuclears & X-rays	39	5	6	10	8	10	0
45 Power Systems	89	9	14	30	26	7	3
46 Semiconductor Devices	55	4	11	10	14	10	6
49 Miscellaneous-Elec.	32	5	7	6	10	4	0
51 Materials Processing & Handling	56	9	15	8	14	4	6
52 Metal Working	49	6	6	8	17	8	4
53 Motors, Engines & Parts	56	8	6	12	18	7	5
54 Optics	43	2	8	9	13	9	2
55 Transportation	33	4	9	6	7	5	2
59 Miscellaneous Mechanical	42	7	10	10	6	5	4
61 Agriculture, Husbandry, Food	14	5	5	0	1	2	1
63 Apparel & Textile	9	1	2	3	3	0	0
64 Earth Working & Wells	5	1	0	0	3	0	1
65 Furniture, House Fixtures	9	2	0	4	2	1	0
66 Heating	8	3	2	1	1	1	0
67 Pipes & Joints	13	1	4	3	3	1	1
68 Receptacles	20	0	5	3	7	3	2
69 Miscellaneous-Others	123	16	19	27	32	16	13

B.1A Technical significance worldwide

	all	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Don't know	Missing
NBER All	1,919	218	296	387	489	340	189
11 Agriculture, Food, Textiles	8	0	1	2	1	2	2
12 Coating	34	3	8	9	7	4	3
13 Gas	11	2	1	3	2	3	0
14 Organic Compounds	61	8	7	12	19	10	5
15 Resins	84	9	12	29	19	9	6
19 Miscellaneous-chemical	233	27	32	47	74	39	14
21 Communications	149	19	19	27	45	21	18
22 Computer Hardware	42	3	12	4	13	5	5
77 Computer Software	93	13	15	17	21	19	8
23 Computer Peripherals	33	1	5	11	9	5	2
24 Information Storage	42	5	11	8	6	6	6
31 Drugs	101	18	19	25	11	11	17
32 Surgery & Medical Instruments	123	15	17	17	35	26	13
33 Biotechnology	41	4	6	6	6	11	8
39 Miscellaneous-Drug&Med	29	3	4	6	6	7	3
41 Electrical Devices	45	3	6	8	11	15	2
42 Electrical Lighting	33	4	7	5	8	8	1
43 Measuring & Testing	62	7	11	14	13	11	6
44 Nuclears & X-rays	39	3	8	8	7	10	3
45 Power Systems	89	7	10	27	24	14	7
46 Semiconductor Devices	55	3	10	11	15	10	6
49 Miscellaneous-Elec.	32	5	5	5	8	5	4
51 Materials Processing & Handling	56	10	12	6	17	5	6
52 Metal Working	49	2	9	6	16	11	5
53 Motors, Engines & Parts	56	7	4	13	18	9	5
54 Optics	43	2	7	8	13	10	3
55 Transportation	33	4	4	6	8	8	3
59 Miscellaneous Mechanical	42	6	9	10	3	7	7
61 Agriculture, Husbandry, Food	14	5	3	2	1	1	2
63 Apparel & Textile	9	1	2	1	4	1	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	0	1	2	3	3	0
66 Heating	8	2	1	1	2	1	1
67 Pipes & Joints	13	2	1	3	3	3	1
68 Receptacles	20	0	2	3	9	3	3
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX

%	N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
NBER All	1511	16.02	22.9	28.33	32.76	100
11 Agriculture, Food, Textiles	4	0	50	50	0	100
12 Coating	29	17.24	17.24	41.38	24.14	100
13 Gas	9	33.33	11.11	22.22	33.33	100
14 Organic Compounds	50	16	20	26	38	100
15 Resins	72	12.5	23.61	37.5	26.39	100
19 Miscellaneous-chemical	193	15.03	18.13	27.98	38.86	100
21 Communications	118	18.64	16.1	26.27	38.98	100
22 Computer Hardware	34	8.82	29.41	17.65	44.12	100
77 Computer Software	70	17.14	28.57	22.86	31.43	100
23 Computer Peripherals	26	7.69	23.08	30.77	38.46	100
24 Information Storage	35	14.29	37.14	28.57	20	100
31 Drugs	77	23.38	27.27	33.77	15.58	100
32 Surgery & Medical Instruments	93	15.05	24.73	24.73	35.48	100
33 Biotechnology	25	24	24	20	32	100
39 Miscellaneous-Drug&Med	19	15.79	31.58	31.58	21.05	100
41 Electrical Devices	33	6.06	24.24	33.33	36.36	100
42 Electrical Lighting	25	12	28	36	24	100
43 Measuring & Testing	47	21.28	17.02	36.17	25.53	100
44 Nuclears & X-rays	29	17.24	20.69	34.48	27.59	100
45 Power Systems	79	11.39	17.72	37.97	32.91	100
46 Semiconductor Devices	39	10.26	28.21	25.64	35.9	100
49 Miscellaneous-Elec.	28	17.86	25	21.43	35.71	100
51 Materials Processing & Handling	46	19.57	32.61	17.39	30.43	100
52 Metal Working	37	16.22	16.22	21.62	45.95	100
53 Motors, Engines & Parts	44	18.18	13.64	27.27	40.91	100
54 Optics	32	6.25	25	28.13	40.63	100
55 Transportation	26	15.38	34.62	23.08	26.92	100
59 Miscellaneous Mechanical	33	21.21	30.3	30.3	18.18	100
61 Agriculture, Husbandry, Food	11	45.45	45.45	0	9.09	100
63 Apparel & Textile	9	11.11	22.22	33.33	33.33	100
64 Earth Working & Wells	4	25	0	0	75	100
65 Furniture, House Fixtures	8	25	0	50	25	100
66 Heating	7	42.86	28.57	14.29	14.29	100
67 Pipes & Joints	11	9.09	36.36	27.27	27.27	100
68 Receptacles	15	0	33.33	20	46.67	100
69 Miscellaneous-Others	94	17.02	20.21	28.72	34.04	100
US-JP weighted		**16.33**	**23.74**	**28.07**	**31.86**	**100**

N	Top 10%	Top25%, but not top 10%	Top half, but not top 25%	Bottom half	Total
1390	15.68	21.29	27.84	35.18	100
4	0	25	50	25	100
27	11.11	29.63	33.33	25.93	100
8	25	12.5	37.5	25	100
46	17.39	15.22	26.09	41.3	100
69	13.04	17.39	42.03	27.54	100
180	15	17.78	26.11	41.11	100
110	17.27	17.27	24.55	40.91	100
32	9.38	37.5	12.5	40.63	100
66	19.7	22.73	25.76	31.82	100
26	3.85	19.23	42.31	34.62	100
30	16.67	36.67	26.67	20	100
73	24.66	26.03	34.25	15.07	100
84	17.86	20.24	20.24	41.67	100
22	18.18	27.27	27.27	27.27	100
19	15.79	21.05	31.58	31.58	100
28	10.71	21.43	28.57	39.29	100
24	16.67	29.17	20.83	33.33	100
45	15.56	24.44	31.11	28.89	100
26	11.54	30.77	30.77	26.92	100
68	10.29	14.71	39.71	35.29	100
39	7.69	25.64	28.21	38.46	100
23	21.74	21.74	21.74	34.78	100
45	22.22	26.67	13.33	37.78	100
33	6.06	27.27	18.18	48.48	100
42	16.67	9.52	30.95	42.86	100
30	6.67	23.33	26.67	43.33	100
22	18.18	18.18	27.27	36.36	100
28	21.43	32.14	35.71	10.71	100
11	45.45	27.27	18.18	9.09	100
8	12.5	25	12.5	50	100
XX	XX	XX	XX	XX	XX
6	0	16.67	33.33	50	100
6	33.33	16.67	16.67	33.33	100
9	22.22	11.11	33.33	33.33	100
14	0	14.29	21.43	64.29	100
XX	XX	XX	XX	XX	XX
	16.18	**21.94**	**27.52**	**34.36**	100

Japan (1/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

自社製品・自社製造工程での排他的な利用
Commercial exploitation in an exclusive manner

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	46	97	252	1209	1259	795
Agriculture, Food, Textiles	60	0	0	1	14	22	23
Coating	80	2	1	2	29	32	14
Gas	45	0	2	2	17	14	10
Organic Compounds	120	4	3	6	32	40	35
Resins	125	1	4	9	36	44	31
Miscellaneous-chemical	208	0	4	6	71	70	57
Communications	160	1	7	13	57	51	31
Computer Hardware	59	3	0	5	17	20	14
Computer Software	123	4	4	13	37	45	20
Computer Peripherals	76	0	2	5	26	28	15
Information Storage	120	4	12	12	39	24	29
Drugs	127	1	3	2	25	61	35
Surgery & Medical Instruments	85	2	5	7	31	27	13
Biotechnology	87	0	5	7	24	25	26
Miscellaneous-Drug&Med	45	1	1	4	17	12	10
Electrical Devices	91	2	2	8	39	29	11
Electrical Lighting	96	0	3	9	29	32	23
Measuring & Testing	111	5	1	6	34	41	24
Nuclears & X-rays	72	1	2	1	31	21	16
Power Systems	172	1	6	14	52	62	37
Semiconductor Devices	129	0	3	14	44	46	22
Miscellaneous-Elec.	120	1	4	10	45	40	20
Materials Processing & Handling	103	1	2	3	32	37	28
Metal Working	137	1	2	8	47	60	19
Motors, Engines & Parts	145	0	3	7	50	56	29
Optics	100	0	1	9	38	26	26
Transportation	73	1	2	6	23	27	14
Miscellaneous Mechanical	124	2	1	12	41	40	28
Agriculture, Husbandry, Food	87	1	1	2	35	29	19
Apparel & Textile	77	1	2	11	25	26	12
Earth Working & Wells	20	1	1	1	6	9	2
Furniture, House Fixtures	51	1	2	4	11	16	17
Heating	84	1	1	7	33	26	16
Pipes & Joints	66	0	1	8	20	28	9
Receptacles	55	1	0	1	24	18	11
Miscellaneous-Others	225	2	4	17	78	75	49

%	N	1	2	3	4	5	Total
All	2863	1.61	3.39	8.8	42.23	43.97	100
Agriculture, Food, Textiles	37	0	0	2.7	37.84	59.46	100
Coating	66	3.03	1.52	3.03	43.94	48.48	100
Gas	35	0	5.71	5.71	48.57	40	100
Organic Compounds	85	4.71	3.53	7.06	37.65	47.06	100
Resins	94	1.06	4.26	9.57	38.3	46.81	100
Miscellaneous-chemical	151	0	2.65	3.97	47.02	46.36	100
Communications	129	0.78	5.43	10.08	44.19	39.53	100
Computer Hardware	45	6.67	0	11.11	37.78	44.44	100
Computer Software	103	3.88	3.88	12.62	35.92	43.69	100
Computer Peripherals	61	0	3.28	8.2	42.62	45.9	100
Information Storage	91	4.4	13.19	13.19	42.86	26.37	100
Drugs	92	1.09	3.26	2.17	27.17	66.3	100
Surgery & Medical Instruments	72	2.78	6.94	9.72	43.06	37.5	100
Biotechnology	61	0	8.2	11.48	39.34	40.98	100
Miscellaneous-Drug&Med	35	2.86	2.86	11.43	48.57	34.29	100
Electrical Devices	80	2.5	2.5	10	48.75	36.25	100
Electrical Lighting	73	0	4.11	12.33	39.73	43.84	100
Measuring & Testing	87	5.75	1.15	6.9	39.08	47.13	100
Nuclears & X-rays	56	1.79	3.57	1.79	55.36	37.5	100
Power Systems	135	0.74	4.44	10.37	38.52	45.93	100
Semiconductor Devices	107	0	2.8	13.08	41.12	42.99	100
Miscellaneous-Elec.	100	1	4	10	45	40	100
Materials Processing & Handling	75	1.33	2.67	4	42.67	49.33	100
Metal Working	118	0.85	1.69	6.78	39.83	50.85	100
Motors, Engines & Parts	116	0	2.59	6.03	43.1	48.28	100
Optics	74	0	1.35	12.16	51.35	35.14	100
Transportation	59	1.69	3.39	10.17	38.98	45.76	100
Miscellaneous Mechanical	96	2.08	1.04	12.5	42.71	41.67	100
Agriculture, Husbandry, Food	68	1.47	1.47	2.94	51.47	42.65	100
Apparel & Textile	65	1.54	3.08	16.92	38.46	40	100
Earth Working & Wells	18	5.56	5.56	5.56	33.33	50	100
Furniture, House Fixtures	34	2.94	5.88	11.76	32.35	47.06	100
Heating	68	1.47	1.47	10.29	48.53	38.24	100
Pipes & Joints	57	0	1.75	14.04	35.09	49.12	100
Receptacles	44	2.27	0	2.27	54.55	40.91	100
Miscellaneous-Others	176	1.14	2.27	9.66	44.32	42.61	100
US-JP weighted		1.55	3.6	8.75	42.07	44.04	100
JP weighted		1.48	3.57	8.92	42.16	43.87	100

ライセンシング
Licensing

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	153	377	722	1114	462	830
Agriculture, Food, Textiles	60	2	8	7	13	7	23
Coating	80	4	12	13	26	9	16
Gas	45	0	8	10	13	3	11
Organic Compounds	120	7	8	20	32	17	36
Resins	125	2	9	29	37	16	32
Miscellaneous-chemical	208	6	24	33	64	21	60
Communications	160	3	13	30	59	26	29
Computer Hardware	59	2	6	10	17	10	14
Computer Software	123	3	19	24	40	17	20
Computer Peripherals	76	4	5	13	26	13	15
Information Storage	120	4	10	17	33	27	29
Drugs	127	4	8	14	34	31	36
Surgery & Medical Instruments	85	8	6	20	33	7	11
Biotechnology	87	2	6	14	21	16	28
Miscellaneous-Drug&Med	45	1	5	12	16	3	8
Electrical Devices	91	3	13	20	33	11	11
Electrical Lighting	96	3	9	21	25	14	24
Measuring & Testing	111	6	12	24	31	14	24
Nuclears & X-rays	72	7	8	11	22	7	17
Power Systems	172	2	16	29	68	20	37
Semiconductor Devices	129	2	13	28	47	15	24
Miscellaneous-Elec.	120	5	10	24	39	18	24
Materials Processing & Handling	103	12	3	22	24	9	33
Metal Working	137	9	18	28	42	21	19
Motors, Engines & Parts	145	2	10	31	54	17	31
Optics	100	3	9	20	33	9	26
Transportation	73	6	6	16	19	9	17
Miscellaneous Mechanical	124	10	14	27	34	11	28
Agriculture, Husbandry, Food	87	1	10	21	24	10	21
Apparel & Textile	77	7	18	22	13	3	14
Earth Working & Wells	20	1	2	4	5	5	3
Furniture, House Fixtures	51	3	9	11	9	4	15
Heating	84	1	7	18	29	11	18
Pipes & Joints	66	1	12	16	19	7	11
Receptacles	55	7	5	10	16	5	12
Miscellaneous-Others	225	10	26	53	64	19	53

%	N	1	2	3	4	5	Total
All	2828	5.41	13.33	25.53	39.39	16.34	100
Agriculture, Food, Textiles	37	5.41	21.62	18.92	35.14	18.92	100
Coating	64	6.25	18.75	20.31	40.63	14.06	100
Gas	34	0	23.53	29.41	38.24	8.82	100
Organic Compounds	84	8.33	9.52	23.81	38.1	20.24	100
Resins	93	2.15	9.68	31.18	39.78	17.2	100
Miscellaneous-chemical	148	4.05	16.22	22.3	43.24	14.19	100
Communications	131	2.29	9.92	22.9	45.04	19.85	100
Computer Hardware	45	4.44	13.33	22.22	37.78	22.22	100
Computer Software	103	2.91	18.45	23.3	38.83	16.5	100
Computer Peripherals	61	6.56	8.2	21.31	42.62	21.31	100
Information Storage	91	4.4	10.99	18.68	36.26	29.67	100
Drugs	91	4.4	8.79	15.38	37.36	34.07	100
Surgery & Medical Instruments	74	10.81	8.11	27.03	44.59	9.46	100
Biotechnology	59	3.39	10.17	23.73	35.59	27.12	100
Miscellaneous-Drug&Med	37	2.7	13.51	32.43	43.24	8.11	100
Electrical Devices	80	3.75	16.25	25	41.25	13.75	100
Electrical Lighting	72	4.17	12.5	29.17	34.72	19.44	100
Measuring & Testing	87	6.9	13.79	27.59	35.63	16.09	100
Nuclears & X-rays	55	12.73	14.55	20	40	12.73	100
Power Systems	135	1.48	11.85	21.48	50.37	14.81	100
Semiconductor Devices	105	1.9	12.38	26.67	44.76	14.29	100
Miscellaneous-Elec.	96	5.21	10.42	25	40.63	18.75	100
Materials Processing & Handling	70	17.14	4.29	31.43	34.29	12.86	100
Metal Working	118	7.63	15.25	23.73	35.59	17.8	100
Motors, Engines & Parts	114	1.75	8.77	27.19	47.37	14.91	100
Optics	74	4.05	12.16	27.03	44.59	12.16	100
Transportation	56	10.71	10.71	28.57	33.93	16.07	100
Miscellaneous Mechanical	96	10.42	14.58	28.13	35.42	11.46	100
Agriculture, Husbandry, Food	66	1.52	15.15	31.82	36.36	15.15	100
Apparel & Textile	63	11.11	28.57	34.92	20.63	4.76	100
Earth Working & Wells	17	5.88	11.76	23.53	29.41	29.41	100
Furniture, House Fixtures	36	8.33	25	30.56	25	11.11	100
Heating	66	1.52	10.61	27.27	43.94	16.67	100
Pipes & Joints	55	1.82	21.82	29.09	34.55	12.73	100
Receptacles	43	16.28	11.63	23.26	37.21	11.63	100
Miscellaneous-Others	172	5.81	15.12	30.81	37.21	11.05	100
US-JP weighted		5.17	12.61	24.93	40.53	16.75	100
JP weighted		5.09	12.7	25.53	40.09	16.59	100

US (1/5)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

B3A Commercial exploitation of the patented technology in your own product/process in an exclusive manner(including its future possibility)

	all	1	2	3	4	5	missing
NBER All	1,919	97	73	154	386	1,067	142
11 Agriculture, Food, Textiles	8	0	0	0	1	5	2
12 Coating	34	2	0	2	5	22	3
13 Gas	11	2	0	1	1	7	0
14 Organic Compounds	61	3	1	7	16	30	4
15 Resins	84	1	1	4	15	55	8
19 Miscellaneous-chemical	233	7	8	22	53	132	11
21 Communications	149	15	11	14	32	64	13
22 Computer Hardware	42	4	1	4	10	19	4
77 Computer Software	93	9	2	16	19	42	5
23 Computer Peripherals	33	1	1	3	8	18	2
24 Information Storage	42	4	2	3	6	24	3
31 Drugs	101	2	1	6	19	61	12
32 Surgery & Medical Instruments	123	8	3	14	29	61	8
33 Biotechnology	41	3	3	4	2	23	6
39 Miscellaneous-Drug&Med	29	6	1	1	6	12	3
41 Electrical Devices	45	1	2	6	5	28	3
42 Electrical Lighting	33	2	0	1	9	20	1
43 Measuring & Testing	62	2	2	3	20	31	4
44 Nuclears & X-rays	39	1	1	4	5	28	0
45 Power Systems	89	3	7	4	17	55	3
46 Semiconductor Devices	55	0	5	6	19	19	6
49 Miscellaneous-Elec.	32	2	1	0	5	24	0
51 Materials Processing & Handlir	56	2	2	2	8	36	6
52 Metal Working	49	2	0	4	14	24	5
53 Motors, Engines & Parts	56	4	3	3	8	33	5
54 Optics	43	4	4	5	11	18	1
55 Transportation	33	0	4	0	4	23	2
59 Miscellaneous Mechanical	42	2	1	4	8	23	4
61 Agriculture, Husbandry, Food	14	1	0	0	0	12	1
63 Apparel & Textile	9	0	1	0	0	8	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	0	0	0	1	8	0
66 Heating	8	0	1	0	1	6	0
67 Pipes & Joints	13	2	0	0	1	10	0
68 Receptacles	20	0	2	0	4	11	3
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX

%	N	1	2	3	4	5	Total
NBER All	1777	5.46	4.11	8.67	21.72	60.05	100
11 Agriculture, Food, Textiles	6	0	0	0	16.67	83.33	100
12 Coating	31	6.45	0	6.45	16.13	70.97	100
13 Gas	11	18.18	0	9.09	9.09	63.64	100
14 Organic Compounds	57	5.26	1.75	12.28	28.07	52.63	100
15 Resins	76	1.32	1.32	5.26	19.74	72.37	100
19 Miscellaneous-chemical	222	3.15	3.6	9.91	23.87	59.46	100
21 Communications	136	11.03	8.09	10.29	23.53	47.06	100
22 Computer Hardware	38	10.53	2.63	10.53	26.32	50	100
77 Computer Software	88	10.23	2.27	18.18	21.59	47.73	100
23 Computer Peripherals	31	3.23	3.23	9.68	25.81	58.06	100
24 Information Storage	39	10.26	5.13	7.69	15.38	61.54	100
31 Drugs	89	2.25	1.12	6.74	21.35	68.54	100
32 Surgery & Medical Instruments	115	6.96	2.61	12.17	25.22	53.04	100
33 Biotechnology	35	8.57	8.57	11.43	5.71	65.71	100
39 Miscellaneous-Drug&Med	26	23.08	3.85	3.85	23.08	46.15	100
41 Electrical Devices	42	2.38	4.76	14.29	11.9	66.67	100
42 Electrical Lighting	32	6.25	0	3.13	28.13	62.5	100
43 Measuring & Testing	58	3.45	3.45	5.17	34.48	53.45	100
44 Nuclears & X-rays	39	2.56	2.56	10.26	12.82	71.79	100
45 Power Systems	86	3.49	8.14	4.65	19.77	63.95	100
46 Semiconductor Devices	49	0	10.2	12.24	38.78	38.78	100
49 Miscellaneous-Elec.	32	6.25	3.13	0	15.63	75	100
51 Materials Processing & Handlir	50	4	4	4	16	72	100
52 Metal Working	44	4.55	0	9.09	31.82	54.55	100
53 Motors, Engines & Parts	51	7.84	5.88	5.88	15.69	64.71	100
54 Optics	42	9.52	9.52	11.9	26.19	42.86	100
55 Transportation	31	0	12.9	0	12.9	74.19	100
59 Miscellaneous Mechanical	38	5.26	2.63	10.53	21.05	60.53	100
61 Agriculture, Husbandry, Food	13	7.69	0	0	0	92.31	100
63 Apparel & Textile	9	0	11.11	0	0	88.89	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	0	0	0	11.11	88.89	100
66 Heating	8	0	12.5	0	12.5	75	100
67 Pipes & Joints	13	15.38	0	0	7.69	76.92	100
68 Receptacles	17	0	11.76	0	23.53	64.71	100
69 Miscellaneous-Others	XX	XX	XX	XX	XX	XX	XX
US-JP weighted		**5.64**	**4.13**	**8.39**	**21.83**	**60.07**	100

B3B Licensing (obtain exclusive rights to license the invention in order to generate licensing revenues)

	all	1	2	3	4	5	Missing
NBER All	1,919	658	262	282	254	276	187
11 Agriculture, Food, Textiles	8	1	0	0	2	2	3
12 Coating	34	11	6	5	2	6	4
13 Gas	11	2	2	1	2	3	1
14 Organic Compounds	61	24	11	10	6	6	4
15 Resins	84	33	7	16	11	9	8
19 Miscellaneous-chemical	233	80	30	38	28	40	17
21 Communications	149	35	18	26	30	26	14
22 Computer Hardware	42	17	5	8	5	1	6
77 Computer Software	93	34	14	17	14	9	5
23 Computer Peripherals	33	9	5	6	4	7	2
24 Information Storage	42	5	6	6	6	15	4
31 Drugs	101	30	13	8	16	18	16
32 Surgery & Medical Instruments	123	48	13	12	19	15	16
33 Biotechnology	41	13	5	7	2	7	7
39 Miscellaneous-Drug&Med	29	10	6	4	4	2	3
41 Electrical Devices	45	14	10	7	5	4	5
42 Electrical Lighting	33	7	3	10	3	9	1
43 Measuring & Testing	62	26	9	10	6	5	6
44 Nuclears & X-rays	39	15	8	5	6	5	0
45 Power Systems	89	37	15	11	10	12	4
46 Semiconductor Devices	55	10	10	9	11	9	6
49 Miscellaneous-Elec.	32	7	5	4	6	8	2
51 Materials Processing & Handlir	56	23	3	5	6	8	11
52 Metal Working	49	14	4	13	8	6	4
53 Motors, Engines & Parts	56	29	10	2	3	6	6
54 Optics	43	12	7	6	8	9	1
55 Transportation	33	16	0	5	4	4	4
59 Miscellaneous Mechanical	42	17	6	5	7	2	5
61 Agriculture, Husbandry, Food	14	8	1	1	2	1	1
63 Apparel & Textile	9	4	1	2	0	1	1
64 Earth Working & Wells	5	2	0	1	0	1	1
65 Furniture, House Fixtures	9	3	2	2	2	0	0
66 Heating	8	6	1	0	0	1	0
67 Pipes & Joints	13	7	2	1	1	2	0
68 Receptacles	20	5	5	2	2	3	3
69 Miscellaneous-Others	123	44	19	17	13	14	16

%	N	1	2	3	4	5	Total
NBER All	1732	37.99	15.13	16.28	14.67	15.94	100
11 Agriculture, Food, Textiles	5	20	0	0	40	40	100
12 Coating	30	36.67	20	16.67	6.67	20	100
13 Gas	10	20	20	10	20	30	100
14 Organic Compounds	57	42.11	19.3	17.54	10.53	10.53	100
15 Resins	76	43.42	9.21	21.05	14.47	11.84	100
19 Miscellaneous-chemical	216	37.04	13.89	17.59	12.96	18.52	100
21 Communications	135	25.93	13.33	19.26	22.22	19.26	100
22 Computer Hardware	36	47.22	13.89	22.22	13.89	2.78	100
77 Computer Software	88	38.64	15.91	19.32	15.91	10.23	100
23 Computer Peripherals	31	29.03	16.13	19.35	12.9	22.58	100
24 Information Storage	38	13.16	15.79	15.79	15.79	39.47	100
31 Drugs	85	35.29	15.29	9.41	18.82	21.18	100
32 Surgery & Medical Instruments	107	44.86	12.15	11.21	17.76	14.02	100
33 Biotechnology	34	38.24	14.71	20.59	5.88	20.59	100
39 Miscellaneous-Drug&Med	26	38.46	23.08	15.38	15.38	7.69	100
41 Electrical Devices	40	35	25	17.5	12.5	10	100
42 Electrical Lighting	32	21.88	9.38	31.25	9.38	28.13	100
43 Measuring & Testing	56	46.43	16.07	17.86	10.71	8.93	100
44 Nuclears & X-rays	39	38.46	20.51	12.82	15.38	12.82	100
45 Power Systems	85	43.53	17.65	12.94	11.76	14.12	100
46 Semiconductor Devices	49	20.41	20.41	18.37	22.45	18.37	100
49 Miscellaneous-Elec.	30	23.33	16.67	13.33	20	26.67	100
51 Materials Processing & Handlir	45	51.11	6.67	11.11	13.33	17.78	100
52 Metal Working	45	31.11	8.89	28.89	17.78	13.33	100
53 Motors, Engines & Parts	50	58	20	4	6	12	100
54 Optics	42	28.57	16.67	14.29	19.05	21.43	100
55 Transportation	29	55.17	0	17.24	13.79	13.79	100
59 Miscellaneous Mechanical	37	45.95	16.22	13.51	18.92	5.41	100
61 Agriculture, Husbandry, Food	13	61.54	7.69	7.69	15.38	7.69	100
63 Apparel & Textile	8	50	12.5	25	0	12.5	100
64 Earth Working & Wells	4	50	0	25	0	25	100
65 Furniture, House Fixtures	9	33.33	22.22	22.22	22.22	0	100
66 Heating	8	75	12.5	0	0	12.5	100
67 Pipes & Joints	13	53.85	15.38	7.69	7.69	15.38	100
68 Receptacles	17	29.41	29.41	11.76	11.76	17.65	100
69 Miscellaneous-Others	107	41.12	17.76	15.89	12.15	13.08	100
US-JP weighted		**37.36**	**14.66**	**16.23**	**14.99**	**16.75**	100

Japan (2/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

クロスライセンシング
Cross-licensing

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	182	341	762	1140	388	845
Agriculture, Food, Textiles	60	3	9	12	11	2	23
Coating	80	3	9	22	24	6	16
Gas	45	2	7	12	10	2	12
Organic Compounds	120	8	14	28	26	7	37
Resins	125	4	8	23	42	16	32
Miscellaneous-chemical	208	13	24	34	58	18	61
Communications	160	3	9	27	67	25	29
Computer Hardware	59	3	4	6	21	8	17
Computer Software	123	5	13	16	42	27	20
Computer Peripherals	76	1	6	12	29	13	15
Information Storage	120	1	6	11	46	28	28
Drugs	127	4	8	22	35	21	37
Surgery & Medical Instruments	85	10	9	18	27	8	13
Biotechnology	87	2	6	15	27	8	29
Miscellaneous-Drug&Med	45	2	3	14	13	3	10
Electrical Devices	91	3	11	21	36	9	11
Electrical Lighting	96	1	7	15	38	11	24
Measuring & Testing	111	9	9	21	35	13	24
Nuclears & X-rays	72	9	6	14	22	5	16
Power Systems	172	3	10	29	72	21	37
Semiconductor Devices	129	1	10	22	48	24	24
Miscellaneous-Elec.	120	4	7	30	36	20	23
Materials Processing & Handling	103	13	4	19	28	7	32
Metal Working	137	10	18	37	40	12	20
Motors, Engines & Parts	145	3	8	29	57	18	30
Optics	100	4	7	15	37	11	26
Transportation	73	6	5	16	21	8	17
Miscellaneous Mechanical	124	6	17	42	24	7	28
Agriculture, Husbandry, Food	87	3	15	29	12	4	24
Apparel & Textile	77	9	12	29	12	0	15
Earth Working & Wells	20	1	3	4	4	5	3
Furniture, House Fixtures	51	4	5	11	11	1	19
Heating	84	2	10	26	26	2	18
Pipes & Joints	66	6	11	16	21	2	10
Receptacles	55	8	5	12	14	4	12
Miscellaneous-Others	225	13	26	53	68	12	53

%	N	1	2	3	4	5	Total
All	2813	6.47	12.12	27.09	40.53	13.79	100
Agriculture, Food, Textiles	37	8.11	24.32	32.43	29.73	5.41	100
Coating	64	4.69	14.06	34.38	37.5	9.38	100
Gas	33	6.06	21.21	36.36	30.3	6.06	100
Organic Compounds	83	9.64	16.87	33.73	31.33	8.43	100
Resins	93	4.3	8.6	24.73	45.16	17.2	100
Miscellaneous-chemical	147	8.84	16.33	23.13	39.46	12.24	100
Communications	131	2.29	6.87	20.61	51.15	19.08	100
Computer Hardware	42	7.14	9.52	14.29	50	19.05	100
Computer Software	103	4.85	12.62	15.53	40.78	26.21	100
Computer Peripherals	61	1.64	9.84	19.67	47.54	21.31	100
Information Storage	92	1.09	6.52	11.96	50	30.43	100
Drugs	90	4.44	8.89	24.44	38.89	23.33	100
Surgery & Medical Instruments	72	13.89	12.5	25	37.5	11.11	100
Biotechnology	58	3.45	10.34	25.86	46.55	13.79	100
Miscellaneous-Drug&Med	35	5.71	8.57	40	37.14	8.57	100
Electrical Devices	80	3.75	13.75	26.25	45	11.25	100
Electrical Lighting	72	1.39	9.72	20.83	52.78	15.28	100
Measuring & Testing	87	10.34	10.34	24.14	40.23	14.94	100
Nuclears & X-rays	56	16.07	10.71	25	39.29	8.93	100
Power Systems	135	2.22	7.41	21.48	53.33	15.56	100
Semiconductor Devices	105	0.95	9.52	20.95	45.71	22.86	100
Miscellaneous-Elec.	97	4.12	7.22	30.93	37.11	20.62	100
Materials Processing & Handling	71	18.31	5.63	26.76	39.44	9.86	100
Metal Working	117	8.55	15.38	31.62	34.19	10.26	100
Motors, Engines & Parts	115	2.61	6.96	25.22	49.57	15.65	100
Optics	74	5.41	9.46	20.27	50	14.86	100
Transportation	56	10.71	8.93	28.57	37.5	14.29	100
Miscellaneous Mechanical	96	6.25	17.71	43.75	25	7.29	100
Agriculture, Husbandry, Food	63	4.76	23.81	46.03	19.05	6.35	100
Apparel & Textile	62	14.52	19.35	46.77	19.35	0	100
Earth Working & Wells	17	5.88	17.65	23.53	23.53	29.41	100
Furniture, House Fixtures	32	12.5	15.63	34.38	34.38	3.13	100
Heating	66	3.03	15.15	39.39	39.39	3.03	100
Pipes & Joints	56	10.71	19.64	28.57	37.5	3.57	100
Receptacles	43	18.6	11.63	27.91	32.56	9.3	100
Miscellaneous-Others	172	7.56	15.12	30.81	39.53	6.98	100
US-JP weighted		6.09	11.29	25.01	42.34	15.27	100
JP weighted		5.82	11.09	24.98	42.74	15.37	100

純粋的な防衛
Pure defense

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	134	239	552	1338	566	829
Agriculture, Food, Textiles	60	4	6	4	17	6	23
Coating	80	2	6	11	25	19	17
Gas	45	1	1	10	14	7	12
Organic Compounds	120	6	13	22	30	13	36
Resins	125	8	5	20	41	19	32
Miscellaneous-chemical	208	11	15	29	67	25	61
Communications	160	6	7	23	73	23	28
Computer Hardware	59	4	2	3	22	12	16
Computer Software	123	3	8	17	55	20	20
Computer Peripherals	76	2	7	7	35	10	15
Information Storage	120	5	5	28	44	8	30
Drugs	127	3	15	21	36	15	37
Surgery & Medical Instruments	85	9	9	19	25	11	12
Biotechnology	87	6	1	12	29	11	28
Miscellaneous-Drug&Med	45	0	2	8	15	11	9
Electrical Devices	91	3	9	14	39	15	11
Electrical Lighting	96	4	8	21	24	14	25
Measuring & Testing	111	6	6	11	35	27	26
Nuclears & X-rays	72	7	8	9	25	7	16
Power Systems	172	4	6	29	73	24	36
Semiconductor Devices	129	3	13	23	49	18	23
Miscellaneous-Elec.	120	5	6	20	51	16	22
Materials Processing & Handling	103	1	5	14	30	22	31
Metal Working	137	5	11	21	55	25	20
Motors, Engines & Parts	145	2	7	16	62	29	29
Optics	100	2	8	14	38	12	26
Transportation	73	6	4	8	30	11	14
Miscellaneous Mechanical	124	2	11	14	44	24	29
Agriculture, Husbandry, Food	87	4	5	9	30	17	22
Apparel & Textile	77	0	2	12	32	19	12
Earth Working & Wells	20	1	2	2	7	5	3
Furniture, House Fixtures	51	0	1	4	14	14	18
Heating	84	0	8	18	31	10	17
Pipes & Joints	66	2	3	9	30	11	11
Receptacles	55	0	4	7	25	7	12
Miscellaneous-Others	225	7	10	43	86	29	50

N	1	2	3	4	5	Total
2829	4.74	8.45	19.51	47.3	20.01	100
37	10.81	16.22	10.81	45.95	16.22	100
63	3.17	9.52	17.46	39.68	30.16	100
33	3.03	3.03	30.3	42.42	21.21	100
84	7.14	15.48	26.19	35.71	15.48	100
93	8.6	5.38	21.51	44.09	20.43	100
147	7.48	10.2	19.73	45.58	17.01	100
132	4.55	5.3	17.42	55.3	17.42	100
43	9.3	4.65	6.98	51.16	27.91	100
103	2.91	7.77	16.5	53.4	19.42	100
61	3.28	11.48	11.48	57.38	16.39	100
90	5.56	5.56	31.11	48.89	8.89	100
90	3.33	16.67	23.33	40	16.67	100
73	12.33	12.33	26.03	34.25	15.07	100
59	10.17	1.69	20.34	49.15	18.64	100
36	0	5.56	22.22	41.67	30.56	100
80	3.75	11.25	17.5	48.75	18.75	100
71	5.63	11.27	29.58	33.8	19.72	100
85	7.06	7.06	12.94	41.18	31.76	100
56	12.5	14.29	16.07	44.64	12.5	100
136	2.94	4.41	21.32	53.68	17.65	100
106	2.83	12.26	21.7	46.23	16.98	100
98	5.1	6.12	20.41	52.04	16.33	100
72	1.39	6.94	19.44	41.67	30.56	100
117	4.27	9.4	17.95	47.01	21.37	100
116	1.72	6.03	13.79	53.45	25	100
74	2.7	10.81	18.92	51.35	16.22	100
59	10.17	6.78	13.56	50.85	18.64	100
95	2.11	11.58	14.74	46.32	25.26	100
65	6.15	7.69	13.85	46.15	26.15	100
65	0	3.08	18.46	49.23	29.23	100
17	5.88	11.76	11.76	41.18	29.41	100
33	0	3.03	12.12	42.42	42.42	100
67	0	11.94	26.87	46.27	14.93	100
55	3.64	5.45	16.36	54.55	20	100
43	0	9.3	16.28	58.14	16.28	100
175	4	5.71	24.57	49.14	16.57	100
	4.97	8.59	19.61	47.59	19.24	100
	4.6	8	19.26	48.54	19.6	100

US (2/5)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

B3C Cross-licensing (improve your bargaining position in the trading of your own patent rights in exchange for other firms' patent rights)

	all	1	2	3	4	5	missing
NBER All	1,919	762	256	284	233	187	197
11 Agriculture, Food, Textiles	8	4	0	1	0	1	2
12 Coating	34	16	4	3	4	3	4
13 Gas	11	3	2	3	3	0	0
14 Organic Compounds	61	34	12	7	3	2	3
15 Resins	84	44	12	13	4	1	10
19 Miscellaneous-chemical	233	100	29	35	34	19	16
21 Communications	149	24	22	30	32	27	14
22 Computer Hardware	42	19	4	6	4	3	6
77 Computer Software	93	29	11	8	20	19	6
23 Computer Peripherals	33	7	3	10	7	4	2
24 Information Storage	42	3	4	9	7	14	5
31 Drugs	101	41	12	13	13	6	16
32 Surgery & Medical Instruments	123	55	16	14	12	8	18
33 Biotechnology	41	17	2	4	4	7	7
39 Miscellaneous-Drug&Med	29	17	1	4	3	1	3
41 Electrical Devices	45	17	4	10	5	3	6
42 Electrical Lighting	33	4	5	7	8	7	2
43 Measuring & Testing	62	26	8	11	5	6	6
44 Nuclears & X-rays	39	14	9	4	8	3	1
45 Power Systems	89	45	12	11	9	8	4
46 Semiconductor Devices	55	8	8	10	13	9	7
49 Miscellaneous-Elec.	32	14	4	4	1	7	2
51 Materials Processing & Handling	56	28	5	6	3	2	12
52 Metal Working	49	20	8	11	2	2	6
53 Motors, Engines & Parts	56	31	11	4	3	1	6
54 Optics	43	6	9	8	10	9	1
55 Transportation	33	18	4	3	1	2	5
59 Miscellaneous Mechanical	42	18	8	6	4	1	5
61 Agriculture, Husbandry, Food	14	11	1	0	0	1	1
63 Apparel & Textile	9	5	0	2	2	0	0
64 Earth Working & Wells	5	3	0	0	0	1	1
65 Furniture, House Fixtures	9	5	1	3	0	0	0
66 Heating	8	6	1	1	0	0	0
67 Pipes & Joints	13	8	3	2	0	0	0
68 Receptacles	20	8	3	3	2	1	3
69 Miscellaneous-Others	123	54	18	18	7	9	17

B3D Pure defense (to ensure that the use of own technology not be blocked by others)

	all	1	2	3	4	5	missing
NBER All	1,919	398	211	358	389	384	179
11 Agriculture, Food, Textiles	8	1	0	2	1	2	2
12 Coating	34	11	1	3	10	6	3
13 Gas	11	2	0	4	3	2	0
14 Organic Compounds	61	17	9	13	10	9	3
15 Resins	84	20	10	15	22	10	7
19 Miscellaneous-chemical	233	49	35	41	47	45	16
21 Communications	149	22	17	35	34	28	13
22 Computer Hardware	42	10	4	8	9	6	5
77 Computer Software	93	15	12	13	23	24	6
23 Computer Peripherals	33	6	6	6	7	6	2
24 Information Storage	42	5	5	10	8	9	5
31 Drugs	101	29	12	10	17	17	16
32 Surgery & Medical Instruments	123	24	18	13	27	29	12
33 Biotechnology	41	13	5	5	3	8	7
39 Miscellaneous-Drug&Med	29	6	1	7	8	4	3
41 Electrical Devices	45	7	1	8	15	9	5
42 Electrical Lighting	33	7	3	6	8	7	2
43 Measuring & Testing	62	12	8	13	10	14	5
44 Nuclears & X-rays	39	11	2	10	5	10	1
45 Power Systems	89	20	13	12	20	20	4
46 Semiconductor Devices	55	10	4	9	10	16	6
49 Miscellaneous-Elec.	32	6	2	11	4	8	1
51 Materials Processing & Handling	56	12	3	8	8	15	10
52 Metal Working	49	7	1	14	15	5	7
53 Motors, Engines & Parts	56	11	8	16	8	7	6
54 Optics	43	7	3	12	14	6	1
55 Transportation	33	7	3	4	3	12	4
59 Miscellaneous Mechanical	42	7	6	6	8	10	5
61 Agriculture, Husbandry, Food	14	5	1	2	4	1	1
63 Apparel & Textile	9	0	2	0	4	3	0
64 Earth Working & Wells	5	1	0	1	0	2	1
65 Furniture, House Fixtures	9	2	1	3	2	1	0
66 Heating	8	0	0	3	0	5	0
67 Pipes & Joints	13	3	3	2	0	4	1
68 Receptacles	20	4	4	2	3	4	3
69 Miscellaneous-Others	123	29	8	31	19	20	16

%	N	1	2	3	4	5	Total
NBER All	1722	44.25	14.87	16.49	13.53	10.86	100
11 Agriculture, Food, Textiles	6	66.67	0	16.67	0	16.67	100
12 Coating	30	53.33	13.33	10	13.33	10	100
13 Gas	11	27.27	18.18	27.27	27.27	0	100
14 Organic Compounds	58	58.62	20.69	12.07	5.17	3.45	100
15 Resins	74	59.46	16.22	17.57	5.41	1.35	100
19 Miscellaneous-chemical	217	46.08	13.36	16.13	15.67	8.76	100
21 Communications	135	17.78	16.3	22.22	23.7	20	100
22 Computer Hardware	36	52.78	11.11	16.67	11.11	8.33	100
77 Computer Software	87	33.33	12.64	9.2	22.99	21.84	100
23 Computer Peripherals	31	22.58	9.68	32.26	22.58	12.9	100
24 Information Storage	37	8.11	10.81	24.32	18.92	37.84	100
31 Drugs	85	48.24	14.12	15.29	15.29	7.06	100
32 Surgery & Medical Instruments	105	52.38	15.24	13.33	11.43	7.62	100
33 Biotechnology	34	50	5.88	11.76	11.76	20.59	100
39 Miscellaneous-Drug&Med	26	65.38	3.85	15.38	11.54	3.85	100
41 Electrical Devices	39	43.59	10.26	25.64	12.82	7.69	100
42 Electrical Lighting	31	12.9	16.13	22.58	25.81	22.58	100
43 Measuring & Testing	56	46.43	14.29	19.64	8.93	10.71	100
44 Nuclears & X-rays	38	36.84	23.68	10.53	21.05	7.89	100
45 Power Systems	85	52.94	14.12	12.94	10.59	9.41	100
46 Semiconductor Devices	48	16.67	16.67	20.83	27.08	18.75	100
49 Miscellaneous-Elec.	30	46.67	13.33	13.33	3.33	23.33	100
51 Materials Processing & Handling	44	63.64	11.36	13.64	6.82	4.55	100
52 Metal Working	43	46.51	18.6	25.58	4.65	4.65	100
53 Motors, Engines & Parts	50	62	22	8	6	2	100
54 Optics	42	14.29	21.43	19.05	23.81	21.43	100
55 Transportation	28	64.29	14.29	10.71	3.57	7.14	100
59 Miscellaneous Mechanical	37	48.65	21.62	16.22	10.81	2.7	100
61 Agriculture, Husbandry, Food	13	84.62	7.69	0	0	7.69	100
63 Apparel & Textile	9	55.56	0	22.22	22.22	0	100
64 Earth Working & Wells	4	75	0	0	0	25	100
65 Furniture, House Fixtures	9	55.56	11.11	33.33	0	0	100
66 Heating	8	75	12.5	12.5	0	0	100
67 Pipes & Joints	13	61.54	23.08	15.38	0	0	100
68 Receptacles	17	47.06	17.65	17.65	11.76	5.88	100
69 Miscellaneous-Others	106	50.94	16.98	16.98	6.6	8.49	100
US-JP weighted		**42.92**	**14.81**	**16.7**	**13.79**	**11.77**	100

N	1	2	3	4	5	Total
1740	22.87	12.13	20.57	22.36	22.07	100
6	16.67	0	33.33	16.67	33.33	100
31	35.48	3.23	9.68	32.26	19.35	100
11	18.18	0	36.36	27.27	18.18	100
58	29.31	15.52	22.41	17.24	15.52	100
77	25.97	12.99	19.48	28.57	12.99	100
217	22.58	16.13	18.89	21.66	20.74	100
136	16.18	12.5	25.74	25	20.59	100
37	27.03	10.81	21.62	24.32	16.22	100
87	17.24	13.79	14.94	26.44	27.59	100
31	19.35	19.35	19.35	22.58	19.35	100
37	13.51	13.51	27.03	21.62	24.32	100
85	34.12	14.12	11.76	20	20	100
111	21.62	16.22	11.71	24.32	26.13	100
34	38.24	14.71	14.71	8.82	23.53	100
26	23.08	3.85	26.92	30.77	15.38	100
40	17.5	2.5	20	37.5	22.5	100
31	22.58	9.68	19.35	25.81	22.58	100
57	21.05	14.04	22.81	17.54	24.56	100
38	28.95	5.26	26.32	13.16	26.32	100
85	23.53	15.29	14.12	23.53	23.53	100
49	20.41	8.16	18.37	20.41	32.65	100
31	19.35	6.45	35.48	12.9	25.81	100
46	26.09	6.52	17.39	17.39	32.61	100
42	16.67	2.38	33.33	35.71	11.9	100
50	22	16	32	16	14	100
42	16.67	7.14	28.57	33.33	14.29	100
29	24.14	10.34	13.79	10.34	41.38	100
37	18.92	16.22	16.22	21.62	27.03	100
13	38.46	7.69	15.38	30.77	7.69	100
9	0	22.22	0	44.44	33.33	100
4	25	0	25	0	50	100
9	22.22	11.11	33.33	22.22	11.11	100
8	0	0	37.5	0	62.5	100
12	25	25	16.67	0	33.33	100
17	23.53	23.53	11.76	17.65	23.53	100
107	27.1	7.48	28.97	17.76	18.69	100
	22.5	**12.04**	**20.68**	**22.24**	**22.54**	100

Japan (3/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

ブロッキング特許
Blocking patents

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	121	202	508	1428	570	829
Agriculture, Food, Textiles	60	4	2	4	20	7	23
Coating	80	2	5	10	31	16	16
Gas	45	2	2	6	15	8	12
Organic Compounds	120	5	12	20	31	13	39
Resins	125	10	6	18	43	16	32
Miscellaneous-chemical	208	7	10	28	77	25	61
Communications	160	5	7	26	73	20	29
Computer Hardware	59	5	2	5	21	10	16
Computer Software	123	4	6	17	57	18	21
Computer Peripherals	76	2	5	6	38	10	15
Information Storage	120	5	11	25	39	11	29
Drugs	127	2	15	16	38	20	36
Surgery & Medical Instruments	85	5	7	18	28	15	12
Biotechnology	87	6	0	16	25	12	28
Miscellaneous-Drug&Med	45	0	1	6	18	10	10
Electrical Devices	91	4	7	13	47	9	11
Electrical Lighting	96	3	5	22	23	19	24
Measuring & Testing	111	5	7	12	40	23	24
Nuclears & X-rays	72	7	6	12	27	4	16
Power Systems	172	6	3	27	78	22	36
Semiconductor Devices	129	5	8	17	61	15	23
Miscellaneous-Elec.	120	2	6	16	55	18	23
Materials Processing & Handling	103	1	6	12	34	19	31
Metal Working	137	4	14	17	57	24	21
Motors, Engines & Parts	145	3	5	17	59	32	29
Optics	100	3	5	16	36	14	26
Transportation	73	4	3	12	24	14	16
Miscellaneous Mechanical	124	0	7	14	53	22	28
Agriculture, Husbandry, Food	87	3	3	5	33	20	23
Apparel & Textile	77	0	4	6	31	23	13
Earth Working & Wells	20	1	1	1	10	4	3
Furniture, House Fixtures	51	0	0	7	15	12	17
Heating	84	1	5	14	34	14	16
Pipes & Joints	66	1	0	11	30	15	9
Receptacles	55	1	0	4	32	7	11
Miscellaneous-Others	225	3	16	32	95	29	50

%	N	1	2	3	4	5	Total
All	2829	4.28	7.14	17.96	50.48	20.15	100
Agriculture, Food, Textiles	37	10.81	5.41	10.81	54.05	18.92	100
Coating	64	3.13	7.81	15.63	48.44	25	100
Gas	33	6.06	6.06	18.18	45.45	24.24	100
Organic Compounds	81	6.17	14.81	24.69	38.27	16.05	100
Resins	93	10.75	6.45	19.35	46.24	17.2	100
Miscellaneous-chemical	147	4.76	6.8	19.05	52.38	17.01	100
Communications	131	3.82	5.34	19.85	55.73	15.27	100
Computer Hardware	43	11.63	4.65	11.63	48.84	23.26	100
Computer Software	102	3.92	5.88	16.67	55.88	17.65	100
Computer Peripherals	61	3.28	8.2	9.84	62.3	16.39	100
Information Storage	91	5.49	12.09	27.47	42.86	12.09	100
Drugs	91	2.2	16.48	17.58	41.76	21.98	100
Surgery & Medical Instruments	73	6.85	9.59	24.66	38.36	20.55	100
Biotechnology	59	10.17	0	27.12	42.37	20.34	100
Miscellaneous-Drug&Med	35	0	2.86	17.14	51.43	28.57	100
Electrical Devices	80	5	8.75	16.25	58.75	11.25	100
Electrical Lighting	72	4.17	6.94	30.56	31.94	26.39	100
Measuring & Testing	87	5.75	8.05	13.79	45.98	26.44	100
Nuclears & X-rays	56	12.5	10.71	21.43	48.21	7.14	100
Power Systems	136	4.41	2.21	19.85	57.35	16.18	100
Semiconductor Devices	106	4.72	7.55	16.04	57.55	14.15	100
Miscellaneous-Elec.	97	2.06	6.19	16.49	56.7	18.56	100
Materials Processing & Handling	72	1.39	8.33	16.67	47.22	26.39	100
Metal Working	116	3.45	12.07	14.66	49.14	20.69	100
Motors, Engines & Parts	116	2.59	4.31	14.66	50.86	27.59	100
Optics	74	4.05	6.76	21.62	48.65	18.92	100
Transportation	57	7.02	5.26	21.05	42.11	24.56	100
Miscellaneous Mechanical	96	0	7.29	14.58	55.21	22.92	100
Agriculture, Husbandry, Food	64	4.69	4.69	7.81	51.56	31.25	100
Apparel & Textile	64	0	6.25	9.38	48.44	35.94	100
Earth Working & Wells	17	5.88	5.88	5.88	58.82	23.53	100
Furniture, House Fixtures	34	0	0	20.59	44.12	35.29	100
Heating	68	1.47	7.35	20.59	50	20.59	100
Pipes & Joints	57	1.75	0	19.3	52.63	26.32	100
Receptacles	44	2.27	0	9.09	72.73	15.91	100
Miscellaneous-Others	175	1.71	9.14	18.29	54.29	16.57	100
US-JP weighted		4.39	7.42	18.4	50.81	18.97	100
JP weighted		4.12	7.04	18.11	51.55	19.18	100

迂回の防止
Prevention of inventing-around

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	187	383	1017	1000	218	853
Agriculture, Food, Textiles	60	6	6	10	14	1	23
Coating	80	1	4	21	30	6	18
Gas	45	1	5	10	15	2	12
Organic Compounds	120	7	15	32	22	4	40
Resins	125	10	14	29	33	7	32
Miscellaneous-chemical	208	15	24	50	48	9	62
Communications	160	8	17	54	43	8	30
Computer Hardware	59	6	4	16	13	4	16
Computer Software	123	8	19	34	35	7	20
Computer Peripherals	76	3	15	22	16	5	15
Information Storage	120	9	14	39	24	5	29
Drugs	127	9	21	24	27	9	37
Surgery & Medical Instruments	85	9	10	24	25	5	12
Biotechnology	87	6	4	25	22	2	28
Miscellaneous-Drug&Med	45	2	1	16	11	5	10
Electrical Devices	91	3	12	31	30	4	11
Electrical Lighting	96	5	13	32	13	8	25
Measuring & Testing	111	7	10	32	32	7	23
Nuclears & X-rays	72	9	10	23	10	4	16
Power Systems	172	7	11	51	57	9	37
Semiconductor Devices	129	6	13	34	46	7	23
Miscellaneous-Elec.	120	7	12	38	34	6	23
Materials Processing & Handling	103	4	9	21	27	7	35
Metal Working	137	5	20	36	44	12	20
Motors, Engines & Parts	145	4	8	47	42	13	31
Optics	100	4	11	26	28	4	27
Transportation	73	6	5	20	17	8	17
Miscellaneous Mechanical	124	1	13	41	37	3	29
Agriculture, Husbandry, Food	87	4	6	17	27	9	24
Apparel & Textile	77	0	9	19	27	9	13
Earth Working & Wells	20	1	2	4	7	3	3
Furniture, House Fixtures	51	1	4	8	16	4	18
Heating	84	2	8	20	32	5	17
Pipes & Joints	66	1	5	28	19	2	11
Receptacles	55	1	3	16	19	4	12
Miscellaneous-Others	225	9	26	67	58	11	54

%	N	1	2	3	4	5	Total
All	2805	6.67	13.65	36.26	35.65	7.77	100
Agriculture, Food, Textiles	37	16.22	16.22	27.03	37.84	2.7	100
Coating	62	1.61	6.45	33.87	48.39	9.68	100
Gas	33	3.03	15.15	30.3	45.45	6.06	100
Organic Compounds	80	8.75	18.75	40	27.5	5	100
Resins	93	10.75	15.05	31.18	35.48	7.53	100
Miscellaneous-chemical	146	10.27	16.44	34.25	32.88	6.16	100
Communications	130	6.15	13.08	41.54	33.08	6.15	100
Computer Hardware	43	13.95	9.3	37.21	30.23	9.3	100
Computer Software	103	7.77	18.45	33.01	33.98	6.8	100
Computer Peripherals	61	4.92	24.59	36.07	26.23	8.2	100
Information Storage	91	9.89	15.38	42.86	26.37	5.49	100
Drugs	90	10	23.33	26.67	30	10	100
Surgery & Medical Instruments	73	12.33	13.7	32.88	34.25	6.85	100
Biotechnology	59	10.17	6.78	42.37	37.29	3.39	100
Miscellaneous-Drug&Med	35	5.71	2.86	45.71	31.43	14.29	100
Electrical Devices	80	3.75	15	38.75	37.5	5	100
Electrical Lighting	71	7.04	18.31	45.07	18.31	11.27	100
Measuring & Testing	88	7.95	11.36	36.36	36.36	7.95	100
Nuclears & X-rays	56	16.07	17.86	41.07	17.86	7.14	100
Power Systems	135	5.19	8.15	37.78	42.22	6.67	100
Semiconductor Devices	106	5.66	12.26	32.08	43.4	6.6	100
Miscellaneous-Elec.	97	7.22	12.37	39.18	35.05	6.19	100
Materials Processing & Handling	68	5.88	13.24	30.88	39.71	10.29	100
Metal Working	117	4.27	17.09	30.77	37.61	10.26	100
Motors, Engines & Parts	114	3.51	7.02	41.23	36.84	11.4	100
Optics	73	5.48	15.07	35.62	38.36	5.48	100
Transportation	56	10.71	8.93	35.71	30.36	14.29	100
Miscellaneous Mechanical	95	1.05	13.68	43.16	38.95	3.16	100
Agriculture, Husbandry, Food	63	6.35	9.52	26.98	42.86	14.29	100
Apparel & Textile	64	0	14.06	29.69	42.19	14.06	100
Earth Working & Wells	17	5.88	11.76	23.53	41.18	17.65	100
Furniture, House Fixtures	33	3.03	12.12	24.24	48.48	12.12	100
Heating	67	2.99	11.94	29.85	47.76	7.46	100
Pipes & Joints	55	1.82	9.09	50.91	34.55	3.64	100
Receptacles	43	2.33	6.98	37.21	44.19	9.3	100
Miscellaneous-Others	171	5.26	15.2	39.18	33.92	6.43	100
US-JP weighted		7.14	14.37	36.41	34.66	7.42	100
JP weighted		6.7	14.08	36.9	34.77	7.54	100

US (3/5)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

F.2. How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?

B3E Blocking patents (avoid that others commercialize similar inventions)

	all	1	2	3	4	5	missing
NBER All	1,919	365	200	374	419	376	185
11 Agriculture, Food, Textiles	8	1	0	0	3	2	2
12 Coating	34	8	4	4	9	5	4
13 Gas	11	1	1	3	6	0	0
14 Organic Compounds	61	15	11	13	13	5	4
15 Resins	84	14	10	17	22	12	9
19 Miscellaneous-chemical	233	41	26	53	50	48	15
21 Communications	149	33	18	29	28	26	15
22 Computer Hardware	42	13	4	5	11	3	6
77 Computer Software	93	27	11	10	21	18	6
23 Computer Peripherals	33	5	4	10	7	5	2
24 Information Storage	42	5	3	10	9	10	5
31 Drugs	101	24	8	14	18	21	16
32 Surgery & Medical Instruments	123	20	15	14	33	27	14
33 Biotechnology	41	13	4	7	7	4	6
39 Miscellaneous-Drug&Med	29	6	1	8	8	3	3
41 Electrical Devices	45	4	2	9	12	13	5
42 Electrical Lighting	33	4	6	8	8	5	2
43 Measuring & Testing	62	11	9	12	11	15	4
44 Nuclears & X-rays	39	7	4	8	11	7	2
45 Power Systems	89	12	13	18	20	22	4
46 Semiconductor Devices	55	7	11	9	11	10	7
49 Miscellaneous-Elec.	32	7	2	9	4	9	1
51 Materials Processing & Handling	56	10	4	8	7	16	11
52 Metal Working	49	6	1	15	14	7	6
53 Motors, Engines & Parts	56	10	3	18	13	6	6
54 Optics	43	6	6	12	11	7	1
55 Transportation	33	4	2	6	7	9	5
59 Miscellaneous Mechanical	42	8	5	7	6	11	5
61 Agriculture, Husbandry, Food	14	3	1	0	5	4	1
63 Apparel & Textile	9	0	0	3	0	6	0
64 Earth Working & Wells	5	0	0	1	0	3	1
65 Furniture, House Fixtures	9	2	1	4	1	1	0
66 Heating	8	0	0	4	1	3	0
67 Pipes & Joints	13	4	0	3	1	5	0
68 Receptacles	20	7	1	2	4	4	2
69 Miscellaneous-Others	123	27	9	21	27	24	15

%	N	1	2	3	4	5	Total
NBER All	1734	21.05	11.53	21.57	24.16	21.68	100
11 Agriculture, Food, Textiles	6	16.67	0	0	50	33.33	100
12 Coating	30	26.67	13.33	13.33	30	16.67	100
13 Gas	11	9.09	9.09	27.27	54.55	0	100
14 Organic Compounds	57	26.32	19.3	22.81	22.81	8.77	100
15 Resins	75	18.67	13.33	22.67	29.33	16	100
19 Miscellaneous-chemical	218	18.81	11.93	24.31	22.94	22.02	100
21 Communications	134	24.63	13.43	21.64	20.9	19.4	100
22 Computer Hardware	36	36.11	11.11	13.89	30.56	8.33	100
77 Computer Software	87	31.03	12.64	11.49	24.14	20.69	100
23 Computer Peripherals	31	16.13	12.9	32.26	22.58	16.13	100
24 Information Storage	37	13.51	8.11	27.03	24.32	27.03	100
31 Drugs	85	28.24	9.41	16.47	21.18	24.71	100
32 Surgery & Medical Instruments	109	18.35	13.76	12.84	30.28	24.77	100
33 Biotechnology	35	37.14	11.43	20	20	11.43	100
39 Miscellaneous-Drug&Med	26	23.08	3.85	30.77	30.77	11.54	100
41 Electrical Devices	40	10	5	22.5	30	32.5	100
42 Electrical Lighting	31	12.9	19.35	25.81	25.81	16.13	100
43 Measuring & Testing	58	18.97	15.52	20.69	18.97	25.86	100
44 Nuclears & X-rays	37	18.92	10.81	21.62	29.73	18.92	100
45 Power Systems	85	14.12	15.29	21.18	23.53	25.88	100
46 Semiconductor Devices	48	14.58	22.92	18.75	22.92	20.83	100
49 Miscellaneous-Elec.	31	22.58	6.45	29.03	12.9	29.03	100
51 Materials Processing & Handling	45	22.22	8.89	17.78	15.56	35.56	100
52 Metal Working	43	13.95	2.33	34.88	32.56	16.28	100
53 Motors, Engines & Parts	50	20	6	36	26	12	100
54 Optics	42	14.29	14.29	28.57	26.19	16.67	100
55 Transportation	28	14.29	7.14	21.43	25	32.14	100
59 Miscellaneous Mechanical	37	21.62	13.51	18.92	16.22	29.73	100
61 Agriculture, Husbandry, Food	13	23.08	7.69	0	38.46	30.77	100
63 Apparel & Textile	9	0	0	33.33	0	66.67	100
64 Earth Working & Wells	4	0	0	25	0	75	100
65 Furniture, House Fixtures	9	22.22	11.11	44.44	11.11	11.11	100
66 Heating	8	0	0	50	12.5	37.5	100
67 Pipes & Joints	13	30.77	0	23.08	7.69	38.46	100
68 Receptacles	18	38.89	5.56	11.11	22.22	22.22	100
69 Miscellaneous-Others	108	25	8.33	19.44	25	22.22	100
US-JP weighted		**20.81**	**11.47**	**21.65**	**23.79**	**22.28**	100

B3F Prevention of inventing-around (avoid that others invent around the patent of the own firm)

	all	1	2	3	4	5	missing
NBER All	1,919	818	282	258	214	148	199
11 Agriculture, Food, Textiles	8	2	1	0	1	2	2
12 Coating	34	18	1	5	3	3	4
13 Gas	11	3	0	4	3	0	1
14 Organic Compounds	61	37	6	6	7	1	4
15 Resins	84	33	9	17	14	4	7
19 Miscellaneous-chemical	233	89	37	37	28	23	19
21 Communications	149	67	18	20	20	9	15
22 Computer Hardware	42	20	7	2	6	1	6
77 Computer Software	93	53	18	7	4	5	6
23 Computer Peripherals	33	15	7	5	3	1	2
24 Information Storage	42	8	6	12	8	3	5
31 Drugs	101	37	15	11	10	11	17
32 Surgery & Medical Instruments	123	46	13	23	11	13	17
33 Biotechnology	41	19	4	9	1	1	7
39 Miscellaneous-Drug&Med	29	14	2	3	3	3	4
41 Electrical Devices	45	11	5	8	11	4	6
42 Electrical Lighting	33	11	7	7	2	4	2
43 Measuring & Testing	62	34	10	3	6	4	5
44 Nuclears & X-rays	39	20	4	7	4	3	1
45 Power Systems	89	44	15	10	12	4	4
46 Semiconductor Devices	55	17	12	6	8	6	6
49 Miscellaneous-Elec.	32	16	7	4	2	2	1
51 Materials Processing & Handling	56	20	5	8	3	7	13
52 Metal Working	49	22	8	8	4	0	7
53 Motors, Engines & Parts	56	30	9	5	4	2	6
54 Optics	43	20	9	5	5	3	1
55 Transportation	33	11	7	4	4	2	5
59 Miscellaneous Mechanical	42	15	9	5	4	4	5
61 Agriculture, Husbandry, Food	14	7	2	1	2	0	2
63 Apparel & Textile	9	1	2	2	0	3	1
64 Earth Working & Wells	5	3	0	0	0	1	1
65 Furniture, House Fixtures	9	7	1	0	0	1	0
66 Heating	8	3	1	0	1	3	0
67 Pipes & Joints	13	8	3	0	1	1	0
68 Receptacles	20	8	4	2	4	0	2
69 Miscellaneous-Others	123	49	18	12	15	14	15

%	N	1	2	3	4	5	Total
NBER All	1720	47.56	16.4	15	12.44	8.6	100
11 Agriculture, Food, Textiles	6	33.33	16.67	0	16.67	33.33	100
12 Coating	30	60	3.33	16.67	10	10	100
13 Gas	10	30	0	40	30	0	100
14 Organic Compounds	57	64.91	10.53	10.53	12.28	1.75	100
15 Resins	77	42.86	11.69	22.08	18.18	5.19	100
19 Miscellaneous-chemical	214	41.59	17.29	17.29	13.08	10.75	100
21 Communications	134	50	13.43	14.93	14.93	6.72	100
22 Computer Hardware	36	55.56	19.44	5.56	16.67	2.78	100
77 Computer Software	87	60.92	20.69	8.05	4.6	5.75	100
23 Computer Peripherals	31	48.39	22.58	16.13	9.68	3.23	100
24 Information Storage	37	21.62	16.22	32.43	21.62	8.11	100
31 Drugs	84	44.05	17.86	13.1	11.9	13.1	100
32 Surgery & Medical Instruments	106	43.4	12.26	21.7	10.38	12.26	100
33 Biotechnology	34	55.88	11.76	26.47	2.94	2.94	100
39 Miscellaneous-Drug&Med	25	56	8	12	12	12	100
41 Electrical Devices	39	28.21	12.82	20.51	28.21	10.26	100
42 Electrical Lighting	31	35.48	22.58	22.58	6.45	12.9	100
43 Measuring & Testing	57	59.65	17.54	5.26	10.53	7.02	100
44 Nuclears & X-rays	38	52.63	10.53	18.42	10.53	7.89	100
45 Power Systems	85	51.76	17.65	11.76	14.12	4.71	100
46 Semiconductor Devices	49	34.69	24.49	12.24	16.33	12.24	100
49 Miscellaneous-Elec.	31	51.61	22.58	12.9	6.45	6.45	100
51 Materials Processing & Handling	43	46.51	11.63	18.6	6.98	16.28	100
52 Metal Working	42	52.38	19.05	19.05	9.52	0	100
53 Motors, Engines & Parts	50	60	18	10	8	4	100
54 Optics	42	47.62	21.43	11.9	11.9	7.14	100
55 Transportation	28	39.29	25	14.29	14.29	7.14	100
59 Miscellaneous Mechanical	37	40.54	24.32	13.51	10.81	10.81	100
61 Agriculture, Husbandry, Food	12	58.33	16.67	8.33	16.67	0	100
63 Apparel & Textile	8	12.5	25	25	0	37.5	100
64 Earth Working & Wells	4	75	0	0	0	25	100
65 Furniture, House Fixtures	9	77.78	11.11	0	0	11.11	100
66 Heating	8	37.5	12.5	0	12.5	37.5	100
67 Pipes & Joints	13	61.54	23.08	0	7.69	7.69	100
68 Receptacles	18	44.44	22.22	11.11	22.22	0	100
69 Miscellaneous-Others	108	45.37	16.67	11.11	13.89	12.96	100
US-JP weighted		**47.23**	**16.67**	**15.09**	**12.28**	**8.74**	100

Japan (4/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

発明者の評判
Inventors' reputation

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	646	780	1051	286	49	846
Agriculture, Food, Textiles	60	13	11	9	3	1	23
Coating	80	9	20	25	9	0	17
Gas	45	3	11	15	2	3	11
Organic Compounds	120	27	23	23	7	0	40
Resins	125	22	28	31	8	3	33
Miscellaneous-chemical	208	47	31	49	17	3	61
Communications	160	33	29	44	20	5	29
Computer Hardware	59	12	7	18	5	1	16
Computer Software	123	30	30	35	7	1	20
Computer Peripherals	76	15	19	20	6	1	15
Information Storage	120	20	31	36	4	0	29
Drugs	127	26	19	30	12	3	37
Surgery & Medical Instruments	85	19	20	24	8	2	12
Biotechnology	87	10	14	29	6	1	27
Miscellaneous-Drug&Med	45	5	10	16	3	1	10
Electrical Devices	91	12	27	29	12	0	11
Electrical Lighting	96	11	28	21	7	3	26
Measuring & Testing	111	19	26	31	11	0	24
Nuclears & X-rays	72	14	19	14	9	0	16
Power Systems	172	32	38	51	13	2	36
Semiconductor Devices	129	26	25	42	12	1	23
Miscellaneous-Elec.	120	21	19	45	10	1	24
Materials Processing & Handling	103	13	21	32	5	0	32
Metal Working	137	31	31	46	9	0	20
Motors, Engines & Parts	145	25	29	45	11	4	31
Optics	100	15	25	29	4	1	26
Transportation	73	12	14	25	5	0	17
Miscellaneous Mechanical	124	14	30	39	13	0	28
Agriculture, Husbandry, Food	87	12	16	26	6	2	25
Apparel & Textile	77	14	22	20	7	1	13
Earth Working & Wells	20	5	3	4	1	4	3
Furniture, House Fixtures	51	9	12	8	4	1	17
Heating	84	12	17	28	7	2	18
Pipes & Joints	66	10	14	26	5	0	11
Receptacles	55	15	8	13	6	1	12
Miscellaneous-Others	225	33	53	73	12	1	53

%	N	1	2	3	4	5	Total
All	2812	22.97	27.74	37.38	10.17	1.74	100
Agriculture, Food, Textiles	37	35.14	29.73	24.32	8.11	2.7	100
Coating	63	14.29	31.75	39.68	14.29	0	100
Gas	34	8.82	32.35	44.12	5.88	8.82	100
Organic Compounds	80	33.75	28.75	28.75	8.75	0	100
Resins	92	23.91	30.43	33.7	8.7	3.26	100
Miscellaneous-chemical	147	31.97	21.09	33.33	11.56	2.04	100
Communications	131	25.19	22.14	33.59	15.27	3.82	100
Computer Hardware	43	27.91	16.28	41.86	11.63	2.33	100
Computer Software	103	29.13	29.13	33.98	6.8	0.97	100
Computer Peripherals	61	24.59	31.15	32.79	9.84	1.64	100
Information Storage	91	21.98	34.07	39.56	4.4	0	100
Drugs	90	28.89	21.11	33.33	13.33	3.33	100
Surgery & Medical Instruments	73	26.03	27.4	32.88	10.96	2.74	100
Biotechnology	60	16.67	23.33	48.33	10	1.67	100
Miscellaneous-Drug&Med	35	14.29	28.57	45.71	8.57	2.86	100
Electrical Devices	80	15	33.75	36.25	15	0	100
Electrical Lighting	70	15.71	40	30	10	4.29	100
Measuring & Testing	87	21.84	29.89	35.63	12.64	0	100
Nuclears & X-rays	56	25	33.93	25	16.07	0	100
Power Systems	136	23.53	27.94	37.5	9.56	1.47	100
Semiconductor Devices	106	24.53	23.58	39.62	11.32	0.94	100
Miscellaneous-Elec.	96	21.88	19.79	46.88	10.42	1.04	100
Materials Processing & Handling	71	18.31	29.58	45.07	7.04	0	100
Metal Working	117	26.5	26.5	39.32	7.69	0	100
Motors, Engines & Parts	114	21.93	25.44	39.47	9.65	3.51	100
Optics	74	20.27	33.78	39.19	5.41	1.35	100
Transportation	56	21.43	25	44.64	8.93	0	100
Miscellaneous Mechanical	96	14.58	31.25	40.63	13.54	0	100
Agriculture, Husbandry, Food	62	19.35	25.81	41.94	9.68	3.23	100
Apparel & Textile	64	21.88	34.38	31.25	10.94	1.56	100
Earth Working & Wells	17	29.41	17.65	23.53	5.88	23.53	100
Furniture, House Fixtures	34	26.47	35.29	23.53	11.76	2.94	100
Heating	66	18.18	25.76	42.42	10.61	3.03	100
Pipes & Joints	55	18.18	25.45	47.27	9.09	0	100
Receptacles	43	34.88	18.6	30.23	13.95	2.33	100
Miscellaneous-Others	172	19.19	30.81	42.44	6.98	0.58	100
US-JP weighted		23.74	27.32	36.8	10.41	1.73	100
JP weighted		23.45	27.53	36.92	10.43	1.68	100

企業の評判
Corporations' reputation (Patenting enhances the technological reputation of the firm)

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	3658	319	451	887	980	189	832
Agriculture, Food, Textiles	60	7	8	10	6	6	23
Coating	80	6	14	21	20	2	17
Gas	45	2	4	14	9	4	12
Organic Compounds	120	10	15	21	30	4	40
Resins	125	9	17	36	21	10	32
Miscellaneous-chemical	208	27	16	46	53	5	61
Communications	160	14	19	47	43	9	28
Computer Hardware	59	7	4	14	20	0	14
Computer Software	123	18	22	25	31	7	20
Computer Peripherals	76	8	8	22	21	1	16
Information Storage	120	11	21	37	19	3	29
Drugs	127	13	13	26	33	5	37
Surgery & Medical Instruments	85	6	16	27	19	4	13
Biotechnology	87	3	6	19	27	5	27
Miscellaneous-Drug&Med	45	3	0	14	12	6	10
Electrical Devices	91	3	17	26	31	3	11
Electrical Lighting	96	4	16	23	24	5	24
Measuring & Testing	111	8	15	32	25	7	24
Nuclears & X-rays	72	9	12	14	17	4	16
Power Systems	172	20	21	45	42	8	36
Semiconductor Devices	129	15	18	39	32	2	23
Miscellaneous-Elec.	120	14	7	30	40	7	22
Materials Processing & Handling	103	5	8	26	27	5	32
Metal Working	137	13	14	38	45	8	19
Motors, Engines & Parts	145	14	17	39	38	8	29
Optics	100	7	12	30	20	5	26
Transportation	73	8	10	14	20	5	16
Miscellaneous Mechanical	124	7	14	30	41	5	27
Agriculture, Husbandry, Food	87	4	8	18	24	11	22
Apparel & Textile	77	6	12	20	20	6	13
Earth Working & Wells	20	3	3	1	6	5	2
Furniture, House Fixtures	51	4	4	3	20	2	18
Heating	84	6	13	18	24	5	18
Pipes & Joints	66	3	8	14	29	2	10
Receptacles	55	8	2	3	25	6	11
Miscellaneous-Others	225	14	37	45	66	9	54

%	N	1	2	3	4	5	Total
All	2826	11.29	15.96	31.39	34.68	6.69	100
Agriculture, Food, Textiles	37	18.92	21.62	27.03	16.22	16.22	100
Coating	63	9.52	22.22	33.33	31.75	3.17	100
Gas	33	6.06	12.12	42.42	27.27	12.12	100
Organic Compounds	80	12.5	18.75	26.25	37.5	5	100
Resins	93	9.68	18.28	38.71	22.58	10.75	100
Miscellaneous-chemical	147	18.37	10.88	31.29	36.05	3.4	100
Communications	132	10.61	14.39	35.61	32.58	6.82	100
Computer Hardware	45	15.56	8.89	31.11	44.44	0	100
Computer Software	103	17.48	21.36	24.27	30.1	6.8	100
Computer Peripherals	60	13.33	13.33	36.67	35	1.67	100
Information Storage	91	12.09	23.08	40.66	20.88	3.3	100
Drugs	90	14.44	14.44	28.89	36.67	5.56	100
Surgery & Medical Instruments	72	8.33	22.22	37.5	26.39	5.56	100
Biotechnology	60	5	10	31.67	45	8.33	100
Miscellaneous-Drug&Med	35	8.57	0	40	34.29	17.14	100
Electrical Devices	80	3.75	21.25	32.5	38.75	3.75	100
Electrical Lighting	72	5.56	22.22	31.94	33.33	6.94	100
Measuring & Testing	87	9.2	17.24	36.78	28.74	8.05	100
Nuclears & X-rays	56	16.07	21.43	25	30.36	7.14	100
Power Systems	136	14.71	15.44	33.09	30.88	5.88	100
Semiconductor Devices	106	14.15	16.98	36.79	30.19	1.89	100
Miscellaneous-Elec.	98	14.29	7.14	30.61	40.82	7.14	100
Materials Processing & Handling	71	7.04	11.27	36.62	38.03	7.04	100
Metal Working	118	11.02	11.86	32.2	38.14	6.78	100
Motors, Engines & Parts	116	12.07	14.66	33.62	32.76	6.9	100
Optics	74	9.46	16.22	40.54	27.03	6.76	100
Transportation	57	14.04	17.54	24.56	35.09	8.77	100
Miscellaneous Mechanical	97	7.22	14.43	30.93	42.27	5.15	100
Agriculture, Husbandry, Food	65	6.15	12.31	27.69	36.92	16.92	100
Apparel & Textile	64	9.38	18.75	31.25	31.25	9.38	100
Earth Working & Wells	18	16.67	16.67	5.56	33.33	27.78	100
Furniture, House Fixtures	33	12.12	12.12	9.09	60.61	6.06	100
Heating	66	9.09	19.7	27.27	36.36	7.58	100
Pipes & Joints	56	5.36	14.29	25	51.79	3.57	100
Receptacles	44	18.18	4.55	6.82	56.82	13.64	100
Miscellaneous-Others	171	8.19	21.64	26.32	38.6	5.26	100
US-JP weighted		11.71	16.13	32.22	33.92	6.02	100
JP weighted		11.48	15.94	32.21	34.45	5.93	100

US (4/5)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

B3G Inventors' reputation

	all	1	2	3	4	5	missing
NBER All	1,919	911	295	261	169	95	188
11 Agriculture, Food, Textiles	8	3	1	0	1	1	2
12 Coating	34	18	5	4	3	1	3
13 Gas	11	5	2	1	1	0	2
14 Organic Compounds	61	30	8	10	6	4	3
15 Resins	84	40	14	11	9	2	8
19 Miscellaneous-chemical	233	125	34	25	25	8	16
21 Communications	149	63	29	25	11	6	15
22 Computer Hardware	42	11	6	11	7	3	4
77 Computer Software	93	44	10	20	5	8	6
23 Computer Peripherals	33	22	6	2	0	1	2
24 Information Storage	42	13	7	7	6	4	5
31 Drugs	101	36	20	14	10	4	17
32 Surgery & Medical Instruments	123	58	16	16	11	6	16
33 Biotechnology	41	16	5	8	4	2	6
39 Miscellaneous-Drug&Med	29	13	4	4	4	1	3
41 Electrical Devices	45	19	9	6	3	3	5
42 Electrical Lighting	33	12	12	4	3	0	2
43 Measuring & Testing	62	30	7	6	9	5	5
44 Nuclears & X-rays	39	20	6	4	6	1	2
45 Power Systems	89	50	13	12	6	4	4
46 Semiconductor Devices	55	19	8	9	8	5	6
49 Miscellaneous-Elec.	32	18	3	5	4	2	0
51 Materials Processing & Handling	56	24	9	5	2	4	12
52 Metal Working	49	24	4	9	6	0	6
53 Motors, Engines & Parts	56	31	5	8	3	3	6
54 Optics	43	20	8	8	3	3	1
55 Transportation	33	21	4	0	2	1	5
59 Miscellaneous Mechanical	42	17	11	3	3	3	5
61 Agriculture, Husbandry, Food	14	10	0	1	1	1	1
63 Apparel & Textile	9	7	1	1	0	0	0
64 Earth Working & Wells	5	3	0	0	0	1	1
65 Furniture, House Fixtures	9	7	1	1	0	0	0
66 Heating	8	2	4	2	0	0	0
67 Pipes & Joints	13	8	5	0	0	0	0
68 Receptacles	20	12	2	2	0	1	3
69 Miscellaneous-Others	123	60	16	17	7	7	16

B3H Firm's reputation (Patenting enhances the technological reputation of the firm)

	all	1	2	3	4	5	missing
NBER All	1,919	499	273	447	337	191	172
11 Agriculture, Food, Textiles	8	3	1	0	2	1	1
12 Coating	34	9	8	4	6	4	3
13 Gas	11	2	3	4	2	0	0
14 Organic Compounds	61	21	7	14	10	5	4
15 Resins	84	20	15	24	11	8	6
19 Miscellaneous-chemical	233	65	38	54	41	21	14
21 Communications	149	39	14	39	30	14	13
22 Computer Hardware	42	5	6	10	10	7	4
77 Computer Software	93	21	8	28	22	8	6
23 Computer Peripherals	33	13	4	8	3	3	2
24 Information Storage	42	6	4	14	7	7	4
31 Drugs	101	27	15	16	17	10	16
32 Surgery & Medical Instruments	123	35	17	20	23	14	14
33 Biotechnology	41	9	7	8	5	4	8
39 Miscellaneous-Drug&Med	29	7	5	5	6	3	3
41 Electrical Devices	45	11	4	12	9	4	5
42 Electrical Lighting	33	7	5	9	7	3	2
43 Measuring & Testing	62	6	8	22	16	5	5
44 Nuclears & X-rays	39	8	10	7	10	3	1
45 Power Systems	89	23	18	21	15	8	4
46 Semiconductor Devices	55	8	7	18	10	6	6
49 Miscellaneous-Elec.	32	9	4	5	9	5	0
51 Materials Processing & Handling	56	21	6	8	6	5	10
52 Metal Working	49	14	4	11	10	6	4
53 Motors, Engines & Parts	56	17	6	15	7	5	6
54 Optics	43	13	7	13	6	3	1
55 Transportation	33	9	7	5	6	1	5
59 Miscellaneous Mechanical	42	10	6	9	7	5	5
61 Agriculture, Husbandry, Food	14	5	2	3	2	0	2
63 Apparel & Textile	9	2	1	4	2	0	0
64 Earth Working & Wells	5	1	0	2	1	0	1
65 Furniture, House Fixtures	9	2	1	5	1	0	0
66 Heating	8	0	1	2	3	2	0
67 Pipes & Joints	13	5	2	3	1	2	0
68 Receptacles	20	9	2	4	1	1	3
69 Miscellaneous-Others	123	37	20	21	13	18	14

%	N	1	2	3	4	5	Total
NBER All	1731	52.63	17.04	15.08	9.76	5.49	100
11 Agriculture, Food, Textiles	6	50	16.67	0	16.67	16.67	100
12 Coating	31	58.06	16.13	12.9	9.68	3.23	100
13 Gas	9	55.56	22.22	11.11	11.11	0	100
14 Organic Compounds	58	51.72	13.79	17.24	10.34	6.9	100
15 Resins	76	52.63	18.42	14.47	11.84	2.63	100
19 Miscellaneous-chemical	217	57.6	15.67	11.52	11.52	3.69	100
21 Communications	134	47.01	21.64	18.66	8.21	4.48	100
22 Computer Hardware	38	28.95	15.79	28.95	18.42	7.89	100
77 Computer Software	87	50.57	11.49	22.99	5.75	9.2	100
23 Computer Peripherals	31	70.97	19.35	6.45	0	3.23	100
24 Information Storage	37	35.14	18.92	18.92	16.22	10.81	100
31 Drugs	84	42.86	23.81	16.67	11.9	4.76	100
32 Surgery & Medical Instruments	107	54.21	14.95	14.95	10.28	5.61	100
33 Biotechnology	35	45.71	14.29	22.86	11.43	5.71	100
39 Miscellaneous-Drug&Med	26	50	15.38	15.38	15.38	3.85	100
41 Electrical Devices	40	47.5	22.5	15	7.5	7.5	100
42 Electrical Lighting	31	38.71	38.71	12.9	9.68	0	100
43 Measuring & Testing	57	52.63	12.28	10.53	15.79	8.77	100
44 Nuclears & X-rays	37	54.05	16.22	10.81	16.22	2.7	100
45 Power Systems	85	58.82	15.29	14.12	7.06	4.71	100
46 Semiconductor Devices	49	38.78	16.33	18.37	16.33	10.2	100
49 Miscellaneous-Elec.	32	56.25	9.38	15.63	12.5	6.25	100
51 Materials Processing & Handling	44	54.55	20.45	11.36	4.55	9.09	100
52 Metal Working	43	55.81	9.3	20.93	13.95	0	100
53 Motors, Engines & Parts	50	62	10	16	6	6	100
54 Optics	42	47.62	19.05	19.05	7.14	7.14	100
55 Transportation	28	75	14.29	0	7.14	3.57	100
59 Miscellaneous Mechanical	37	45.95	29.73	8.11	8.11	8.11	100
61 Agriculture, Husbandry, Food	13	76.92	0	7.69	7.69	7.69	100
63 Apparel & Textile	9	77.78	11.11	11.11	0	0	100
64 Earth Working & Wells	4	75	0	0	0	25	100
65 Furniture, House Fixtures	9	77.78	11.11	11.11	0	0	100
66 Heating	8	25	50	25	0	0	100
67 Pipes & Joints	13	61.54	38.46	0	0	0	100
68 Receptacles	17	70.59	11.76	11.76	0	5.88	100
69 Miscellaneous-Others	107	56.07	14.95	15.89	6.54	6.54	100
US-JP weighted		**52.07**	**17.4**	**15.01**	**9.85**	**5.67**	100

	N	1	2	3	4	5	Total
NBER All	1747	28.56	15.63	25.59	19.29	10.93	100
11 Agriculture, Food, Textiles	7	42.86	14.29	0	28.57	14.29	100
12 Coating	31	29.03	25.81	12.9	19.35	12.9	100
13 Gas	11	18.18	27.27	36.36	18.18	0	100
14 Organic Compounds	57	36.84	12.28	24.56	17.54	8.77	100
15 Resins	78	25.64	19.23	30.77	14.1	10.26	100
19 Miscellaneous-chemical	219	29.68	17.35	24.66	18.72	9.59	100
21 Communications	136	28.68	10.29	28.68	22.06	10.29	100
22 Computer Hardware	38	13.16	15.79	26.32	26.32	18.42	100
77 Computer Software	87	24.14	9.2	32.18	25.29	9.2	100
23 Computer Peripherals	31	41.94	12.9	25.81	9.68	9.68	100
24 Information Storage	38	15.79	10.53	36.84	18.42	18.42	100
31 Drugs	85	31.76	17.65	18.82	20	11.76	100
32 Surgery & Medical Instruments	109	32.11	15.6	18.35	21.1	12.84	100
33 Biotechnology	33	27.27	21.21	24.24	15.15	12.12	100
39 Miscellaneous-Drug&Med	26	26.92	19.23	19.23	23.08	11.54	100
41 Electrical Devices	40	27.5	10	30	22.5	10	100
42 Electrical Lighting	31	22.58	16.13	29.03	22.58	9.68	100
43 Measuring & Testing	57	10.53	14.04	38.6	28.07	8.77	100
44 Nuclears & X-rays	38	21.05	26.32	18.42	26.32	7.89	100
45 Power Systems	85	27.06	21.18	24.71	17.65	9.41	100
46 Semiconductor Devices	49	16.33	14.29	36.73	20.41	12.24	100
49 Miscellaneous-Elec.	32	28.13	12.5	15.63	28.13	15.63	100
51 Materials Processing & Handling	46	45.65	13.04	17.39	13.04	10.87	100
52 Metal Working	45	31.11	8.89	24.44	22.22	13.33	100
53 Motors, Engines & Parts	50	34	12	30	14	10	100
54 Optics	42	30.95	16.67	30.95	14.29	7.14	100
55 Transportation	28	32.14	25	17.86	21.43	3.57	100
59 Miscellaneous Mechanical	37	27.03	16.22	24.32	18.92	13.51	100
61 Agriculture, Husbandry, Food	12	41.67	16.67	25	16.67	0	100
63 Apparel & Textile	9	22.22	11.11	44.44	22.22	0	100
64 Earth Working & Wells	4	25	0	50	25	0	100
65 Furniture, House Fixtures	9	22.22	11.11	55.56	11.11	0	100
66 Heating	8	0	12.5	25	37.5	25	100
67 Pipes & Joints	13	38.46	15.38	23.08	7.69	15.38	100
68 Receptacles	17	52.94	11.76	23.53	5.88	5.88	100
69 Miscellaneous-Others	109	33.94	18.35	19.27	11.93	16.51	100
US-JP weighted		**28.31**	**15.22**	**25.92**	**19.57**	**10.98**	100

Japan (5/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

others

	All	どちらでもない	非常に重要である	無回答
	All	**other**	**5**	**no response**
All	3658	1	1	3656
Agriculture, Food, Textiles	60	0	0	60
Coating	80	0	0	80
Gas	45	0	0	45
Organic Compounds	120	0	0	120
Resins	125	0	0	125
Miscellaneous-chemical	208	0	0	208
Communications	160	0	1	159
Computer Hardware	59	0	0	59
Computer Software	123	1	0	122
Computer Peripherals	76	0	0	76
Information Storage	120	0	0	120
Drugs	127	0	0	127
Surgery & Medical Instruments	85	0	0	85
Biotechnology	87	0	0	87
Miscellaneous-Drug&Med	45	0	0	45
Electrical Devices	91	0	0	91
Electrical Lighting	96	0	0	96
Measuring & Testing	111	0	0	111
Nuclears & X-rays	72	0	0	72
Power Systems	172	0	0	172
Semiconductor Devices	129	0	0	129
Miscellaneous-Elec.	120	0	0	120
Materials Processing & Handling	103	0	0	103
Metal Working	137	0	0	137
Motors, Engines & Parts	145	0	0	145
Optics	100	0	0	100
Transportation	73	0	0	73
Miscellaneous Mechanical	124	0	0	124
Agriculture, Husbandry, Food	87	0	0	87
Apparel & Textile	77	0	0	77
Earth Working & Wells	20	0	0	20
Furniture, House Fixtures	51	0	0	51
Heating	84	0	0	84
Pipes & Joints	66	0	0	66
Receptacles	55	0	0	55
Miscellaneous-Others	225	0	0	225

%	N	**other**	**5**	**Total**
All	2	50	50	100
Agriculture, Food, Textiles				
Coating				
Gas				
Organic Compounds				
Resins				
Miscellaneous-chemical				
Communications	1	0	100	100
Computer Hardware				
Computer Software	1	100	0	100
Computer Peripherals				
Information Storage				
Drugs				
Surgery & Medical Instruments				
Biotechnology				
Miscellaneous-Drug&Med				
Electrical Devices				
Electrical Lighting				
Measuring & Testing				
Nuclears & X-rays				
Power Systems				
Semiconductor Devices				
Miscellaneous-Elec.				
Materials Processing & Handling				
Metal Working				
Motors, Engines & Parts				
Optics				
Transportation				
Miscellaneous Mechanical				
Agriculture, Husbandry, Food				
Apparel & Textile				
Earth Working & Wells				
Furniture, House Fixtures				
Heating				
Pipes & Joints				
Receptacles				
Miscellaneous-Others				
US-JP weighted		45.83	54.17	100
JP weighted		48.35	51.65	100

Japan (6/6)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

4 or 5

%	Commercial exploitation	Licensing	Cross-licensing	Pure defense	Blocking patents	Prevention of inventing-around	Inventors' reputation	Corporations' reputation (Patenting enhances the technological reputation of the firm)
All	86.20	55.73	54.32	67.30	70.63	43.42	11.91	41.37
Agriculture, Food, Textiles	97.30	54.05	35.14	62.16	72.97	40.54	10.81	32.43
Coating	92.42	54.69	46.88	69.84	73.44	58.06	14.29	34.92
Gas	88.57	47.06	36.36	63.64	69.70	51.52	14.71	39.39
Organic Compounds	84.71	58.33	39.76	51.19	54.32	32.50	8.75	42.50
Resins	85.11	56.99	62.37	64.52	63.44	43.01	11.96	33.33
Miscellaneous-chemical	93.38	57.43	51.70	62.59	69.39	39.04	13.61	39.46
Communications	83.72	64.89	70.23	72.73	70.99	39.23	19.08	39.39
Computer Hardware	82.22	60.00	69.05	79.07	72.09	39.53	13.95	44.44
Computer Software	79.61	55.34	66.99	72.82	73.53	40.78	7.77	36.89
Computer Peripherals	88.52	63.93	68.85	73.77	78.69	34.43	11.48	36.67
Information Storage	69.23	65.93	80.43	57.78	54.95	31.87	4.40	24.18
Drugs	93.48	71.43	62.22	56.67	63.74	40.00	16.67	42.22
Surgery & Medical Instruments	80.56	54.05	48.61	49.32	58.90	41.10	13.70	31.94
Biotechnology	80.33	62.71	60.34	67.80	62.71	40.68	11.67	53.33
Miscellaneous-Drug&Med	82.86	51.35	45.71	72.22	80.00	45.71	11.43	51.43
Electrical Devices	85.00	55.00	56.25	67.50	70.00	42.50	15.00	42.50
Electrical Lighting	83.56	54.17	68.06	53.52	58.33	29.58	14.29	40.28
Measuring & Testing	86.21	51.72	55.17	72.94	72.41	44.32	12.64	36.78
Nuclears & X-rays	92.86	52.73	48.21	57.14	55.36	25.00	16.07	37.50
Power Systems	84.44	65.19	68.89	71.32	73.53	48.89	11.03	36.76
Semiconductor Devices	84.11	59.05	68.57	63.21	71.70	50.00	12.26	32.08
Miscellaneous-Elec.	85.00	59.38	57.73	68.37	75.26	41.24	11.46	47.96
Materials Processing & Handling	92.00	47.14	49.30	72.22	73.61	50.00	7.04	45.07
Metal Working	90.68	53.39	44.44	68.38	69.83	47.86	7.69	44.92
Motors, Engines & Parts	91.38	62.28	65.22	78.45	78.45	48.25	13.16	39.66
Optics	86.49	56.76	64.86	67.57	67.57	43.84	6.76	33.78
Transportation	84.75	50.00	51.79	69.49	66.67	44.64	8.93	43.86
Miscellaneous Mechanical	84.38	46.88	32.29	71.58	78.13	42.11	13.54	47.42
Agriculture, Husbandry, Food	94.12	51.52	25.40	72.31	82.81	57.14	12.90	53.85
Apparel & Textile	78.46	25.40	19.35	78.46	84.38	56.25	12.50	40.63
Earth Working & Wells	83.33	58.82	52.94	70.59	82.35	58.82	29.41	61.11
Furniture, House Fixtures	79.41	36.11	37.50	84.85	79.41	60.61	14.71	66.67
Heating	86.76	60.61	42.42	61.19	70.59	55.22	13.64	43.94
Pipes & Joints	84.21	47.27	41.07	74.55	78.95	38.18	9.09	55.36
Receptacles	95.45	48.84	41.86	74.42	88.64	53.49	16.28	70.45
Miscellaneous-Others	86.93	48.26	46.51	65.71	70.86	40.35	7.56	43.86
US-JP weighted	86.11	57.28	57.61	66.83	69.78	42.08	12.14	39.94
JP weighted	86.03	56.68	58.11	68.14	70.73	42.31	12.11	40.38

US (5/5)

Question6-2 How important were the following reasons for patenting this invention? (*1 = not important, 5 = very important*)?(特許化の理由としての重要度)

B3 (4 or 5) %	A Commercial exploitation of the patented technology in your own product/process in an exclusive manner(including its future possibility)	B Licensing (obtain exclusive rights to license the invention in order to generate licensing revenues)	C Cross-licensing (improve your bargaining position in the Trading of your own patent rights in exchange for other firms' patent rights)	D Pure defense (to ensure that the use of own technology not be blocked by others)	E Blocking patents (avoid that others commercialize similar inventions)	F Prevention of inventing-around (avoid that others invent around the patent of the own firm)	G Inventors' reputation	H Firm's reputation (Patenting enhances the technological reputation of the firm)
NBER All	81.77	30.6	24.39	44.43	45.85	21.05	15.25	30.22
11 Agriculture, Food, Textiles	100	80	16.67	50	83.33	50	33.33	42.86
12 Coating	87.1	26.67	23.33	51.61	46.67	20	12.9	32.26
13 Gas	72.73	50	27.27	45.45	54.55	30	11.11	18.18
14 Organic Compounds	80.7	21.05	8.62	32.76	31.58	14.04	17.24	26.32
15 Resins	92.11	26.32	6.76	41.56	45.33	23.38	14.47	24.36
19 Miscellaneous-chemical	83.33	31.48	24.42	42.4	44.95	23.83	15.21	28.31
21 Communications	70.59	41.48	43.7	45.59	40.3	21.64	12.69	32.35
22 Computer Hardware	76.32	16.67	19.44	40.54	38.89	19.44	26.32	44.74
77 Computer Software	69.32	26.14	44.83	54.02	44.83	10.34	14.94	34.48
23 Computer Peripherals	83.87	35.48	35.48	41.94	38.71	12.9	3.23	19.35
24 Information Storage	76.92	55.26	56.76	45.95	51.35	29.73	27.03	36.84
31 Drugs	89.89	40	22.35	40	45.88	25	16.67	31.76
32 Surgery & Medical Instruments	78.26	31.78	19.05	50.45	55.05	22.64	15.89	33.94
33 Biotechnology	71.43	26.47	32.35	32.35	31.43	5.88	17.14	27.27
39 Miscellaneous-Drug&Med	69.23	23.08	15.38	46.15	42.31	24	19.23	34.62
41 Electrical Devices	78.57	22.5	20.51	60	62.5	38.46	15	32.5
42 Electrical Lighting	90.63	37.5	48.39	48.39	41.94	19.35	9.68	32.26
43 Measuring & Testing	87.93	19.64	19.64	42.11	44.83	17.54	24.56	36.84
44 Nuclears & X-rays	84.62	28.21	28.95	39.47	48.65	18.42	18.92	34.21
45 Power Systems	83.72	25.88	20	47.06	49.41	18.82	11.76	27.06
46 Semiconductor Devices	77.55	40.82	45.83	53.06	43.75	28.57	26.53	32.65
49 Miscellaneous-Elec.	90.63	46.67	26.67	38.71	41.94	12.9	18.75	43.75
51 Materials Processing & Handling	88	31.11	11.36	50	51.11	23.26	13.64	23.91
52 Metal Working	86.36	31.11	9.3	47.62	48.84	9.52	13.95	35.56
53 Motors, Engines & Parts	80.39	18	8	30	38	12	12	24
54 Optics	69.05	40.48	45.24	47.62	42.86	19.05	14.29	21.43
55 Transportation	87.1	27.59	10.71	51.72	57.14	21.43	10.71	25
59 Miscellaneous Mechanical	81.58	24.32	13.51	48.65	45.95	21.62	16.22	32.43
61 Agriculture, Husbandry, Food	92.31	23.08	7.69	38.46	69.23	16.67	15.38	16.67
63 Apparel & Textile	88.89	12.5	22.22	77.78	66.67	37.5	0	22.22
64 Earth Working & Wells	66.67	25	25	50	75	25	25	25
65 Furniture, House Fixtures	XX	22.22	0	33.33	22.22	11.11	0	11.11
66 Heating	87.5	12.5	0	62.5	50	50	0	62.5
67 Pipes & Joints	84.62	23.08	0	33.33	46.15	15.38	0	23.08
68 Receptacles	88.24	29.41	17.65	41.18	44.44	22.22	5.88	11.76
69 Miscellaneous-Others	XX	25.23	15.09	36.45	47.22	26.85	13.08	28.44
US-JP weighted	**81.84**	**31.74**	**25.56**	**44.78**	**46.07**	**21.01**	**15.52**	**30.55**

Japan (1/2)

Question 6-3 Internal commercialization. Has the applicant/owner ever used this patent for its product or for its production?（当該発明は出願者によって製品などに利用されたか）

他社との共同開発や共同生産が必要であったか

If Yes, did the inventions require co-development or co-production with another firm to bring it to the market?

	All	はい	いいえ	未利用だが使用可能性を検討中	無回答	All	はい	いいえ	無回答
	All	**yes**	**No.**	**Not yet, but still investigating the possibilities**	**no response**	**All**	**Yes**	**No.**	**no response**
All	3658	1998	1026	547	87	1998	450	1525	23
Agriculture, Food, Textiles	60	27	24	8	1	27	14	13	0
Coating	80	49	22	8	1	49	11	37	1
Gas	45	23	9	12	1	23	7	15	1
Organic Compounds	120	44	45	25	6	44	16	28	0
Resins	125	62	40	18	5	62	23	38	1
Miscellaneous-chemical	208	119	57	23	9	119	32	86	1
Communications	160	72	52	32	4	72	16	56	0
Computer Hardware	59	37	18	3	1	37	3	34	0
Computer Software	123	72	29	20	2	72	10	61	1
Computer Peripherals	76	41	25	7	3	41	8	33	0
Information Storage	120	62	46	11	1	62	12	50	0
Drugs	127	33	50	40	4	33	14	19	0
Surgery & Medical Instruments	85	44	21	16	4	44	9	34	1
Biotechnology	87	39	26	19	3	39	12	26	1
Miscellaneous-Drug&Med	45	25	12	7	1	25	6	19	0
Electrical Devices	91	53	27	11	0	53	5	48	0
Electrical Lighting	96	51	28	17	0	51	2	48	1
Measuring & Testing	111	60	34	15	2	60	17	42	1
Nuclears & X-rays	72	39	22	10	1	39	8	31	0
Power Systems	172	77	51	40	4	77	15	60	2
Semiconductor Devices	129	64	43	20	2	64	8	56	0
Miscellaneous-Elec.	120	76	25	18	1	76	23	52	1
Materials Processing & Handling	103	68	25	7	3	68	9	58	1
Metal Working	137	84	27	20	6	84	21	62	1
Motors, Engines & Parts	145	72	48	22	3	72	19	53	0
Optics	100	51	34	12	3	51	7	44	0
Transportation	73	43	17	12	1	43	5	36	2
Miscellaneous Mechanical	124	79	28	13	4	79	16	63	0
Agriculture, Husbandry, Food	87	56	20	11	0	56	16	38	2
Apparel & Textile	77	60	11	6	0	60	15	45	0
Earth Working & Wells	20	15	4	1	0	15	5	10	0
Furniture, House Fixtures	51	39	4	7	1	39	10	27	2
Heating	84	46	29	7	2	46	13	33	0
Pipes & Joints	66	39	15	9	3	39	6	33	0
Receptacles	55	39	9	6	1	39	7	32	0
Miscellaneous-Others	225	138	49	34	4	138	30	105	3

%	N	**yes**	**no**	**Not yet, but still investigating the possibilities**	**Total**	N	**yes**	**no**	**Total**
All	3571	55.95	28.73	15.32	100	1975	22.78	77.22	100
Agriculture, Food, Textiles	59	45.76	40.68	13.56	100	27	51.85	48.15	100
Coating	79	62.03	27.85	10.13	100	48	22.92	77.08	100
Gas	44	52.27	20.45	27.27	100	22	31.82	68.18	100
Organic Compounds	114	38.6	39.47	21.93	100	44	36.36	63.64	100
Resins	120	51.67	33.33	15	100	61	37.7	62.3	100
Miscellaneous-chemical	199	59.8	28.64	11.56	100	118	27.12	72.88	100
Communications	156	46.15	33.33	20.51	100	72	22.22	77.78	100
Computer Hardware	58	63.79	31.03	5.17	100	37	8.11	91.89	100
Computer Software	121	59.5	23.97	16.53	100	71	14.08	85.92	100
Computer Peripherals	73	56.16	34.25	9.59	100	41	19.51	80.49	100
Information Storage	119	52.1	38.66	9.24	100	62	19.35	80.65	100
Drugs	123	26.83	40.65	32.52	100	33	42.42	57.58	100
Surgery & Medical Instruments	81	54.32	25.93	19.75	100	43	20.93	79.07	100
Biotechnology	84	46.43	30.95	22.62	100	38	31.58	68.42	100
Miscellaneous-Drug&Med	44	56.82	27.27	15.91	100	25	24	76	100
Electrical Devices	91	58.24	29.67	12.09	100	53	9.43	90.57	100
Electrical Lighting	96	53.13	29.17	17.71	100	50	4	96	100
Measuring & Testing	109	55.05	31.19	13.76	100	59	28.81	71.19	100
Nuclears & X-rays	71	54.93	30.99	14.08	100	39	20.51	79.49	100
Power Systems	168	45.83	30.36	23.81	100	75	20	80	100
Semiconductor Devices	127	50.39	33.86	15.75	100	64	12.5	87.5	100
Miscellaneous-Elec.	119	63.87	21.01	15.13	100	75	30.67	69.33	100
Materials Processing & Handling	100	68	25	7	100	67	13.43	86.57	100
Metal Working	131	64.12	20.61	15.27	100	83	25.3	74.7	100
Motors, Engines & Parts	142	50.7	33.8	15.49	100	72	26.39	73.61	100
Optics	97	52.58	35.05	12.37	100	51	13.73	86.27	100
Transportation	72	59.72	23.61	16.67	100	41	12.2	87.8	100
Miscellaneous Mechanical	120	65.83	23.33	10.83	100	79	20.25	79.75	100
Agriculture, Husbandry, Food	87	64.37	22.99	12.64	100	54	29.63	70.37	100
Apparel & Textile	77	77.92	14.29	7.79	100	60	25	75	100
Earth Working & Wells	20	75	20	5	100	15	33.33	66.67	100
Furniture, House Fixtures	50	78	8	14	100	37	27.03	72.97	100
Heating	82	56.1	35.37	8.54	100	46	28.26	71.74	100
Pipes & Joints	63	61.9	23.81	14.29	100	39	15.38	84.62	100
Receptacles	54	72.22	16.67	11.11	100	39	17.95	82.05	100
Miscellaneous-Others	221	62.44	22.17	15.38	100	135	22.22	77.78	100
US-JP weighted		54.46	29.61	15.94	100		22.04	77.96	100
JP weighted		55.08	29.32	15.59	100		21.33	78.67	100

US (1/3)

Question 6-3 Internal commercialization. Has the applicant/owner ever used this patent for its product or for its production?（当該発明は出願者によって製品などに利用されたか）

Has the applicant/owner ever used this patent for in a product/process/services that has been commercialized?

	B4 Has the applicant/owner ever used this patent for in a product/process/services that has been commercialized?	all	yes	no	Not yet, but still investigating the possibilities	Don't know	missing
NBER	All	1,919	866	359	491	135	68
11	Agriculture, Food, Textiles	8	3	4	0	1	0
12	Coating	34	20	3	5	4	2
13	Gas	11	4	1	4	2	0
14	Organic Compounds	61	19	21	15	5	1
15	Resins	84	36	16	23	7	2
19	Miscellaneous-chemical	233	108	38	71	12	4
21	Communications	149	62	40	23	17	7
22	Computer Hardware	42	16	4	10	10	2
77	Computer Software	93	51	17	14	9	2
23	Computer Peripherals	33	10	10	12	1	0
24	Information Storage	42	15	9	11	3	4
31	Drugs	101	24	27	43	3	4
32	Surgery & Medical Instruments	123	51	25	38	4	5
33	Biotechnology	41	17	7	12	3	2
39	Miscellaneous-Drug&Med	29	14	4	6	2	3
41	Electrical Devices	45	28	5	6	6	0
42	Electrical Lighting	33	14	8	8	1	2
43	Measuring & Testing	62	37	9	10	2	4
44	Nuclears & X-rays	39	17	4	13	4	1
45	Power Systems	89	43	17	20	6	3
46	Semiconductor Devices	55	16	14	18	5	2
49	Miscellaneous-Elec.	32	20	6	3	3	0
51	Materials Processing & Handling	56	32	6	16	0	2
52	Metal Working	49	23	10	12	3	1
53	Motors, Engines & Parts	56	28	9	14	1	4
54	Optics	43	17	11	11	3	1
55	Transportation	33	17	3	10	3	0
59	Miscellaneous Mechanical	42	23	5	9	2	3
61	Agriculture, Husbandry, Food	14	11	0	3	0	0
63	Apparel & Textile	9	7	1	1	0	0
64	Earth Working & Wells	5	3	0	1	0	1
65	Furniture, House Fixtures	9	6	0	1	2	0
66	Heating	8	4	1	2	0	1
67	Pipes & Joints	13	5	0	7	1	0
68	Receptacles	20	9	3	7	0	1
69	Miscellaneous-Others	123	56	21	32	10	4

	%	N	yes	no	Not yet, but still investigating the possibilities	Total
NBER	All	1716	50.47	20.92	28.61	100
11	Agriculture, Food, Textiles	7	42.86	57.14	0	100
12	Coating	28	71.43	10.71	17.86	100
13	Gas	9	44.44	11.11	44.44	100
14	Organic Compounds	55	34.55	38.18	27.27	100
15	Resins	75	48	21.33	30.67	100
19	Miscellaneous-chemical	217	49.77	17.51	32.72	100
21	Communications	125	49.6	32	18.4	100
22	Computer Hardware	30	53.33	13.33	33.33	100
77	Computer Software	82	62.2	20.73	17.07	100
23	Computer Peripherals	32	31.25	31.25	37.5	100
24	Information Storage	35	42.86	25.71	31.43	100
31	Drugs	94	25.53	28.72	45.74	100
32	Surgery & Medical Instruments	114	44.74	21.93	33.33	100
33	Biotechnology	36	47.22	19.44	33.33	100
39	Miscellaneous-Drug&Med	24	58.33	16.67	25	100
41	Electrical Devices	39	71.79	12.82	15.38	100
42	Electrical Lighting	30	46.67	26.67	26.67	100
43	Measuring & Testing	56	66.07	16.07	17.86	100
44	Nuclears & X-rays	34	50	11.76	38.24	100
45	Power Systems	80	53.75	21.25	25	100
46	Semiconductor Devices	48	33.33	29.17	37.5	100
49	Miscellaneous-Elec.	29	68.97	20.69	10.34	100
51	Materials Processing & Handling	54	59.26	11.11	29.63	100
52	Metal Working	45	51.11	22.22	26.67	100
53	Motors, Engines & Parts	51	54.9	17.65	27.45	100
54	Optics	39	43.59	28.21	28.21	100
55	Transportation	30	56.67	10	33.33	100
59	Miscellaneous Mechanical	37	62.16	13.51	24.32	100
61	Agriculture, Husbandry, Food	14	78.57	0	21.43	100
63	Apparel & Textile	9	77.78	11.11	11.11	100
64	Earth Working & Wells	4	75	0	25	100
65	Furniture, House Fixtures	7	85.71	0	14.29	100
66	Heating	7	57.14	14.29	28.57	100
67	Pipes & Joints	12	41.67	0	58.33	100
68	Receptacles	19	47.37	15.79	36.84	100
69	Miscellaneous-Others	109	51.38	19.27	29.36	100
	US-JP weighted		**50.09**	**21.28**	**28.63**	100

Japan (2/2)

Question 6-3(2)

Pure in house or not (発明は自社内のみで使用しているかどうか)

	All	pure in house use	other	no response
All	3658	1198	2248	212
Agriculture, Food, Textiles	60	16	41	3
Coating	80	25	50	5
Gas	45	12	30	3
Organic Compounds	120	26	85	9
Resins	125	40	76	9
Miscellaneous-chemical	208	71	117	20
Communications	160	56	100	4
Computer Hardware	59	27	31	1
Computer Software	123	48	71	4
Computer Peripherals	76	27	45	4
Information Storage	120	31	82	7
Drugs	127	18	104	5
Surgery & Medical Instruments	85	25	55	5
Biotechnology	87	23	57	7
Miscellaneous-Drug&Med	45	15	27	3
Electrical Devices	91	35	55	1
Electrical Lighting	96	33	58	5
Measuring & Testing	111	36	70	5
Nuclears & X-rays	72	27	41	4
Power Systems	172	49	115	8
Semiconductor Devices	129	47	77	5
Miscellaneous-Elec.	120	50	65	5
Materials Processing & Handling	103	35	60	8
Metal Working	137	44	81	12
Motors, Engines & Parts	145	43	97	5
Optics	100	32	58	10
Transportation	73	25	45	3
Miscellaneous Mechanical	124	47	68	9
Agriculture, Husbandry, Food	87	27	55	5
Apparel & Textile	77	34	41	2
Earth Working & Wells	20	8	10	2
Furniture, House Fixtures	51	12	35	4
Heating	84	29	51	4
Pipes & Joints	66	20	41	5
Receptacles	55	24	26	5
Miscellaneous-Others	225	81	128	16

%	N	pure in house use	other	Total
All	3446	34.76	65.24	100
Agriculture, Food, Textiles	57	28.07	71.93	100
Coating	75	33.33	66.67	100
Gas	42	28.57	71.43	100
Organic Compounds	111	23.42	76.58	100
Resins	116	34.48	65.52	100
Miscellaneous-chemical	188	37.77	62.23	100
Communications	156	35.9	64.1	100
Computer Hardware	58	46.55	53.45	100
Computer Software	119	40.34	59.66	100
Computer Peripherals	72	37.5	62.5	100
Information Storage	113	27.43	72.57	100
Drugs	122	14.75	85.25	100
Surgery & Medical Instruments	80	31.25	68.75	100
Biotechnology	80	28.75	71.25	100
Miscellaneous-Drug&Med	42	35.71	64.29	100
Electrical Devices	90	38.89	61.11	100
Electrical Lighting	91	36.26	63.74	100
Measuring & Testing	106	33.96	66.04	100
Nuclears & X-rays	68	39.71	60.29	100
Power Systems	164	29.88	70.12	100
Semiconductor Devices	124	37.9	62.1	100
Miscellaneous-Elec.	115	43.48	56.52	100
Materials Processing & Handling	95	36.84	63.16	100
Metal Working	125	35.2	64.8	100
Motors, Engines & Parts	140	30.71	69.29	100
Optics	90	35.56	64.44	100
Transportation	70	35.71	64.29	100
Miscellaneous Mechanical	115	40.87	59.13	100
Agriculture, Husbandry, Food	82	32.93	67.07	100
Apparel & Textile	75	45.33	54.67	100
Earth Working & Wells	18	44.44	55.56	100
Furniture, House Fixtures	47	25.53	74.47	100
Heating	80	36.25	63.75	100
Pipes & Joints	61	32.79	67.21	100
Receptacles	50	48	52	100
Miscellaneous-Others	209	38.76	61.24	100
US-JP weighted		34.7	65.3	100
JP weighted		35.39	64.61	100

US (3/3)

Question 6-3(2)

Pure in house or not (発明は自社内のみで使用しているかどうか)

		all	Yes	No	Missing
NBER	All	1,919	687	1029	203
11	Agriculture, Food, Textiles	8	2	5	1
12	Coating	34	16	12	6
13	Gas	11	4	5	2
14	Organic Compounds	61	15	40	6
15	Resins	84	29	46	9
19	Miscellaneous-chemical	233	81	136	16
21	Communications	149	47	78	24
22	Computer Hardware	42	14	16	12
77	Computer Software	93	43	39	11
23	Computer Peripherals	33	10	22	1
24	Information Storage	42	10	25	7
31	Drugs	101	14	80	7
32	Surgery & Medical Instruments	123	31	83	9
33	Biotechnology	41	9	27	5
39	Miscellaneous-Drug&Med	29	9	15	5
41	Electrical Devices	45	26	13	6
42	Electrical Lighting	33	12	18	3
43	Measuring & Testing	62	32	24	6
44	Nuclears & X-rays	39	16	18	5
45	Power Systems	89	36	44	9
46	Semiconductor Devices	55	16	32	7
49	Miscellaneous-Elec.	32	14	15	3
51	Materials Processing & Handling	56	27	27	2
52	Metal Working	49	19	26	4
53	Motors, Engines & Parts	56	26	25	5
54	Optics	43	13	26	4
55	Transportation	33	12	18	3
59	Miscellaneous Mechanical	42	19	18	5
61	Agriculture, Husbandry, Food	14	8	6	0
63	Apparel & Textile	9	6	3	0
64	Earth Working & Wells	5	2	2	1
65	Furniture, House Fixtures	9	5	2	2
66	Heating	8	4	3	1
67	Pipes & Joints	13	5	7	1
68	Receptacles	20	8	11	1
69	Miscellaneous-Others	123	47	62	14

		%	N	Yes	No	Total
NBER	All		1716	40.03	59.97	100
11	Agriculture, Food, Textiles		7	28.57	71.43	100
12	Coating		28	57.14	42.86	100
13	Gas		9	44.44	55.56	100
14	Organic Compounds		55	27.27	72.73	100
15	Resins		75	38.67	61.33	100
19	Miscellaneous-chemical		217	37.33	62.67	100
21	Communications		125	37.6	62.4	100
22	Computer Hardware		30	46.67	53.33	100
77	Computer Software		82	52.44	47.56	100
23	Computer Peripherals		32	31.25	68.75	100
24	Information Storage		35	28.57	71.43	100
31	Drugs		94	14.89	85.11	100
32	Surgery & Medical Instruments		114	27.19	72.81	100
33	Biotechnology		36	25	75	100
39	Miscellaneous-Drug&Med		24	37.5	62.5	100
41	Electrical Devices		39	66.67	33.33	100
42	Electrical Lighting		30	40	60	100
43	Measuring & Testing		56	57.14	42.86	100
44	Nuclears & X-rays		34	47.06	52.94	100
45	Power Systems		80	45	55	100
46	Semiconductor Devices		48	33.33	66.67	100
49	Miscellaneous-Elec.		29	48.28	51.72	100
51	Materials Processing & Handling		54	50	50	100
52	Metal Working		45	42.22	57.78	100
53	Motors, Engines & Parts		51	50.98	49.02	100
54	Optics		39	33.33	66.67	100
55	Transportation		30	40	60	100
59	Miscellaneous Mechanical		37	51.35	48.65	100
61	Agriculture, Husbandry, Food		14	57.14	42.86	100
63	Apparel & Textile		9	66.67	33.33	100
64	Earth Working & Wells		4	50	50	100
65	Furniture, House Fixtures		7	71.43	28.57	100
66	Heating		7	57.14	42.86	100
67	Pipes & Joints		12	41.67	58.33	100
68	Receptacles		19	42.11	57.89	100
69	Miscellaneous-Others		109	43.12	56.88	100
		US-JP weighted		**39.58**	**60.42**	100

US (2/3)

Refefence:While many innovations involve a combination of products, processes, and services, would you characterize the commercial application of the focal patent as primarily involving a new product, process, or service? (参考：当該特許の応用先は新製品、新生産過程あるいはサービスの中のどれか)

	B5 While many innovations involve a combination of products, processes, and services, would you characterize the commercial application of the focal patent as?	all	Product	Process	Service	Don't know	Missing
NBER	All	948	678	177	14	6	73
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX
12	Coating	22	16	4	0	0	2
13	Gas	4	3	1	0	0	0
14	Organic Compounds	20	5	14	0	0	1
15	Resins	40	31	6	0	0	3
19	Miscellaneous-chemical	113	77	29	1	1	5
21	Communications	70	48	11	2	2	7
22	Computer Hardware	19	14	3	0	0	2
77	Computer Software	54	30	15	5	1	3
23	Computer Peripherals	10	9	1	0	0	0
24	Information Storage	20	14	3	0	0	3
31	Drugs	29	21	3	0	0	5
32	Surgery & Medical Instruments	59	51	1	0	1	6
33	Biotechnology	19	9	6	1	0	3
39	Miscellaneous-Drug&Med	17	13	1	0	0	3
41	Electrical Devices	28	28	0	0	0	0
42	Electrical Lighting	16	11	3	1	0	1
43	Measuring & Testing	41	32	6	0	0	3
44	Nuclears & X-rays	18	15	2	0	0	1
45	Power Systems	48	40	5	0	0	3
46	Semiconductor Devices	19	7	10	0	0	2
49	Miscellaneous-Elec.	20	14	5	0	0	1
51	Materials Processing & Handling	34	21	11	0	0	2
52	Metal Working	24	9	13	1	0	1
53	Motors, Engines & Parts	32	28	0	0	0	4
54	Optics	18	11	7	0	0	0
55	Transportation	17	16	1	0	0	0
59	Miscellaneous Mechanical	26	20	3	0	0	3
61	Agriculture, Husbandry, Food	11	8	2	1	0	0
63	Apparel & Textile	7	5	1	0	0	1
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	6	0	0	0	0
66	Heating	5	2	2	0	0	1
67	Pipes & Joints	5	5	0	0	0	0
68	Receptacles	10	7	2	0	0	1
69	Miscellaneous-Others	60	47	5	2	1	5

	%	N	Product	Process	Service	Total
NBER	All	869	78.02	20.37	1.61	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX
12	Coating	20	80	20	0	100
13	Gas	4	75	25	0	100
14	Organic Compounds	19	26.32	73.68	0	100
15	Resins	37	83.78	16.22	0	100
19	Miscellaneous-chemical	107	71.96	27.1	0.93	100
21	Communications	61	78.69	18.03	3.28	100
22	Computer Hardware	17	82.35	17.65	0	100
77	Computer Software	50	60	30	10	100
23	Computer Peripherals	10	90	10	0	100
24	Information Storage	17	82.35	17.65	0	100
31	Drugs	24	87.5	12.5	0	100
32	Surgery & Medical Instruments	52	98.08	1.92	0	100
33	Biotechnology	16	56.25	37.5	6.25	100
39	Miscellaneous-Drug&Med	14	92.86	7.14	0	100
41	Electrical Devices	28	100	0	0	100
42	Electrical Lighting	15	73.33	20	6.67	100
43	Measuring & Testing	38	84.21	15.79	0	100
44	Nuclears & X-rays	17	88.24	11.76	0	100
45	Power Systems	45	88.89	11.11	0	100
46	Semiconductor Devices	17	41.18	58.82	0	100
49	Miscellaneous-Elec.	19	73.68	26.32	0	100
51	Materials Processing & Handling	32	65.63	34.38	0	100
52	Metal Working	23	39.13	56.52	4.35	100
53	Motors, Engines & Parts	28	100	0	0	100
54	Optics	18	61.11	38.89	0	100
55	Transportation	17	94.12	5.88	0	100
59	Miscellaneous Mechanical	23	86.96	13.04	0	100
61	Agriculture, Husbandry, Food	11	72.73	18.18	9.09	100
63	Apparel & Textile	6	83.33	16.67	0	100
64	Earth Working & Wells	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	100	0	0	100
66	Heating	4	50	50	0	100
67	Pipes & Joints	5	100	0	0	100
68	Receptacles	9	77.78	22.22	0	100
69	Miscellaneous-Others	54	87.04	9.26	3.7	100
	US-JP weighted	869	**77.45**	**20.92**	**1.63**	100

Japan

Question 6-4. How long did it take from the application to the use of the invention? (出願から利用開始までの時間)

	All	1年未満	1年以上、2年未満	2年以上、3年未満	3年以上、4年未満	4年以上、5年未満	5年以上、6年未満	6年以上、7年未満	7年以上、8年未満	8年以上、9年未満	9年以上、10年未満	10年以上、15年未満	15年以上、20年未満	20年以上	無回答
	All	**less than one year**	**1 year**	**2 years**	**3 years**	**4 years**	**5 years**	**6 years**	**7 years**	**8 years**	**9 years**	**10-14years**	**15-19 years**	**20 years or more**	**no response**
All	1998	605	605	261	175	63	54	15	18	6	7	12	1	1	175
Agriculture, Food, Textiles	27	3	10	2	7	2	2	0	0	0	0	0	0	0	1
Coating	49	10	14	10	4	2	2	2	2	0	0	0	0	0	3
Gas	23	6	7	1	2	0	4	0	0	0	0	0	1	0	2
Organic Compounds	44	11	20	6	4	1	1	0	0	0	0	0	0	0	1
Resins	62	12	17	10	8	4	3	1	2	1	2	0	0	0	2
Miscellaneous-chemical	119	25	29	17	16	6	9	2	0	0	2	1	0	0	12
Communications	72	21	24	8	9	1	3	1	0	1	0	1	0	0	3
Computer Hardware	37	13	16	3	0	2	0	0	0	0	0	0	0	0	3
Computer Software	72	26	20	8	3	0	0	0	1	0	1	0	0	0	13
Computer Peripherals	41	15	13	4	2	3	1	1	0	0	0	0	0	1	1
Information Storage	62	22	21	9	4	2	0	1	0	0	0	0	0	0	3
Drugs	33	4	9	4	5	2	2	1	1	0	1	2	0	0	2
Surgery & Medical Instruments	44	11	9	7	9	1	1	0	0	0	0	1	0	0	5
Biotechnology	39	7	5	6	5	4	1	1	1	0	0	0	0	0	9
Miscellaneous-Drug&Med	25	12	6	2	1	2	1	0	0	0	0	0	0	0	1
Electrical Devices	53	22	17	5	6	0	0	0	0	0	0	0	0	0	3
Electrical Lighting	51	10	15	7	5	2	5	0	2	1	0	0	0	0	4
Measuring & Testing	60	17	13	13	8	1	1	0	1	0	0	1	0	0	5
Nuclears & X-rays	39	9	16	5	4	0	2	0	0	0	0	0	0	0	3
Power Systems	77	31	27	8	4	1	2	0	0	0	0	1	0	0	3
Semiconductor Devices	64	16	14	11	7	4	4	0	1	0	0	0	0	0	7
Miscellaneous-Elec.	76	30	26	10	5	2	0	1	0	0	0	1	0	0	1
Materials Processing & Handling	68	23	18	4	4	2	0	0	0	0	0	0	0	0	17
Metal Working	84	23	32	12	7	0	2	0	1	0	0	0	0	0	7
Motors, Engines & Parts	72	17	22	20	5	0	0	2	1	0	1	0	0	0	4
Optics	51	20	16	7	2	2	0	0	0	0	0	0	0	0	4
Transportation	43	10	18	6	3	0	0	1	0	1	0	0	0	0	4
Miscellaneous Mechanical	79	33	21	5	4	3	0	0	1	0	0	1	0	0	11
Agriculture, Husbandry, Food	56	16	18	6	4	4	1	0	1	1	0	0	0	0	5
Apparel & Textile	60	29	15	6	4	1	0	0	0	1	0	1	0	0	3
Earth Working & Wells	15	3	7	2	0	0	1	0	0	0	0	0	0	0	2
Furniture, House Fixtures	39	12	12	8	2	0	0	0	2	0	0	0	0	0	3
Heating	46	13	12	8	7	2	0	0	1	0	0	0	0	0	3
Pipes & Joints	39	10	13	3	4	2	1	0	0	0	0	1	0	0	5
Receptacles	39	12	16	3	0	0	0	0	0	0	0	0	0	0	8
Miscellaneous-Others	138	51	37	15	11	5	5	1	0	0	0	1	0	0	12

%	N	**less than one year**	**1 year**	**2 years**	**3 years**	**4 years**	**5 years**	**6 years**	**7 years**	**8 years**	**9 years**	**10-14years**	**15-19 years**	**20 years or more**	**Total**
All	1823	33.19	33.19	14.32	9.6	3.46	2.96	0.82	0.99	0.33	0.38	0.66	0.05	0.05	100
Agriculture, Food, Textiles	26	11.54	38.46	7.69	26.92	7.69	7.69	0	0	0	0	0	0	0	100
Coating	46	21.74	30.43	21.74	8.7	4.35	4.35	4.35	4.35	0	0	0	0	0	100
Gas	21	28.57	33.33	4.76	9.52	0	19.05	0	0	0	0	0	4.76	0	100
Organic Compounds	43	25.58	46.51	13.95	9.3	2.33	2.33	0	0	0	0	0	0	0	100
Resins	60	20	28.33	16.67	13.33	6.67	5	1.67	3.33	1.67	3.33	0	0	0	100
Miscellaneous-chemical	107	23.36	27.1	15.89	14.95	5.61	8.41	1.87	0	0	1.87	0.93	0	0	100
Communications	69	30.43	34.78	11.59	13.04	1.45	4.35	1.45	0	1.45	0	1.45	0	0	100
Computer Hardware	34	38.24	47.06	8.82	0	5.88	0	0	0	0	0	0	0	0	100
Computer Software	59	44.07	33.9	13.56	5.08	0	0	0	1.69	0	1.69	0	0	0	100
Computer Peripherals	40	37.5	32.5	10	5	7.5	2.5	2.5	0	0	0	0	0	2.5	100
Information Storage	59	37.29	35.59	15.25	6.78	3.39	0	1.69	0	0	0	0	0	0	100
Drugs	31	12.9	29.03	12.9	16.13	6.45	6.45	3.23	3.23	0	3.23	6.45	0	0	100
Surgery & Medical Instruments	39	28.21	23.08	17.95	23.08	2.56	2.56	0	0	0	0	2.56	0	0	100
Biotechnology	30	23.33	16.67	20	16.67	13.33	3.33	3.33	3.33	0	0	0	0	0	100
Miscellaneous-Drug&Med	24	50	25	8.33	4.17	8.33	4.17	0	0	0	0	0	0	0	100
Electrical Devices	50	44	34	10	12	0	0	0	0	0	0	0	0	0	100
Electrical Lighting	47	21.28	31.91	14.89	10.64	4.26	10.64	0	4.26	2.13	0	0	0	0	100
Measuring & Testing	55	30.91	23.64	23.64	14.55	1.82	1.82	0	1.82	0	0	1.82	0	0	100
Nuclears & X-rays	36	25	44.44	13.89	11.11	0	5.56	0	0	0	0	0	0	0	100
Power Systems	74	41.89	36.49	10.81	5.41	1.35	2.7	0	0	0	0	1.35	0	0	100
Semiconductor Devices	57	28.07	24.56	19.3	12.28	7.02	7.02	0	1.75	0	0	0	0	0	100
Miscellaneous-Elec.	75	40	34.67	13.33	6.67	2.67	0	1.33	0	0	0	1.33	0	0	100
Materials Processing & Handling	51	45.1	35.29	7.84	7.84	3.92	0	0	0	0	0	0	0	0	100
Metal Working	77	29.87	41.56	15.58	9.09	0	2.6	0	1.3	0	0	0	0	0	100
Motors, Engines & Parts	68	25	32.35	29.41	7.35	0	0	2.94	1.47	0	1.47	0	0	0	100
Optics	47	42.55	34.04	14.89	4.26	4.26	0	0	0	0	0	0	0	0	100
Transportation	39	25.64	46.15	15.38	7.69	0	0	2.56	0	2.56	0	0	0	0	100
Miscellaneous Mechanical	68	48.53	30.88	7.35	5.88	4.41	0	0	1.47	0	0	1.47	0	0	100
Agriculture, Husbandry, Food	51	31.37	35.29	11.76	7.84	7.84	1.96	0	1.96	1.96	0	0	0	0	100
Apparel & Textile	57	50.88	26.32	10.53	7.02	1.75	0	0	0	1.75	0	1.75	0	0	100
Earth Working & Wells	13	23.08	53.85	15.38	0	0	7.69	0	0	0	0	0	0	0	100
Furniture, House Fixtures	36	33.33	33.33	22.22	5.56	0	0	0	5.56	0	0	0	0	0	100
Heating	43	30.23	27.91	18.6	16.28	4.65	0	0	2.33	0	0	0	0	0	100
Pipes & Joints	34	29.41	38.24	8.82	11.76	5.88	2.94	0	0	0	0	2.94	0	0	100
Receptacles	31	38.71	51.61	9.68	0	0	0	0	0	0	0	0	0	0	100
Miscellaneous-Others	126	40.48	29.37	11.9	8.73	3.97	3.97	0.79	0	0	0	0.79	0	0	100
JP weighted		34.8	32.71	13.97	9.32	3.09	2.9	0.93	0.77	0.29	0.49	0.61	0.02	0.1	

Japan

Question 6-5 How many domestic patents (including the other firms' patents) are jointly used in the commercial application of the invention? (当該特許の商業的利用において約何件の特許が利用されたか)

	All	1 domestic patent (your patent covers all patented technologies of the product/the process)	2 to 5	6 to 10	11-50	51-100	101-500	501-1000	more than 1001	no response
All	1998	434	865	284	248	58	27	7	2	73
Agriculture, Food, Textiles	27	4	14	2	5	0	0	0	0	2
Coating	49	3	27	7	8	2	0	0	0	2
Gas	23	7	9	2	3	1	0	0	0	1
Organic Compounds	44	12	16	9	4	0	2	0	0	1
Resins	62	8	30	18	4	1	0	0	0	1
Miscellaneous-chemical	119	19	47	17	27	4	2	0	0	3
Communications	72	7	28	17	15	1	3	0	1	0
Computer Hardware	37	12	16	2	4	2	0	0	1	0
Computer Software	72	22	23	8	10	4	2	2	0	1
Computer Peripherals	41	5	11	6	13	5	0	1	0	0
Information Storage	62	10	15	8	13	11	4	1	0	0
Drugs	33	7	15	5	4	0	0	0	0	2
Surgery & Medical Instruments	44	9	22	8	1	1	0	0	0	3
Biotechnology	39	10	21	6	0	0	0	0	0	2
Miscellaneous-Drug&Med	25	3	11	4	3	0	0	0	0	4
Electrical Devices	53	12	25	13	2	0	0	0	0	1
Electrical Lighting	51	9	23	5	10	2	1	0	0	1
Measuring & Testing	60	13	37	5	3	0	0	0	0	2
Nuclears & X-rays	39	9	15	7	4	1	0	0	0	3
Power Systems	77	18	30	15	11	1	0	0	0	2
Semiconductor Devices	64	8	25	8	13	1	3	0	0	6
Miscellaneous-Elec.	76	18	31	8	11	4	1	0	0	3
Materials Processing & Handling	68	20	28	7	6	2	0	1	0	4
Metal Working	84	23	41	10	5	3	0	0	0	2
Motors, Engines & Parts	72	12	25	11	16	1	6	0	0	1
Optics	51	4	22	7	10	1	1	1	0	5
Transportation	43	7	19	9	6	0	0	0	0	2
Miscellaneous Mechanical	79	26	34	7	6	2	0	0	0	4
Agriculture, Husbandry, Food	56	17	22	9	2	1	0	0	0	5
Apparel & Textile	60	18	32	5	2	0	0	0	0	3
Earth Working & Wells	15	3	9	1	0	1	0	0	0	1
Furniture, House Fixtures	39	11	16	6	2	3	0	1	0	0
Heating	46	9	25	6	4	0	1	0	0	1
Pipes & Joints	39	12	21	2	4	0	0	0	0	0
Receptacles	39	12	16	8	1	0	0	0	0	2
Miscellaneous-Others	138	35	64	16	16	3	1	0	0	3

%	N	1 domestic patent (your patent covers all patented technologies of the product/the process)	2 to 5	6 to 10	11-50	51-100	101-500	501-1000	more than 1001	Total
All	1925	22.55	44.94	14.75	12.88	3.01	1.4	0.36	0.1	100
Agriculture, Food, Textiles	25	16	56	8	20	0	0	0	0	100
Coating	47	6.38	57.45	14.89	17.02	4.26	0	0	0	100
Gas	22	31.82	40.91	9.09	13.64	4.55	0	0	0	100
Organic Compounds	43	27.91	37.21	20.93	9.3	0	4.65	0	0	100
Resins	61	13.11	49.18	29.51	6.56	1.64	0	0	0	100
Miscellaneous-chemical	116	16.38	40.52	14.66	23.28	3.45	1.72	0	0	100
Communications	72	9.72	38.89	23.61	20.83	1.39	4.17	0	1.39	100
Computer Hardware	37	32.43	43.24	5.41	10.81	5.41	0	0	2.7	100
Computer Software	71	30.99	32.39	11.27	14.08	5.63	2.82	2.82	0	100
Computer Peripherals	41	12.2	26.83	14.63	31.71	12.2	0	2.44	0	100
Information Storage	62	16.13	24.19	12.9	20.97	17.74	6.45	1.61	0	100
Drugs	31	22.58	48.39	16.13	12.9	0	0	0	0	100
Surgery & Medical Instruments	41	21.95	53.66	19.51	2.44	2.44	0	0	0	100
Biotechnology	37	27.03	56.76	16.22	0	0	0	0	0	100
Miscellaneous-Drug&Med	21	14.29	52.38	19.05	14.29	0	0	0	0	100
Electrical Devices	52	23.08	48.08	25	3.85	0	0	0	0	100
Electrical Lighting	50	18	46	10	20	4	2	0	0	100
Measuring & Testing	58	22.41	63.79	8.62	5.17	0	0	0	0	100
Nuclears & X-rays	36	25	41.67	19.44	11.11	2.78	0	0	0	100
Power Systems	75	24	40	20	14.67	1.33	0	0	0	100
Semiconductor Devices	58	13.79	43.1	13.79	22.41	1.72	5.17	0	0	100
Miscellaneous-Elec.	73	24.66	42.47	10.96	15.07	5.48	1.37	0	0	100
Materials Processing & Handling	64	31.25	43.75	10.94	9.38	3.13	0	1.56	0	100
Metal Working	82	28.05	50	12.2	6.1	3.66	0	0	0	100
Motors, Engines & Parts	71	16.9	35.21	15.49	22.54	1.41	8.45	0	0	100
Optics	46	8.7	47.83	15.22	21.74	2.17	2.17	2.17	0	100
Transportation	41	17.07	46.34	21.95	14.63	0	0	0	0	100
Miscellaneous Mechanical	75	34.67	45.33	9.33	8	2.67	0	0	0	100
Agriculture, Husbandry, Food	51	33.33	43.14	17.65	3.92	1.96	0	0	0	100
Apparel & Textile	57	31.58	56.14	8.77	3.51	0	0	0	0	100
Earth Working & Wells	14	21.43	64.29	7.14	0	7.14	0	0	0	100
Furniture, House Fixtures	39	28.21	41.03	15.38	5.13	7.69	0	2.56	0	100
Heating	45	20	55.56	13.33	8.89	0	2.22	0	0	100
Pipes & Joints	39	30.77	53.85	5.13	10.26	0	0	0	0	100
Receptacles	37	32.43	43.24	21.62	2.7	0	0	0	0	100
Miscellaneous-Others	135	25.93	47.41	11.85	11.85	2.22	0.74	0	0	100
US-JP weighted	1925	21.19	43.45	15.59	14.37	3.18	1.61	0.45	0.16	100
JP weighted	1925	21.74	42.69	15.19	14.87	3.23	1.61	0.49	0.17	100

US (1/2)

Question 6-5 How many domestic patents (including the other firms' patents) are jointly used in the commercial application of the invention? (当該特許の商業的利用において約何件の特許が利用されたか)

B.6 Roughly speaking, how many domestic patents (including the other firms' patents) are jointly used, together with your patent in the commercial application of the invention?	all	1 domestic patent	2 to 5	6 to 10	11-50	51-100	101-500	501-1000	more than 1001	Don't know	Missing
NBER All	947	163	385	124	96	15	14	3	1	78	68
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	22	1	11	5	2	0	0	0	0	1	2
13 Gas	4	0	2	1	1	0	0	0	0	0	0
14 Organic Compounds	20	3	8	3	2	1	0	0	0	2	1
15 Resins	40	7	21	5	1	0	0	0	0	4	2
19 Miscellaneous-chemical	113	23	51	17	10	1	2	0	0	6	3
21 Communications	70	6	22	8	11	3	4	0	0	9	7
22 Computer Hardware	19	5	9	2	0	0	0	0	0	1	2
77 Computer Software	54	6	17	8	9	2	1	0	1	8	2
23 Computer Peripherals	10	0	4	2	1	1	1	0	0	1	0
24 Information Storage	20	2	5	2	2	1	1	0	0	4	3
31 Drugs	29	8	10	4	0	0	0	0	0	3	4
32 Surgery & Medical Instruments	59	10	24	8	7	1	1	0	0	3	5
33 Biotechnology	19	3	7	2	3	0	0	0	0	2	2
39 Miscellaneous-Drug&Med	17	2	9	2	1	0	0	0	0	0	3
41 Electrical Devices	28	2	23	3	0	0	0	0	0	0	0
42 Electrical Lighting	16	3	4	4	1	1	1	0	0	1	1
43 Measuring & Testing	41	8	20	3	4	0	0	0	0	3	3
44 Nuclears & X-rays	18	4	6	2	1	1	1	0	0	2	1
45 Power Systems	47	9	14	8	5	1	1	0	0	4	5
46 Semiconductor Devices	19	1	7	3	3	0	0	1	0	2	2
49 Miscellaneous-Elec.	20	2	8	3	4	0	0	1	0	1	1
51 Materials Processing & Handling	34	5	15	2	6	0	0	0	0	4	2
52 Metal Working	24	8	8	3	1	0	0	0	0	3	1
53 Motors, Engines & Parts	32	10	11	5	1	0	0	0	0	1	4
54 Optics	18	4	3	1	5	0	0	0	0	5	0
55 Transportation	17	4	7	4	0	1	0	0	0	1	0
59 Miscellaneous Mechanical	26	5	7	2	5	0	1	1	0	2	3
61 Agriculture, Husbandry, Food	11	4	6	1	0	0	0	0	0	0	0
63 Apparel & Textile	7	2	2	0	2	0	0	0	0	0	1
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	2	2	0	1	0	0	0	0	1	0
66 Heating	5	0	2	1	1	0	0	0	0	0	1
67 Pipes & Joints	5	1	4	0	0	0	0	0	0	0	0
68 Receptacles	10	0	7	0	0	1	0	0	0	1	1
69 Miscellaneous-Others	60	11	28	9	6	0	0	0	0	2	4

%	N	1 domestic patent	2 to 5	6 to 10	11-50	51-100	101-500	501-1000	more than 1001	Total
NBER All	801	20.35	48.06	15.48	11.99	1.87	1.75	0.37	0.12	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	19	5.26	57.89	26.32	10.53	0	0	0	0	100
13 Gas	4	0	50	25	25	0	0	0	0	100
14 Organic Compounds	17	17.65	47.06	17.65	11.76	5.88	0	0	0	100
15 Resins	34	20.59	61.76	14.71	2.94	0	0	0	0	100
19 Miscellaneous-chemical	104	22.12	49.04	16.35	9.62	0.96	1.92	0	0	100
21 Communications	54	11.11	40.74	14.81	20.37	5.56	7.41	0	0	100
22 Computer Hardware	16	31.25	56.25	12.5	0	0	0	0	0	100
77 Computer Software	44	13.64	38.64	18.18	20.45	4.55	2.27	0	2.27	100
23 Computer Peripherals	9	0	44.44	22.22	11.11	11.11	11.11	0	0	100
24 Information Storage	13	15.38	38.46	15.38	15.38	7.69	7.69	0	0	100
31 Drugs	22	36.36	45.45	18.18	0	0	0	0	0	100
32 Surgery & Medical Instruments	51	19.61	47.06	15.69	13.73	1.96	1.96	0	0	100
33 Biotechnology	15	20	46.67	13.33	20	0	0	0	0	100
39 Miscellaneous-Drug&Med	14	14.29	64.29	14.29	7.14	0	0	0	0	100
41 Electrical Devices	28	7.14	82.14	10.71	0	0	0	0	0	100
42 Electrical Lighting	14	21.43	28.57	28.57	7.14	7.14	7.14	0	0	100
43 Measuring & Testing	35	22.86	57.14	8.57	11.43	0	0	0	0	100
44 Nuclears & X-rays	15	26.67	40	13.33	6.67	6.67	6.67	0	0	100
45 Power Systems	38	23.68	36.84	21.05	13.16	2.63	2.63	0	0	100
46 Semiconductor Devices	15	6.67	46.67	20	20	0	0	6.67	0	100
49 Miscellaneous-Elec.	18	11.11	44.44	16.67	22.22	0	0	5.56	0	100
51 Materials Processing & Handling	28	17.86	53.57	7.14	21.43	0	0	0	0	100
52 Metal Working	20	40	40	15	5	0	0	0	0	100
53 Motors, Engines & Parts	27	37.04	40.74	18.52	3.7	0	0	0	0	100
54 Optics	13	30.77	23.08	7.69	38.46	0	0	0	0	100
55 Transportation	16	25	43.75	25	0	6.25	0	0	0	100
59 Miscellaneous Mechanical	21	23.81	33.33	9.52	23.81	0	4.76	4.76	0	100
61 Agriculture, Husbandry, Food	11	36.36	54.55	9.09	0	0	0	0	0	100
63 Apparel & Textile	6	33.33	33.33	0	33.33	0	0	0	0	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	5	40	40	0	20	0	0	0	0	100
66 Heating	4	0	50	25	25	0	0	0	0	100
67 Pipes & Joints	5	20	80	0	0	0	0	0	0	100
68 Receptacles	8	0	87.5	0	0	12.5	0	0	0	100
69 Miscellaneous-Others	54	20.37	51.85	16.67	11.11	0	0	0	0	100
US-JP weighted	801	**20.46**	**47.26**	**15.43**	**12.39**	**2.03**	**1.87**	**0.42**	**0.14**	100

US (2/2)

Question 6-5 How many domestic patents (including the other firms' patents) are jointly used in the commercial application of the invention? (当該特許の商業的利用において約何件の特許が利用されたか)

	B.6	mean	sd	N
NBER	All	17.50	69.79	801
11	Agriculture, Food, Textiles	XX	XX	XX
12	Coating	7.39	8.42	19
13	Gas	11.38	12.93	4
14	Organic Compounds	11.26	18.87	17
15	Resins	4.44	5.06	34
19	Miscellaneous-chemical	12.68	41.87	104
21	Communications	35.39	77.91	54
22	Computer Hardware	3.28	2.18	16
23	Computer Software	42.17	154.96	44
24	Computer Peripherals	48.50	97.43	9
31	Information Storage	36.35	82.10	13
32	Drugs	3.41	2.50	22
33	Surgery & Medical Instruments	14.66	42.98	51
39	Biotechnology	9.00	11.32	15
41	Miscellaneous-Drug&Med	5.71	7.41	14
42	Electrical Devices	3.80	1.62	28
43	Electrical Lighting	32.54	79.62	14
44	Measuring & Testing	6.40	8.96	35
45	Nuclears & X-rays	29.83	77.36	15
46	Power Systems	17.12	49.38	38
49	Semiconductor Devices	59.43	191.49	15
51	Miscellaneous-Elec.	51.47	174.82	18
52	Materials Processing & Handling	9.16	11.46	28
53	Metal Working	4.53	6.56	20
54	Motors, Engines & Parts	4.41	5.79	27
55	Optics	13.46	14.14	13
59	Transportation	8.50	18.06	16
61	Miscellaneous Mechanical	59.48	170.90	21
63	Agriculture, Husbandry, Food	3.00	2.06	11
64	Apparel & Textile	11.67	14.63	6
65	Earth Working & Wells	XX	XX	XX
66	Furniture, House Fixtures	7.90	12.70	5
67	Heating	11.38	12.93	4
68	Pipes & Joints	3.00	1.12	5
69	Receptacles	12.50	25.46	8
77	Miscellaneous-Others	6.74	8.75	54
	US-JP weighted	**18.53**	**72.94**	**787.78**

Japan

Question 6-6 Has this patent been licensed by (one of) the patent-holder(s) ? (当該特許は、特許保有者によってライセンスされたか)

	All	yes	no	Not yet, but willing to license	no response
All	3658	796	2006	684	172
Agriculture, Food, Textiles	60	10	36	10	4
Coating	80	21	48	9	2
Gas	45	8	24	9	4
Organic Compounds	120	19	68	23	10
Resins	125	22	66	29	8
Miscellaneous-chemical	208	39	124	30	15
Communications	160	18	97	39	6
Computer Hardware	59	12	30	15	2
Computer Software	123	22	71	25	5
Computer Peripherals	76	17	42	14	3
Information Storage	120	34	56	26	4
Drugs	127	23	63	36	5
Surgery & Medical Instruments	85	22	38	21	4
Biotechnology	87	15	49	18	5
Miscellaneous-Drug&Med	45	10	28	7	0
Electrical Devices	91	25	54	12	0
Electrical Lighting	96	19	53	16	8
Measuring & Testing	111	25	59	23	4
Nuclears & X-rays	72	10	48	11	3
Power Systems	172	35	97	34	6
Semiconductor Devices	129	16	75	33	5
Miscellaneous-Elec.	120	23	68	27	2
Materials Processing & Handling	103	29	54	12	8
Metal Working	137	44	58	26	9
Motors, Engines & Parts	145	31	87	24	3
Optics	100	17	53	21	9
Transportation	73	20	35	15	3
Miscellaneous Mechanical	124	31	66	18	9
Agriculture, Husbandry, Food	87	29	44	8	6
Apparel & Textile	77	22	44	8	3
Earth Working & Wells	20	5	10	5	0
Furniture, House Fixtures	51	25	20	4	2
Heating	84	19	54	10	1
Pipes & Joints	66	19	30	13	4
Receptacles	55	13	28	12	2
Miscellaneous-Others	225	47	129	41	8

%	N	yes	no	Not yet, but willing to license	Total
All	3486	22.83	57.54	19.62	100
Agriculture, Food, Textiles	56	17.86	64.29	17.86	100
Coating	78	26.92	61.54	11.54	100
Gas	41	19.51	58.54	21.95	100
Organic Compounds	110	17.27	61.82	20.91	100
Resins	117	18.8	56.41	24.79	100
Miscellaneous-chemical	193	20.21	64.25	15.54	100
Communications	154	11.69	62.99	25.32	100
Computer Hardware	57	21.05	52.63	26.32	100
Computer Software	118	18.64	60.17	21.19	100
Computer Peripherals	73	23.29	57.53	19.18	100
Information Storage	116	29.31	48.28	22.41	100
Drugs	122	18.85	51.64	29.51	100
Surgery & Medical Instruments	81	27.16	46.91	25.93	100
Biotechnology	82	18.29	59.76	21.95	100
Miscellaneous-Drug&Med	45	22.22	62.22	15.56	100
Electrical Devices	91	27.47	59.34	13.19	100
Electrical Lighting	88	21.59	60.23	18.18	100
Measuring & Testing	107	23.36	55.14	21.5	100
Nuclears & X-rays	69	14.49	69.57	15.94	100
Power Systems	166	21.08	58.43	20.48	100
Semiconductor Devices	124	12.9	60.48	26.61	100
Miscellaneous-Elec.	118	19.49	57.63	22.88	100
Materials Processing & Handling	95	30.53	56.84	12.63	100
Metal Working	128	34.38	45.31	20.31	100
Motors, Engines & Parts	142	21.83	61.27	16.9	100
Optics	91	18.68	58.24	23.08	100
Transportation	70	28.57	50	21.43	100
Miscellaneous Mechanical	115	26.96	57.39	15.65	100
Agriculture, Husbandry, Food	81	35.8	54.32	9.88	100
Apparel & Textile	74	29.73	59.46	10.81	100
Earth Working & Wells	20	25	50	25	100
Furniture, House Fixtures	49	51.02	40.82	8.16	100
Heating	83	22.89	65.06	12.05	100
Pipes & Joints	62	30.65	48.39	20.97	100
Receptacles	53	24.53	52.83	22.64	100
Miscellaneous-Others	217	21.66	59.45	18.89	100
US-JP weighted	3486	21.47	58.07	20.46	100
JP weighted	3486	21.21	58.53	20.26	100

US (1/4)

Question 6-6 Has this patent been licensed by (one of) the patent-holder(s) to an independent party? (当該特許は、特許保有者によって第三者にライセンスされたか)

	B9 Has this patent been licensed by (one of) the patent-holder(s) to an independent party?	all	yes	no	Not yet, but willing to license	Don't know	Missing
NBER	All	1,919	194	1,019	259	382	65
	11 Agriculture, Food, Textiles	8	1	5	1	1	0
	12 Coating	34	2	15	5	10	2
	13 Gas	11	0	6	3	2	0
	14 Organic Compounds	61	4	35	6	14	2
	15 Resins	84	5	54	8	14	3
	19 Miscellaneous-chemical	233	25	131	36	38	3
	21 Communications	149	16	66	16	43	8
	22 Computer Hardware	42	2	19	8	11	2
	77 Computer Software	93	6	38	13	34	2
	23 Computer Peripherals	33	2	13	7	11	0
	24 Information Storage	42	10	9	6	14	3
	31 Drugs	101	16	50	16	15	4
	32 Surgery & Medical Instruments	123	21	71	7	19	5
	33 Biotechnology	41	11	16	4	8	2
	39 Miscellaneous-Drug&Med	29	2	21	2	1	3
	41 Electrical Devices	45	2	27	6	10	0
	42 Electrical Lighting	33	7	9	7	9	1
	43 Measuring & Testing	62	5	37	10	7	3
	44 Nuclears & X-rays	39	2	24	2	10	1
	45 Power Systems	89	6	56	12	13	2
	46 Semiconductor Devices	55	2	21	10	20	2
	49 Miscellaneous-Elec.	32	3	16	3	10	0
	51 Materials Processing & Handling	56	7	33	8	6	2
	52 Metal Working	49	8	27	6	7	1
	53 Motors, Engines & Parts	56	4	34	10	4	4
	54 Optics	43	5	19	9	10	0
	55 Transportation	33	4	18	2	9	0
	59 Miscellaneous Mechanical	42	2	24	7	6	3
	61 Agriculture, Husbandry, Food	14	2	8	4	0	0
	63 Apparel & Textile	9	1	6	1	1	0
	64 Earth Working & Wells	5	1	3	0	0	1
	65 Furniture, House Fixtures	9	0	5	2	2	0
	66 Heating	8	0	6	1	0	1
	67 Pipes & Joints	13	0	12	1	0	0
	68 Receptacles	20	2	10	5	2	1
	69 Miscellaneous-Others	123	8	75	15	21	4

	%	N	yes	no	Not yet, but willing to license	Total
NBER	All	1472	13.18	69.23	17.6	100
	11 Agriculture, Food, Textiles	7	14.29	71.43	14.29	100
	12 Coating	22	9.09	68.18	22.73	100
	13 Gas	9	0	66.67	33.33	100
	14 Organic Compounds	45	8.89	77.78	13.33	100
	15 Resins	67	7.46	80.6	11.94	100
	19 Miscellaneous-chemical	192	13.02	68.23	18.75	100
	21 Communications	98	16.33	67.35	16.33	100
	22 Computer Hardware	29	6.9	65.52	27.59	100
	77 Computer Software	57	10.53	66.67	22.81	100
	23 Computer Peripherals	22	9.09	59.09	31.82	100
	24 Information Storage	25	40	36	24	100
	31 Drugs	82	19.51	60.98	19.51	100
	32 Surgery & Medical Instruments	99	21.21	71.72	7.07	100
	33 Biotechnology	31	35.48	51.61	12.9	100
	39 Miscellaneous-Drug&Med	25	8	84	8	100
	41 Electrical Devices	35	5.71	77.14	17.14	100
	42 Electrical Lighting	23	30.43	39.13	30.43	100
	43 Measuring & Testing	52	9.62	71.15	19.23	100
	44 Nuclears & X-rays	28	7.14	85.71	7.14	100
	45 Power Systems	74	8.11	75.68	16.22	100
	46 Semiconductor Devices	33	6.06	63.64	30.3	100
	49 Miscellaneous-Elec.	22	13.64	72.73	13.64	100
	51 Materials Processing & Handling	48	14.58	68.75	16.67	100
	52 Metal Working	41	19.51	65.85	14.63	100
	53 Motors, Engines & Parts	48	8.33	70.83	20.83	100
	54 Optics	33	15.15	57.58	27.27	100
	55 Transportation	24	16.67	75	8.33	100
	59 Miscellaneous Mechanical	33	6.06	72.73	21.21	100
	61 Agriculture, Husbandry, Food	14	14.29	57.14	28.57	100
	63 Apparel & Textile	8	12.5	75	12.5	100
	64 Earth Working & Wells	4	25	75	0	100
	65 Furniture, House Fixtures	7	0	71.43	28.57	100
	66 Heating	7	0	85.71	14.29	100
	67 Pipes & Joints	13	0	92.31	7.69	100
	68 Receptacles	17	11.76	58.82	29.41	100
	69 Miscellaneous-Others	98	8.16	76.53	15.31	100
	US-JP weighted	**1472**	**13.97**	**68.18**	**17.85**	**100**

Japan

Question 6-6(2) If Yes, does it include cross-license? (それはクロスライセンスを含むか)

	All	yes	no	Don't know	no response
All	796	150	417	215	14
Agriculture, Food, Textiles	10	3	5	2	0
Coating	21	0	16	5	0
Gas	8	1	5	2	0
Organic Compounds	19	0	10	9	0
Resins	22	3	16	3	0
Miscellaneous-chemical	39	7	19	13	0
Communications	18	4	5	9	0
Computer Hardware	12	2	8	2	0
Computer Software	22	4	12	6	0
Computer Peripherals	17	8	6	3	0
Information Storage	34	18	4	11	1
Drugs	23	4	12	6	1
Surgery & Medical Instruments	22	3	9	10	0
Biotechnology	15	3	9	3	0
Miscellaneous-Drug&Med	10	3	4	3	0
Electrical Devices	25	3	11	9	2
Electrical Lighting	19	5	6	7	1
Measuring & Testing	25	5	15	4	1
Nuclears & X-rays	10	1	7	2	0
Power Systems	35	4	20	11	0
Semiconductor Devices	16	8	7	1	0
Miscellaneous-Elec.	23	7	11	5	0
Materials Processing & Handling	29	6	14	8	1
Metal Working	44	6	33	4	1
Motors, Engines & Parts	31	6	18	6	1
Optics	17	8	6	3	0
Transportation	20	2	10	8	0
Miscellaneous Mechanical	31	2	21	7	1
Agriculture, Husbandry, Food	29	1	16	11	1
Apparel & Textile	22	5	9	7	1
Earth Working & Wells	5	2	1	1	1
Furniture, House Fixtures	25	3	15	6	1
Heating	19	4	10	5	0
Pipes & Joints	19	0	13	6	0
Receptacles	13	4	2	7	0
Miscellaneous-Others	47	5	32	10	0

non- conditional cross license (クロス)ライセンスされた特許の割合

	All	yes	no	unknown
All	3658	150	3107	401
Agriculture, Food, Textiles	60	3	51	6
Coating	80	0	73	7
Gas	45	1	38	6
Organic Compounds	120	0	101	19
Resins	125	3	111	11
Miscellaneous-chemical	208	7	173	28
Communications	160	4	141	15
Computer Hardware	59	2	53	4
Computer Software	123	4	108	11
Computer Peripherals	76	8	62	6
Information Storage	120	18	86	16
Drugs	127	4	111	12
Surgery & Medical Instruments	85	3	68	14
Biotechnology	87	3	76	8
Miscellaneous-Drug&Med	45	3	39	3
Electrical Devices	91	3	77	11
Electrical Lighting	96	5	75	16
Measuring & Testing	111	5	97	9
Nuclears & X-rays	72	1	66	5
Power Systems	172	4	151	17
Semiconductor Devices	129	8	115	6
Miscellaneous-Elec.	120	7	106	7
Materials Processing & Handling	103	6	80	17
Metal Working	137	6	117	14
Motors, Engines & Parts	145	6	129	10
Optics	100	8	80	12
Transportation	73	2	60	11
Miscellaneous Mechanical	124	2	105	17
Agriculture, Husbandry, Food	87	1	68	18
Apparel & Textile	77	5	61	11
Earth Working & Wells	20	2	16	2
Furniture, House Fixtures	51	3	39	9
Heating	84	4	74	6
Pipes & Joints	66	0	56	10
Receptacles	55	4	42	9
Miscellaneous-Others	225	5	202	18

%	N	yes	no	Total
All	567	26.46	73.54	100
Agriculture, Food, Textiles	8	37.5	62.5	100
Coating	16	0	100	100
Gas	6	16.67	83.33	100
Organic Compounds	10	0	100	100
Resins	19	15.79	84.21	100
Miscellaneous-chemical	26	26.92	73.08	100
Communications	9	44.44	55.56	100
Computer Hardware	10	20	80	100
Computer Software	16	25	75	100
Computer Peripherals	14	57.14	42.86	100
Information Storage	22	81.82	18.18	100
Drugs	16	25	75	100
Surgery & Medical Instruments	12	25	75	100
Biotechnology	12	25	75	100
Miscellaneous-Drug&Med	7	42.86	57.14	100
Electrical Devices	14	21.43	78.57	100
Electrical Lighting	11	45.45	54.55	100
Measuring & Testing	20	25	75	100
Nuclears & X-rays	8	12.5	87.5	100
Power Systems	24	16.67	83.33	100
Semiconductor Devices	15	53.33	46.67	100
Miscellaneous-Elec.	18	38.89	61.11	100
Materials Processing & Handling	20	30	70	100
Metal Working	39	15.38	84.62	100
Motors, Engines & Parts	24	25	75	100
Optics	14	57.14	42.86	100
Transportation	12	16.67	83.33	100
Miscellaneous Mechanical	23	8.7	91.3	100
Agriculture, Husbandry, Food	17	5.88	94.12	100
Apparel & Textile	14	35.71	64.29	100
Earth Working & Wells	3	66.67	33.33	100
Furniture, House Fixtures	18	16.67	83.33	100
Heating	14	28.57	71.43	100
Pipes & Joints	13	0	100	100
Receptacles	6	66.67	33.33	100
Miscellaneous-Others	37	13.51	86.49	100
US-JP weighted	567	27.87	72.13	100
JP weighted	567	28.52	71.48	100

	N	yes	no	Total
All	3257	4.61	95.39	100
Agriculture, Food, Textiles	54	5.56	94.44	100
Coating	73	0	100	100
Gas	39	2.56	97.44	100
Organic Compounds	101	0	100	100
Resins	114	2.63	97.37	100
Miscellaneous-chemical	180	3.89	96.11	100
Communications	145	2.76	97.24	100
Computer Hardware	55	3.64	96.36	100
Computer Software	112	3.57	96.43	100
Computer Peripherals	70	11.43	88.57	100
Information Storage	104	17.31	82.69	100
Drugs	115	3.48	96.52	100
Surgery & Medical Instruments	71	4.23	95.77	100
Biotechnology	79	3.8	96.2	100
Miscellaneous-Drug&Med	42	7.14	92.86	100
Electrical Devices	80	3.75	96.25	100
Electrical Lighting	80	6.25	93.75	100
Measuring & Testing	102	4.9	95.1	100
Nuclears & X-rays	67	1.49	98.51	100
Power Systems	155	2.58	97.42	100
Semiconductor Devices	123	6.5	93.5	100
Miscellaneous-Elec.	113	6.19	93.81	100
Materials Processing & Handling	86	6.98	93.02	100
Metal Working	123	4.88	95.12	100
Motors, Engines & Parts	135	4.44	95.56	100
Optics	88	9.09	90.91	100
Transportation	62	3.23	96.77	100
Miscellaneous Mechanical	107	1.87	98.13	100
Agriculture, Husbandry, Food	69	1.45	98.55	100
Apparel & Textile	66	7.58	92.42	100
Earth Working & Wells	18	11.11	88.89	100
Furniture, House Fixtures	42	7.14	92.86	100
Heating	78	5.13	94.87	100
Pipes & Joints	56	0	100	100
Receptacles	46	8.7	91.3	100
Miscellaneous-Others	207	2.42	97.58	100
US-JP weighted	3257	4.52	95.48	100
JP weighted	3257	4.57	95.43	100

US (2/4)

Question 6-6(2) If Yes, does it include cross-license? (それはクロスライセンスを含むか)

	B10 If the patent is licensed, is it part of a cross-license?	all	yes	no	Don't know	Missing
NBER	All	277	42	143	28	64
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX	XX
14	Organic Compounds	7	1	4	0	2
15	Resins	8	2	3	1	2
19	Miscellaneous-chemical	31	5	22	1	3
21	Communications	25	7	9	2	7
22	Computer Hardware	XX	XX	XX	XX	XX
77	Computer Software	XX	XX	XX	XX	XX
23	Computer Peripherals	XX	XX	XX	XX	XX
24	Information Storage	13	4	3	3	3
31	Drugs	20	2	11	3	4
32	Surgery & Medical Instruments	30	3	20	2	5
33	Biotechnology	13	1	8	1	3
39	Miscellaneous-Drug&Med	7	0	4	0	3
41	Electrical Devices	XX	XX	XX	XX	XX
42	Electrical Lighting	9	0	6	2	1
43	Measuring & Testing	9	1	4	1	3
44	Nuclears & X-rays	XX	XX	XX	XX	XX
45	Power Systems	8	1	3	1	3
46	Semiconductor Devices	XX	XX	XX	XX	XX
49	Miscellaneous-Elec.	4	2	2	0	0
51	Materials Processing & Handling	10	4	2	2	2
52	Metal Working	9	0	6	2	1
53	Motors, Engines & Parts	8	0	4	0	4
54	Optics	5	0	4	1	0
55	Transportation	4	0	4	0	0
59	Miscellaneous Mechanical	XX	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX	XX
69	Miscellaneous-Others	13	0	9	0	4

			if licensed			if all			
	%	N	% yes	%no	Total	N	% yes	%no	Total
NBER	All	185	22.7	77.3	100	1475	2.85	97.15	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	5	20	80	100	45	2.22	97.78	100
15	Resins	5	40	60	100	67	2.99	97.01	100
19	Miscellaneous-chemical	27	18.52	81.48	100	192	2.6	97.4	100
21	Communications	16	43.75	56.25	100	98	7.14	92.86	100
22	Computer Hardware	XX	XX	XX	XX	XX	XX	XX	XX
77	Computer Software	XX	XX	XX	XX	XX	XX	XX	XX
23	Computer Peripherals	XX	XX	XX	XX	XX	XX	XX	XX
24	Information Storage	7	57.14	42.86	100	25	16	84	100
31	Drugs	13	15.38	84.62	100	82	2.44	97.56	100
32	Surgery & Medical Instruments	23	13.04	86.96	100	100	3	97	100
33	Biotechnology	9	11.11	88.89	100	31	3.23	96.77	100
39	Miscellaneous-Drug&Med	4	0	100	100	25	0	100	100
41	Electrical Devices	XX	XX	XX	XX	XX	XX	XX	XX
42	Electrical Lighting	6	0	100	100	24	0	100	100
43	Measuring & Testing	5	20	80	100	52	1.92	98.08	100
44	Nuclears & X-rays	XX	XX	XX	XX	XX	XX	XX	XX
45	Power Systems	4	25	75	100	74	1.35	98.65	100
46	Semiconductor Devices	XX	XX	XX	XX	XX	XX	XX	XX
49	Miscellaneous-Elec.	4	50	50	100	22	9.09	90.91	100
51	Materials Processing & Handling	6	66.67	33.33	100	48	8.33	91.67	100
52	Metal Working	6	0	100	100	41	0	100	100
53	Motors, Engines & Parts	4	0	100	100	48	0	100	100
54	Optics	4	0	100	100	33	0	100	100
55	Transportation	4	0	100	100	24	0	100	100
59	Miscellaneous Mechanical	XX	XX	XX	XX	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX	XX	XX	XX	XX
69	Miscellaneous-Others	9	0	100	100	98	0	100	100
	US-JP weighted	185	**24.74**	**75.26**	100	1129	**3.22**	**96.78**	100

Japan

Question 6-6(3) How many licensees have got the license? (また、それは複数の企業にライセンスされたか)

	All	only one	2-4 firms	5-10 firms	10 or more firms	don't know	no response
All	796	338	107	16	20	248	67
Agriculture, Food, Textiles	10	2	3	1	0	4	0
Coating	21	12	1	0	1	4	3
Gas	8	3	2	0	0	2	1
Organic Compounds	19	9	0	1	0	8	1
Resins	22	10	2	1	0	6	3
Miscellaneous-chemical	39	17	3	1	1	14	3
Communications	18	2	1	1	1	11	2
Computer Hardware	12	9	1	0	0	0	2
Computer Software	22	5	6	1	1	6	3
Computer Peripherals	17	9	4	0	0	4	0
Information Storage	34	3	7	4	7	12	1
Drugs	23	12	2	0	0	6	3
Surgery & Medical Instruments	22	14	3	0	0	4	1
Biotechnology	15	6	4	1	1	3	0
Miscellaneous-Drug&Med	10	5	0	0	0	4	1
Electrical Devices	25	9	3	0	1	9	3
Electrical Lighting	19	5	3	0	0	9	2
Measuring & Testing	25	12	6	0	0	6	1
Nuclears & X-rays	10	8	0	0	0	2	0
Power Systems	35	19	3	1	0	9	3
Semiconductor Devices	16	7	7	1	0	1	0
Miscellaneous-Elec.	23	7	1	0	2	10	3
Materials Processing & Handling	29	7	3	0	1	15	3
Metal Working	44	23	7	1	1	7	5
Motors, Engines & Parts	31	15	5	1	0	7	3
Optics	17	5	3	0	0	7	2
Transportation	20	6	1	0	0	9	4
Miscellaneous Mechanical	31	18	3	0	0	10	0
Agriculture, Husbandry, Food	29	10	2	1	0	12	4
Apparel & Textile	22	8	2	0	1	9	2
Earth Working & Wells	5	2	2	0	1	0	0
Furniture, House Fixtures	25	16	1	0	0	6	2
Heating	19	10	4	0	0	5	0
Pipes & Joints	19	10	1	0	0	7	1
Receptacles	13	3	3	0	0	6	1
Miscellaneous-Others	47	20	8	0	1	14	4

%	N	only one	2-4 firms	5-10 firms	10 or more firms	Total
All	481	70.27	22.25	3.33	4.16	100
Agriculture, Food, Textiles	6	33.33	50	16.67	0	100
Coating	14	85.71	7.14	0	7.14	100
Gas	5	60	40	0	0	100
Organic Compounds	10	90	0	10	0	100
Resins	13	76.92	15.38	7.69	0	100
Miscellaneous-chemical	22	77.27	13.64	4.55	4.55	100
Communications	5	40	20	20	20	100
Computer Hardware	10	90	10	0	0	100
Computer Software	13	38.46	46.15	7.69	7.69	100
Computer Peripherals	13	69.23	30.77	0	0	100
Information Storage	21	14.29	33.33	19.05	33.33	100
Drugs	14	85.71	14.29	0	0	100
Surgery & Medical Instruments	17	82.35	17.65	0	0	100
Biotechnology	12	50	33.33	8.33	8.33	100
Miscellaneous-Drug&Med	5	100	0	0	0	100
Electrical Devices	13	69.23	23.08	0	7.69	100
Electrical Lighting	8	62.5	37.5	0	0	100
Measuring & Testing	18	66.67	33.33	0	0	100
Nuclears & X-rays	8	100	0	0	0	100
Power Systems	23	82.61	13.04	4.35	0	100
Semiconductor Devices	15	46.67	46.67	6.67	0	100
Miscellaneous-Elec.	10	70	10	0	20	100
Materials Processing & Handling	11	63.64	27.27	0	9.09	100
Metal Working	32	71.88	21.88	3.13	3.13	100
Motors, Engines & Parts	21	71.43	23.81	4.76	0	100
Optics	8	62.5	37.5	0	0	100
Transportation	7	85.71	14.29	0	0	100
Miscellaneous Mechanical	21	85.71	14.29	0	0	100
Agriculture, Husbandry, Food	13	76.92	15.38	7.69	0	100
Apparel & Textile	11	72.73	18.18	0	9.09	100
Earth Working & Wells	5	40	40	0	20	100
Furniture, House Fixtures	17	94.12	5.88	0	0	100
Heating	14	71.43	28.57	0	0	100
Pipes & Joints	11	90.91	9.09	0	0	100
Receptacles	6	50	50	0	0	100
Miscellaneous-Others	29	68.97	27.59	0	3.45	100
US-JP weighted	481	69.59	22.63	3.52	4.26	100
JP weighted	481	69.2	22.64	3.52	4.64	100

US (3/4)

Question 6-6(3) How many licensees have got the license? (また、それは複数の企業にライセンスされたか)

	B.11 How many licensees have got the license?	all	only one	2-4 firms	5-10 firms	11-50 firms	51-100 firms	more than 100	Don't know	missing
NBER	All	270	108	46	6	3	2	2	40	63
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX	XX	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	6	3	1	0	0	0	0	0	2
15	Resins	9	3	2	0	0	0	0	2	2
19	Miscellaneous-chemical	29	16	7	0	0	0	0	3	3
21	Communications	24	6	3	1	0	2	2	3	7
22	Computer Hardware	XX	XX	XX	XX	XX	XX	XX	XX	XX
77	Computer Software	8	3	1	0	0	0	0	2	2
23	Computer Peripherals	XX	XX	XX	XX	XX	XX	XX	XX	XX
24	Information Storage	13	3	1	0	1	0	0	5	3
31	Drugs	21	12	2	0	0	0	0	3	4
32	Surgery & Medical Instruments	28	13	4	0	0	0	0	6	5
33	Biotechnology	13	5	3	0	0	0	0	2	3
39	Miscellaneous-Drug&Med	XX	XX	XX	XX	XX	XX	XX	XX	XX
41	Electrical Devices	XX	XX	XX	XX	XX	XX	XX	XX	XX
42	Electrical Lighting	9	4	3	0	0	0	0	1	1
43	Measuring & Testing	8	4	0	0	0	0	0	1	3
44	Nuclears & X-rays	XX	XX	XX	XX	XX	XX	XX	XX	XX
45	Power Systems	8	2	4	0	0	0	0	0	2
46	Semiconductor Devices	XX	XX	XX	XX	XX	XX	XX	XX	XX
49	Miscellaneous-Elec.	XX	XX	XX	XX	XX	XX	XX	XX	XX
51	Materials Processing & Handlin	9	5	1	0	1	0	0	0	2
52	Metal Working	9	5	3	0	0	0	0	0	1
53	Motors, Engines & Parts	8	3	0	1	0	0	0	0	4
54	Optics	6	4	0	0	0	0	0	2	0
55	Transportation	XX	XX	XX	XX	XX	XX	XX	XX	XX
59	Miscellaneous Mechanical	XX	XX	XX	XX	XX	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX	XX	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX	XX	XX	XX	XX	XX
69	Miscellaneous-Others	12	4	2	2	0	0	0	0	4

	%	N	only one	2-4 firms	5-10 firms	More than 10 firms	Total
NBER	All	167	64.67	27.54	3.59	4.19	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX	XX	XX
14	Organic Compounds	4	75	25	0	0	100
15	Resins	5	60	40	0	0	100
19	Miscellaneous-chemical	23	69.57	30.43	0	0	100
21	Communications	14	42.86	21.43	7.14	28.57	100
22	Computer Hardware	XX	XX	XX	XX	XX	XX
77	Computer Software	4	75	25	0	0	100
23	Computer Peripherals	XX	XX	XX	XX	XX	XX
24	Information Storage	5	60	20	0	20	100
31	Drugs	14	85.71	14.29	0	0	100
32	Surgery & Medical Instruments	17	76.47	23.53	0	0	100
33	Biotechnology	8	62.5	37.5	0	0	100
39	Miscellaneous-Drug&Med	XX	XX	XX	XX	XX	XX
41	Electrical Devices	XX	XX	XX	XX	XX	XX
42	Electrical Lighting	7	57.14	42.86	0	0	100
43	Measuring & Testing	4	100	0	0	0	100
44	Nuclears & X-rays	XX	XX	XX	XX	XX	XX
45	Power Systems	6	33.33	66.67	0	0	100
46	Semiconductor Devices	XX	XX	XX	XX	XX	XX
49	Miscellaneous-Elec.	XX	XX	XX	XX	XX	XX
51	Materials Processing & Handlin	7	71.43	14.29	0	14.29	100
52	Metal Working	8	62.5	37.5	0	0	100
53	Motors, Engines & Parts	4	75	0	25	0	100
54	Optics	4	100	0	0	0	100
55	Transportation	XX	XX	XX	XX	XX	XX
59	Miscellaneous Mechanical	XX	XX	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX	XX	XX
69	Miscellaneous-Others	8	50	25	25	0	100
	US-JP weighted	**167**	**65.2**	**26.4**	**3.38**	**5.02**	**100**

US (4/4)

Reference: Did the licensing contracts include exclusivity clauses? (参考:ライセンス契約に排他条項があるか)

	B12 Did the licensing contracts include exclusivity clauses?	all	yes	no	Don't know	Missing
NBER	All	270	108	33	65	64
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX	XX
14	Organic Compounds	6	2	2	0	2
15	Resins	9	2	2	2	3
19	Miscellaneous-chemical	29	16	1	9	3
21	Communications	24	5	6	6	7
22	Computer Hardware	XX	XX	XX	XX	XX
77	Computer Software	8	2	2	2	2
23	Computer Peripherals	XX	XX	XX	XX	XX
24	Information Storage	XX	XX	XX	XX	XX
31	Drugs	21	11	1	5	4
32	Surgery & Medical Instruments	28	17	0	6	5
33	Biotechnology	13	6	2	2	3
39	Miscellaneous-Drug&Med	XX	XX	XX	XX	XX
41	Electrical Devices	XX	XX	XX	XX	XX
42	Electrical Lighting	XX	XX	XX	XX	XX
43	Measuring & Testing	8	3	1	1	3
44	Nuclears & X-rays	XX	XX	XX	XX	XX
45	Power Systems	8	3	2	1	2
46	Semiconductor Devices	XX	XX	XX	XX	XX
49	Miscellaneous-Elec.	XX	XX	XX	XX	XX
51	Materials Processing & Handling	9	6	1	0	2
52	Metal Working	9	5	3	0	1
53	Motors, Engines & Parts	8	3	1	0	4
54	Optics	XX	XX	XX	XX	XX
55	Transportation	XX	XX	XX	XX	XX
59	Miscellaneous Mechanical	XX	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX	XX
69	Miscellaneous-Others	12	3	3	2	4

	%	N	% yes	if licensed %no	Total
NBER	All	141	76.6	23.4	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX
12	Coating	XX	XX	XX	XX
13	Gas	XX	XX	XX	XX
14	Organic Compounds	4	50	50	100
15	Resins	4	50	50	100
19	Miscellaneous-chemical	17	94.12	5.88	100
21	Communications	11	45.45	54.55	100
22	Computer Hardware	XX	XX	XX	XX
77	Computer Software	4	50	50	100
23	Computer Peripherals	XX	XX	XX	XX
24	Information Storage	XX	XX	XX	XX
31	Drugs	12	91.67	8.33	100
32	Surgery & Medical Instruments	17	100	0	100
33	Biotechnology	8	75	25	100
39	Miscellaneous-Drug&Med	XX	XX	XX	XX
41	Electrical Devices	XX	XX	XX	XX
42	Electrical Lighting	XX	XX	XX	XX
43	Measuring & Testing	4	75	25	100
44	Nuclears & X-rays	XX	XX	XX	XX
45	Power Systems	5	60	40	100
46	Semiconductor Devices	XX	XX	XX	XX
49	Miscellaneous-Elec.	XX	XX	XX	XX
51	Materials Processing & Handling	7	85.71	14.29	100
52	Metal Working	8	62.5	37.5	100
53	Motors, Engines & Parts	4	75	25	100
54	Optics	XX	XX	XX	XX
55	Transportation	XX	XX	XX	XX
59	Miscellaneous Mechanical	XX	XX	XX	XX
61	Agriculture, Husbandry, Food	XX	XX	XX	XX
63	Apparel & Textile	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX
68	Receptacles	XX	XX	XX	XX
69	Miscellaneous-Others	6	50	50	100
	US-JP weighted	**141**	**75.58**	**24.42**	100

Japan

Question 6-7 Has this patent been exploited commercially by yourself or any of your co-inventors for starting a new company?
(発明者は新会社設立によって当該特許を利用したか)

	All	yes	no	no response
All	3658	134	3199	325
Agriculture, Food, Textiles	60	2	53	5
Coating	80	2	68	10
Gas	45	3	36	6
Organic Compounds	120	3	102	15
Resins	125	2	106	17
Miscellaneous-chemical	208	9	173	26
Communications	160	3	148	9
Computer Hardware	59	1	55	3
Computer Software	123	5	114	4
Computer Peripherals	76	3	67	6
Information Storage	120	3	107	10
Drugs	127	5	114	8
Surgery & Medical Instruments	85	3	74	8
Biotechnology	87	5	73	9
Miscellaneous-Drug&Med	45	1	42	2
Electrical Devices	91	2	85	4
Electrical Lighting	96	1	89	6
Measuring & Testing	111	4	97	10
Nuclears & X-rays	72	7	61	4
Power Systems	172	3	157	12
Semiconductor Devices	129	3	115	11
Miscellaneous-Elec.	120	4	108	8
Materials Processing & Handling	103	7	84	12
Metal Working	137	6	116	15
Motors, Engines & Parts	145	4	131	10
Optics	100	1	85	14
Transportation	73	2	62	9
Miscellaneous Mechanical	124	6	107	11
Agriculture, Husbandry, Food	87	6	71	10
Apparel & Textile	77	7	68	2
Earth Working & Wells	20	1	16	3
Furniture, House Fixtures	51	3	43	5
Heating	84	4	74	6
Pipes & Joints	66	5	53	8
Receptacles	55	1	50	4
Miscellaneous-Others	225	7	195	23

%	N	yes	no	Total
All	3333	4.02	95.98	100
Agriculture, Food, Textiles	55	3.64	96.36	100
Coating	70	2.86	97.14	100
Gas	39	7.69	92.31	100
Organic Compounds	105	2.86	97.14	100
Resins	108	1.85	98.15	100
Miscellaneous-chemical	182	4.95	95.05	100
Communications	151	1.99	98.01	100
Computer Hardware	56	1.79	98.21	100
Computer Software	119	4.2	95.8	100
Computer Peripherals	70	4.29	95.71	100
Information Storage	110	2.73	97.27	100
Drugs	119	4.2	95.8	100
Surgery & Medical Instruments	77	3.9	96.1	100
Biotechnology	78	6.41	93.59	100
Miscellaneous-Drug&Med	43	2.33	97.67	100
Electrical Devices	87	2.3	97.7	100
Electrical Lighting	90	1.11	98.89	100
Measuring & Testing	101	3.96	96.04	100
Nuclears & X-rays	68	10.29	89.71	100
Power Systems	160	1.88	98.13	100
Semiconductor Devices	118	2.54	97.46	100
Miscellaneous-Elec.	112	3.57	96.43	100
Materials Processing & Handling	91	7.69	92.31	100
Metal Working	122	4.92	95.08	100
Motors, Engines & Parts	135	2.96	97.04	100
Optics	86	1.16	98.84	100
Transportation	64	3.13	96.88	100
Miscellaneous Mechanical	113	5.31	94.69	100
Agriculture, Husbandry, Food	77	7.79	92.21	100
Apparel & Textile	75	9.33	90.67	100
Earth Working & Wells	17	5.88	94.12	100
Furniture, House Fixtures	46	6.52	93.48	100
Heating	78	5.13	94.87	100
Pipes & Joints	58	8.62	91.38	100
Receptacles	51	1.96	98.04	100
Miscellaneous-Others	202	3.47	96.53	100
US-JP weighted	3333	3.67	96.33	100
JP weighted	3333	3.52	96.48	100

US

Question 6-7 Has this patent been exploited commercially by yourself or any of your co-inventors for starting a new company? (発明者は新会社設立によって当該特許を利用したか)

	B13 Has this patent been exploited commercially by yourself or any of your co-inventors for starting a new company?	all	yes	no	Don't know	Missing
NBER	All	1,919	127	1,594	116	82
11	Agriculture, Food, Textiles	8	0	7	1	0
12	Coating	34	4	26	2	2
13	Gas	11	0	9	1	1
14	Organic Compounds	61	2	45	11	3
15	Resins	84	6	69	7	2
19	Miscellaneous-chemical	233	17	203	9	4
21	Communications	149	6	118	15	10
22	Computer Hardware	42	4	32	4	2
77	Computer Software	93	5	81	4	3
23	Computer Peripherals	33	1	30	2	0
24	Information Storage	42	2	33	4	3
31	Drugs	101	10	73	11	7
32	Surgery & Medical Instruments	123	18	89	10	6
33	Biotechnology	41	7	28	4	2
39	Miscellaneous-Drug&Med	29	5	21	0	3
41	Electrical Devices	45	1	41	3	0
42	Electrical Lighting	33	0	31	1	1
43	Measuring & Testing	62	2	57	0	3
44	Nuclears & X-rays	39	3	34	1	1
45	Power Systems	89	4	78	5	2
46	Semiconductor Devices	55	4	46	3	2
49	Miscellaneous-Elec.	32	4	25	2	1
51	Materials Processing & Handling	56	1	51	2	2
52	Metal Working	49	1	47	0	1
53	Motors, Engines & Parts	56	2	49	0	5
54	Optics	43	2	37	3	1
55	Transportation	33	3	25	4	1
59	Miscellaneous Mechanical	42	2	36	1	3
61	Agriculture, Husbandry, Food	14	1	12	0	1
63	Apparel & Textile	9	0	9	0	0
64	Earth Working & Wells	5	1	3	0	1
65	Furniture, House Fixtures	9	1	8	0	0
66	Heating	8	0	7	0	1
67	Pipes & Joints	13	0	13	0	0
68	Receptacles	20	0	18	0	2
69	Miscellaneous-Others	123	8	103	6	6

	%	N	yes	no	Total
NBER	All	1721	7.38	92.62	100
11	Agriculture, Food, Textiles	7	0	100	100
12	Coating	30	13.33	86.67	100
13	Gas	9	0	100	100
14	Organic Compounds	47	4.26	95.74	100
15	Resins	75	8	92	100
19	Miscellaneous-chemical	220	7.73	92.27	100
21	Communications	124	4.84	95.16	100
22	Computer Hardware	36	11.11	88.89	100
77	Computer Software	86	5.81	94.19	100
23	Computer Peripherals	31	3.23	96.77	100
24	Information Storage	35	5.71	94.29	100
31	Drugs	83	12.05	87.95	100
32	Surgery & Medical Instruments	107	16.82	83.18	100
33	Biotechnology	35	20	80	100
39	Miscellaneous-Drug&Med	26	19.23	80.77	100
41	Electrical Devices	42	2.38	97.62	100
42	Electrical Lighting	31	0	100	100
43	Measuring & Testing	59	3.39	96.61	100
44	Nuclears & X-rays	37	8.11	91.89	100
45	Power Systems	82	4.88	95.12	100
46	Semiconductor Devices	50	8	92	100
49	Miscellaneous-Elec.	29	13.79	86.21	100
51	Materials Processing & Handling	52	1.92	98.08	100
52	Metal Working	48	2.08	97.92	100
53	Motors, Engines & Parts	51	3.92	96.08	100
54	Optics	39	5.13	94.87	100
55	Transportation	28	10.71	89.29	100
59	Miscellaneous Mechanical	38	5.26	94.74	100
61	Agriculture, Husbandry, Food	13	7.69	92.31	100
63	Apparel & Textile	9	0	100	100
64	Earth Working & Wells	4	25	75	100
65	Furniture, House Fixtures	9	11.11	88.89	100
66	Heating	7	0	100	100
67	Pipes & Joints	13	0	100	100
68	Receptacles	18	0	100	100
69	Miscellaneous-Others	111	7.21	92.79	100
	US-JP weighted	**1721**	**7.16**	**92.84**	100

Japan

Question 6-3,6,7 summary (1)

Any commercialization either through internal (or in-house) use, license or startup (発明は商用化、ライセンス、新会社の設立などで利用されたか)

		全て「いいえ」	いずれかが「はい」	それ以外
	All	**all "no"**	**any "yes"**	**other**
All	3658	1265	2185	208
Agriculture, Food, Textiles	60	25	30	5
Coating	80	27	51	2
Gas	45	17	24	4
Organic Compounds	120	59	49	12
Resins	125	44	67	14
Miscellaneous-chemical	208	65	126	17
Communications	160	74	77	9
Computer Hardware	59	17	40	2
Computer Software	123	43	76	4
Computer Peripherals	76	26	45	5
Information Storage	120	44	72	4
Drugs	127	74	46	7
Surgery & Medical Instruments	85	27	50	8
Biotechnology	87	37	45	5
Miscellaneous-Drug&Med	45	16	28	1
Electrical Devices	91	27	62	2
Electrical Lighting	96	34	57	5
Measuring & Testing	111	38	67	6
Nuclears & X-rays	72	27	44	1
Power Systems	172	76	90	6
Semiconductor Devices	129	53	67	9
Miscellaneous-Elec.	120	35	80	5
Materials Processing & Handling	103	25	70	8
Metal Working	137	33	97	7
Motors, Engines & Parts	145	60	77	8
Optics	100	37	56	7
Transportation	73	21	48	4
Miscellaneous Mechanical	124	30	85	9
Agriculture, Husbandry, Food	87	17	63	7
Apparel & Textile	77	15	61	1
Earth Working & Wells	20	5	15	0
Furniture, House Fixtures	51	8	41	2
Heating	84	28	52	4
Pipes & Joints	66	17	43	6
Receptacles	55	13	41	1
Miscellaneous-Others	225	71	143	11

%	N	**all "no"**	**any "yes"**	**Total**
All	3450	36.67	63.33	100
Agriculture, Food, Textiles	55	45.45	54.55	100
Coating	78	34.62	65.38	100
Gas	41	41.46	58.54	100
Organic Compounds	108	54.63	45.37	100
Resins	111	39.64	60.36	100
Miscellaneous-chemical	191	34.03	65.97	100
Communications	151	49.01	50.99	100
Computer Hardware	57	29.82	70.18	100
Computer Software	119	36.13	63.87	100
Computer Peripherals	71	36.62	63.38	100
Information Storage	116	37.93	62.07	100
Drugs	120	61.67	38.33	100
Surgery & Medical Instruments	77	35.06	64.94	100
Biotechnology	82	45.12	54.88	100
Miscellaneous-Drug&Med	44	36.36	63.64	100
Electrical Devices	89	30.34	69.66	100
Electrical Lighting	91	37.36	62.64	100
Measuring & Testing	105	36.19	63.81	100
Nuclears & X-rays	71	38.03	61.97	100
Power Systems	166	45.78	54.22	100
Semiconductor Devices	120	44.17	55.83	100
Miscellaneous-Elec.	115	30.43	69.57	100
Materials Processing & Handling	95	26.32	73.68	100
Metal Working	130	25.38	74.62	100
Motors, Engines & Parts	137	43.8	56.2	100
Optics	93	39.78	60.22	100
Transportation	69	30.43	69.57	100
Miscellaneous Mechanical	115	26.09	73.91	100
Agriculture, Husbandry, Food	80	21.25	78.75	100
Apparel & Textile	76	19.74	80.26	100
Earth Working & Wells	20	25	75	100
Furniture, House Fixtures	49	16.33	83.67	100
Heating	80	35	65	100
Pipes & Joints	60	28.33	71.67	100
Receptacles	54	24.07	75.93	100
Miscellaneous-Others	214	33.18	66.82	100
US-JP weighted		38.35	61.65	100
JP weighted		37.92	62.08	100

US (1/2)

Question 6-3,6,7 summary (1)

Any commercialization either through internal (or in-house) use, license or startup (発明は商用化、ライセンス、新会社の設立などで利用されたか)

	Cashin (patent used(any from B4,9,10,13))	All	all "no"	any "yes"	Missing
NBER	All	1,919	587	971	361
11	Agriculture, Food, Textiles	8	4	3	1
12	Coating	34	7	20	7
13	Gas	11	4	4	3
14	Organic Compounds	61	25	21	15
15	Resins	84	27	39	18
19	Miscellaneous-chemical	233	75	120	38
21	Communications	149	40	67	42
22	Computer Hardware	42	10	19	13
77	Computer Software	93	19	53	21
23	Computer Peripherals	33	15	13	5
24	Information Storage	42	10	21	11
31	Drugs	101	47	35	19
32	Surgery & Medical Instruments	123	39	64	20
33	Biotechnology	41	10	24	7
39	Miscellaneous-Drug&Med	29	7	16	6
41	Electrical Devices	45	7	28	10
42	Electrical Lighting	33	9	19	5
43	Measuring & Testing	62	16	38	8
44	Nuclears & X-rays	39	10	20	9
45	Power Systems	89	31	45	13
46	Semiconductor Devices	55	20	22	13
49	Miscellaneous-Elec.	32	5	20	7
51	Materials Processing & Handling	56	17	36	3
52	Metal Working	49	15	27	7
53	Motors, Engines & Parts	56	18	30	8
54	Optics	43	16	19	8
55	Transportation	33	10	18	5
59	Miscellaneous Mechanical	42	12	23	7
61	Agriculture, Husbandry, Food	14	2	11	1
63	Apparel & Textile	9	2	7	0
64	Earth Working & Wells	5	1	3	1
65	Furniture, House Fixtures	9	1	6	2
66	Heating	8	3	4	1
67	Pipes & Joints	13	7	5	1
68	Receptacles	20	7	10	3
69	Miscellaneous-Others	123	39	61	23

	%	N	all "no"	any "yes"	Total
NBER	All	1558	37.68	62.32	100
11	Agriculture, Food, Textiles	7	57.14	42.86	100
12	Coating	27	25.93	74.07	100
13	Gas	8	50	50	100
14	Organic Compounds	46	54.35	45.65	100
15	Resins	66	40.91	59.09	100
19	Miscellaneous-chemical	195	38.46	61.54	100
21	Communications	107	37.38	62.62	100
22	Computer Hardware	29	34.48	65.52	100
77	Computer Software	72	26.39	73.61	100
23	Computer Peripherals	28	53.57	46.43	100
24	Information Storage	31	32.26	67.74	100
31	Drugs	82	57.32	42.68	100
32	Surgery & Medical Instruments	103	37.86	62.14	100
33	Biotechnology	34	29.41	70.59	100
39	Miscellaneous-Drug&Med	23	30.43	69.57	100
41	Electrical Devices	35	20	80	100
42	Electrical Lighting	28	32.14	67.86	100
43	Measuring & Testing	54	29.63	70.37	100
44	Nuclears & X-rays	30	33.33	66.67	100
45	Power Systems	76	40.79	59.21	100
46	Semiconductor Devices	42	47.62	52.38	100
49	Miscellaneous-Elec.	25	20	80	100
51	Materials Processing & Handling	53	32.08	67.92	100
52	Metal Working	42	35.71	64.29	100
53	Motors, Engines & Parts	48	37.5	62.5	100
54	Optics	35	45.71	54.29	100
55	Transportation	28	35.71	64.29	100
59	Miscellaneous Mechanical	35	34.29	65.71	100
61	Agriculture, Husbandry, Food	13	15.38	84.62	100
63	Apparel & Textile	9	22.22	77.78	100
64	Earth Working & Wells	4	25	75	100
65	Furniture, House Fixtures	7	14.29	85.71	100
66	Heating	7	42.86	57.14	100
67	Pipes & Joints	12	58.33	41.67	100
68	Receptacles	17	41.18	58.82	100
69	Miscellaneous-Others	100	39	61	100
	US-JP weighted		37.77	62.23	100

US (2/2)

Question 6-3,6,7 summary (2)

From the commercial launch of your product/process/service, approximately how long was it until another firm introduced a competing alternative? (当該特許が商業化されてから、別の企業が競争的な代替手段(製品、生産過程あるいはサービス)を導入するのに要した時間)

	B8 From the commercial launch of your product/process/service, approximately how long was it until another firm introduced a competing alternative?	all	Less than 6 months	6 months - 1.5 years	1.5-3 years	3-5 years	More than 5 years	Don't know	Missing
NBER	All	945	65	87	110	65	116	419	83
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	22	2	4	3	4	1	6	2
13	Gas	XX	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	20	2	1	0	2	1	13	1
15	Resins	40	2	1	7	2	5	20	3
19	Miscellaneous-chemical	112	7	12	12	5	14	58	4
21	Communications	69	14	5	9	6	5	22	8
22	Computer Hardware	19	1	2	0	3	2	9	2
77	Computer Software	54	4	7	9	4	4	24	2
23	Computer Peripherals	10	2	3	0	0	0	5	0
24	Information Storage	20	4	0	2	1	3	7	3
31	Drugs	29	1	0	5	2	1	15	5
32	Surgery & Medical Instruments	59	2	5	13	3	5	26	5
33	Biotechnology	19	0	2	2	0	3	9	3
39	Miscellaneous-Drug&Med	17	1	1	0	1	3	8	3
41	Electrical Devices	28	2	5	3	4	2	10	2
42	Electrical Lighting	16	3	0	1	0	2	8	2
43	Measuring & Testing	41	3	4	6	1	4	18	5
44	Nuclears & X-rays	18	1	1	0	3	1	10	2
45	Power Systems	47	5	5	6	4	6	17	4
46	Semiconductor Devices	19	1	3	3	1	0	9	2
49	Miscellaneous-Elec.	20	0	2	3	3	3	8	1
51	Materials Processing & Handling	34	1	2	4	4	2	18	3
52	Metal Working	24	1	1	1	0	4	15	2
53	Motors, Engines & Parts	32	0	0	2	4	6	15	5
54	Optics	18	1	2	2	0	3	9	1
55	Transportation	17	1	4	1	0	3	8	0
59	Miscellaneous Mechanical	26	1	4	3	1	6	8	3
61	Agriculture, Husbandry, Food	11	0	1	1	1	3	5	0
63	Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX	XX	XX	XX
68	Receptacles	10	0	1	0	0	4	4	1
69	Miscellaneous-Others	60	3	6	8	5	10	22	6

	%	N	Less than 6 months	6 months - 1.5 years	1.5-3 years	3-5 years	More than 5 years	Total
NBER	All	443	14.67	19.64	24.83	14.67	26.19	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12	Coating	14	14.29	28.57	21.43	28.57	7.14	100
13	Gas	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	6	33.33	16.67	0	33.33	16.67	100
15	Resins	17	11.76	5.88	41.18	11.76	29.41	100
19	Miscellaneous-chemical	50	14.00	24	24	10	28	100
21	Communications	39	35.90	12.82	23.08	15.38	12.82	100
22	Computer Hardware	8	12.50	25	0	37.5	25	100
77	Computer Software	28	14.29	25	32.14	14.29	14.29	100
23	Computer Peripherals	5	40.00	60	0	0	0	100
24	Information Storage	10	40.00	0	20	10	30	100
31	Drugs	9	11.11	0	55.56	22.22	11.11	100
32	Surgery & Medical Instruments	28	7.14	17.86	46.43	10.71	17.86	100
33	Biotechnology	7	0.00	28.57	28.57	0	42.86	100
39	Miscellaneous-Drug&Med	6	16.67	16.67	0	16.67	50	100
41	Electrical Devices	16	12.50	31.25	18.75	25	12.5	100
42	Electrical Lighting	6	50.00	0	16.67	0	33.33	100
43	Measuring & Testing	18	16.67	22.22	33.33	5.56	22.22	100
44	Nuclears & X-rays	6	16.67	16.67	0	50	16.67	100
45	Power Systems	26	19.23	19.23	23.08	15.38	23.08	100
46	Semiconductor Devices	8	12.50	37.5	37.5	12.5	0	100
49	Miscellaneous-Elec.	11	0.00	18.18	27.27	27.27	27.27	100
51	Materials Processing & Handling	13	7.69	15.38	30.77	30.77	15.38	100
52	Metal Working	7	14.29	14.29	14.29	0	57.14	100
53	Motors, Engines & Parts	12	0.00	0	16.67	33.33	50	100
54	Optics	8	12.50	25	25	0	37.5	100
55	Transportation	9	11.11	44.44	11.11	0	33.33	100
59	Miscellaneous Mechanical	15	6.67	26.67	20	6.67	40	100
61	Agriculture, Husbandry, Food	6	0.00	16.67	16.67	16.67	50	100
63	Apparel & Textile	XX	XX	XX	XX	XX	XX	XX
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX
66	Heating	XX	XX	XX	XX	XX	XX	XX
67	Pipes & Joints	XX	XX	XX	XX	XX	XX	XX
68	Receptacles	5	0.00	20	0	0	80	100
69	Miscellaneous-Others	32	9.38	18.75	25	15.63	31.25	100
	NBER US-JP weighted	**443**	**15.51**	**18.77**	**25.3**	**14.27**	**26.16**	100

Japan

Question 6-8 If this patent is used neither internally within the applicant firm, licensing nor for starting a new company, what are the important reasons for that?
You can check all relevant boxes.（自社内、ライセンス等によって利用されていない理由　重複回答あり）

	All	他社が類似技術を特許化することをブロックするため	特許は他社による迂回防止に有用だから	技術・市場動向が発明の有用性を低下させる方向に変化したから	発明の技術水準が高くなったから	基礎的な発明でありその応用技術を発展させることが出来なかった	発明の利用を予定していた自社事業が整理・縮小されたから	発明の利用を予定していた自社新事業が不成功に終わったから	当該発明の実施に必要な他分野の技術開発が遅れているから	発明を実施する上で上記以外のボトルネックが存在したから	わからない	無回答
	All	**The patent is used or was used for blocking other firms patent similar inventions.**	**The patent is used or was used for preventing the inventing-around by other firms**	**Technology or market environment has changed in the direction for reducing the value of this invention**	**Low technical level of the invention**	**The firm has not been able to develop the application technologies for this basic invention.**	**The business of the firm for which the invention was aimed at has been downsized**	**The new business of the firm for which the invention was aimed at has not been successful**	**The development of the complementary technology in other technology fields is delayed**	**Other bottlenecks have existed**	**don't know**	**no response**
All	1265	450	202	234	113	218	259	152	151	92	59	73
Agriculture, Food, Textiles	25	7	5	3	7	4	3	2	1	4	0	1
Coating	27	6	3	3	1	6	5	2	4	2	3	0
Gas	17	8	4	2	0	3	3	2	4	2	0	1
Organic Compounds	59	20	6	12	3	18	14	4	6	4	2	2
Resins	44	16	7	9	4	13	11	6	1	4	2	2
Miscellaneous-chemical	65	21	7	11	6	8	12	9	10	6	3	4
Communications	74	22	12	24	3	4	22	6	13	2	6	1
Computer Hardware	17	6	3	6	0	1	5	3	0	2	2	0
Computer Software	43	11	4	7	2	9	12	2	2	2	5	3
Computer Peripherals	26	4	3	5	2	6	6	7	3	2	1	0
Information Storage	44	14	5	14	4	3	16	8	3	0	1	3
Drugs	74	22	7	7	4	14	10	18	10	6	2	8
Surgery & Medical Instruments	27	12	7	1	2	4	6	4	1	3	2	2
Biotechnology	37	10	4	6	3	15	7	4	4	1	2	1
Miscellaneous-Drug&Med	16	6	1	2	0	1	6	1	1	3	0	1
Electrical Devices	27	7	4	6	4	2	6	2	2	4	0	2
Electrical Lighting	34	14	6	6	4	9	7	2	5	1	2	2
Measuring & Testing	38	14	8	5	5	3	6	7	2	1	2	3
Nuclears & X-rays	27	10	5	4	3	8	4	3	4	1	2	1
Power Systems	76	25	12	12	7	10	13	9	15	4	3	3
Semiconductor Devices	53	14	6	14	3	9	16	6	10	3	3	2
Miscellaneous-Elec.	35	18	6	7	2	4	9	5	6	5	1	4
Materials Processing & Handling	25	13	3	6	8	2	5	3	1	2	1	0
Metal Working	33	14	8	4	2	7	5	3	5	3	1	2
Motors, Engines & Parts	60	37	19	10	4	6	5	7	10	3	0	6
Optics	37	11	6	10	5	8	5	6	2	5	0	1
Transportation	21	10	2	4	4	7	6	1	2	1	1	0
Miscellaneous Mechanical	30	7	3	5	2	2	8	6	1	2	3	3
Agriculture, Husbandry, Food	17	11	4	3	2	3	4	2	3	1	0	1
Apparel & Textile	15	6	4	4	2	5	2	1	2	3	0	0
Earth Working & Wells	5	2	1	0	0	2	1	0	0	0	0	0
Furniture, House Fixtures	8	6	5	0	1	0	0	0	3	2	0	1
Heating	28	13	8	7	3	5	6	4	0	2	1	2
Pipes & Joints	17	5	2	4	2	3	0	1	3	1	0	3
Receptacles	13	6	1	0	1	2	1	0	2	1	0	2
Miscellaneous-Others	71	22	11	11	8	12	12	6	10	4	8	6

%	N	**The patent is used or was used for blocking other firms patent similar inventions.**	**The patent is used or was used for preventing the inventing-around by other firms**	**Technology or market environment has changed in the direction for reducing the value of this invention**	**Low technical level of the invention**	**The firm has not been able to develop the application technologies for this basic invention.**	**The business of the firm for which the invention was aimed at has been downsized**	**The new business of the firm for which the invention was aimed at has not been successful**	**The development of the complementary technology in other technology fields is delayed**	**Other bottlenecks have existed**
All	1133	39.72	17.83	20.65	9.97	19.24	22.86	13.42	13.33	8.12
Agriculture, Food, Textiles	24	29.17	20.83	12.5	29.17	16.67	12.5	8.33	4.17	16.67
Coating	24	25	12.5	12.5	4.17	25	20.83	8.33	16.67	8.33
Gas	16	50	25	12.5	0	18.75	18.75	12.5	25	12.5
Organic Compounds	55	36.36	10.91	21.82	5.45	32.73	25.45	7.27	10.91	7.27
Resins	40	40	17.5	22.5	10	32.5	27.5	15	2.5	10
Miscellaneous-chemical	58	36.21	12	18.97	10.34	13.79	20.69	15.52	17.24	10.34
Communications	67	32.84	17.91	35.82	4.48	5.97	32.84	8.96	19.4	2.99
Computer Hardware	15	40	20	40	0	6.67	33.33	20	0	13.33
Computer Software	35	31.43	11.43	20	5.71	25.71	34.29	5.71	5.71	5.71
Computer Peripherals	25	16	12	20	8	24	24	28	12	8
Information Storage	40	35	12.5	35	10	7.5	40	20	7.5	0
Drugs	64	34	10.94	10.94	6.25	21.88	15.63	28.13	15.63	9.38
Surgery & Medical Instruments	23	52	30.43	4.35	8.7	17.39	26.09	17.39	4.35	13.04
Biotechnology	34	29	11.76	17.65	8.82	44.12	20.59	11.76	11.76	2.94
Miscellaneous-Drug&Med	15	40	6.67	13.33	0	6.67	40	6.67	6.67	20
Electrical Devices	25	28	16	24	16	8	24	8	8	16
Electrical Lighting	30	47	20	20	13.33	30	23.33	6.67	16.67	3.33
Measuring & Testing	33	42.42	24.24	15.15	15.15	9.09	18.18	21.21	6.06	3.03
Nuclears & X-rays	24	41.67	20.83	16.67	12.5	33.33	16.67	12.5	16.67	4.17
Power Systems	70	35.71	17.14	17.14	10	14.29	18.57	12.86	21.43	5.71
Semiconductor Devices	48	29.17	12.5	29.17	6.25	18.75	33.33	12.5	20.83	6.25
Miscellaneous-Elec.	30	60	20	23.33	6.67	13.33	30	16.67	20	16.67
Materials Processing & Handling	24	54.17	12.5	25	33.33	8.33	20.83	12.5	4.17	8.33
Metal Working	30	46.67	26.67	13.33	6.67	23.33	16.67	10	16.67	10
Motors, Engines & Parts	54	68.52	35.19	18.52	7.41	11.11	9.26	12.96	18.52	5.56
Optics	36	30.56	16.67	27.78	13.89	22.22	13.89	16.67	5.56	13.89
Transportation	20	50	10	20	20	35	30	5	10	5
Miscellaneous Mechanical	24	29.17	12.5	20.83	8.33	8.33	33.33	25	4.17	8.33
Agriculture, Husbandry, Food	16	68.75	25	18.75	12.5	18.75	25	12.5	18.75	6.25
Apparel & Textile	15	40	26.67	26.67	13.33	33.33	13.33	6.67	13.33	20
Earth Working & Wells	5	40	20	0	0	40	20	0	0	0
Furniture, House Fixtures	7	85.71	71.43	0	14.29	0	0	0	42.86	28.57
Heating	25	52	32	28	12	20	24	16	0	8
Pipes & Joints	14	35.71	14.29	28.57	14.29	21.43	0	7.14	21.43	7.14
Receptacles	11	54.55	9.09	0	9.09	18.18	9.09	0	18.18	9.09
Miscellaneous-Others	57	38.6	19.3	19.3	14.04	21.05	21.05	10.53	17.54	7.02
US-JP weighted		35.81	15.86	20.16	8.89	17.28	22.60	13.23	12.74	7.34
JP weighted		36.34	16.27	20.77	9.26	16.59	22.62	12.84	12.86	7.21

US

Question 6-8 If this patent is used neither internally within the applicant firm, licensing nor for starting a new company, what are the important reasons for that? You can check all relevant boxes. (自社内、ライセンス等によって利用されていない理由(重複回答あり))

B14 If this patent is used neither internally within the applicant firm, licensing nor for starting a new company, what are the important reasons for that? You can check all relevant boxes.	all	c. The patent is used or was used for blocking other firms patent similar inventions.	d. The patent is used or was used for preventing the inventing-around by other firms	e. Technology or market environment has changed in the direction for reducing the value of this invention	f. Low technical level of the invention	i. The firm has not been able to develop the application technologies for this basic invention.	j. The business of the firm for which the invention was aimed at has been downsized	k. The new line of business based on the invention has not been successful	l. The development of the complementary technology in other technology fields is delayed	a. We are still actively exploring the commercial possibilities of this invention	b. The technology is used internally as a research tool to develop other commercial technologies	g. Lack of interest from potential licenses	h. Lack of capital for starting a new firm based on the technology	m. other	n. Don't know	Missing	Skipped
NBER All	1,919	295	201	234	56	101	178	63	77	381	159	72	53	63	81	117	869
11 Agriculture, Food, Textiles	8	2	1	1	0	0	0	0	0	1	0	0	0	0	1	1	3
12 Coating	34	4	3	2	0	2	0	0	0	5	4	1	2	1	4	3	17
13 Gas	11	3	2	2	1	1	3	1	2	4	0	0	0	0	0	0	4
14 Organic Compounds	61	12	7	7	2	6	9	2	1	16	7	3	1	3	5	4	15
15 Resins	84	15	13	8	3	4	10	1	2	18	11	1	2	3	2	6	34
19 Miscellaneous-chemical	233	31	26	32	6	12	17	10	14	52	19	12	4	3	8	9	113
21 Communications	149	20	15	25	3	11	26	3	8	21	11	6	4	8	5	14	60
22 Computer Hardware	42	3	1	4	1	4	5	0	0	6	1	2	0	1	5	3	18
77 Computer Software	93	15	7	10	5	6	9	2	3	12	7	2	2	2	0	4	51
23 Computer Peripherals	33	1	2	9	1	2	6	0	2	6		2	2	0	2	1	12
24 Information Storage	42	2	1	7	0	1	9	6	0	7	5	2	3	1	1	5	20
31 Drugs	101	24	14	13	6	10	13	4	1	38	11	6	1	4	2	9	26
32 Surgery & Medical Instruments	123	25	17	13	3	3	6	2	7	24	8	2	6	4	4	10	57
33 Biotechnology	41	1	1	3	2	3	4	0	0	6	4	2	1	0	1	3	23
39 Miscellaneous-Drug&Med	29	3	3	1	2	1	2	1	1	4	3	1	0	1	0	5	16
41 Electrical Devices	45	7	6	6	0	3	8	4	5	3	4	1	0	1	0	0	25
42 Electrical Lighting	33	5	2	3	1	0	2	2	2	8	4	2	3	2	1	3	16
43 Measuring & Testing	62	7	0	8	1	2	2	1	2	7	3	1	0	1	5	3	35
44 Nuclears & X-rays	39	7	5	5	1	1	2	2	1	7	2	1	1	1	2	0	18
45 Power Systems	89	18	11	10	0	6	5	5	1	17	5	2	5	2	6	4	43
46 Semiconductor Devices	55	12	11	8	1	1	6	2	5	13	8	3	1	3	3	3	16
49 Miscellaneous-Elec.	32	2	2	2	1	2	5	1	1	3	1	1	1	1	0	4	20
51 Materials Processing & Handling	56	9	7	9	0	1	2	2	1	12	4	4	2	3	3	3	27
52 Metal Working	49	12	3	4	4	2	4	2	1	11	3	1	0	2	2	1	23
53 Motors, Engines & Parts	56	6	2	6	4	3	2	1	3	12	5	2	1	2	1	5	29
54 Optics	43	6	7	11	1	4	10	5	3	11	2	2	3	3	2	0	14
55 Transportation	33	5	4	5	1	2	2	0	2	4	3	1	1	1	4	0	15
59 Miscellaneous Mechanical	42	7	3	5	2	2	2	1	1	4	3	3	1	2	1	4	21
61 Agriculture, Husbandry, Food	14	1	1	0	0	0	1	0	0	2	1	1	1	1	0	0	8
63 Apparel & Textile	9	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
64 Earth Working & Wells	5	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	9	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
66 Heating	8	1	1	0	0	1	0	0	0	3	1	1	0	1	0	1	3
67 Pipes & Joints	13	3	2	0	0	1	0	0	0	5	0	0	0	3	1	0	5
68 Receptacles	20	3	3	0	0	0	0	0	0	7	1	0	0	1	0	1	10
69 Miscellaneous-Others	123	20	16	12	3	4	5	3	8	29	11	4	5	2	9	7	56

%	N	c. The patent is used or was used for blocking other firms patent similar inventions.	d. The patent is used or was used for preventing the inventing-around by other firms	e. Technology or market environment has changed in the direction for reducing the value of this invention	f. Low technical level of the invention	i. The firm has not been able to develop the application technologies for this basic invention.	j. The business of the firm for which the invention was aimed at has been downsized	k. The new line of business based on the invention has not been successful	l. The development of the complementary technology in other technology fields is delayed	a. We are still actively exploring the commercial possibilities of this invention	b. The technology is used internally as a research tool to develop other commercial technologies	g. Lack of interest from potential licenses	h. Lack of capital for starting a new firm based on the technology	m. other
NBER All	852	34.62	23.59	27.46	6.57	11.85	20.89	7.39	9.04	44.72	18.66	8.45	6.22	7.39
11 Agriculture, Food, Textiles	3	66.67	33.33	33.33	0	0	0	0	0	33.33	0	0	0	0
12 Coating	10	40	30	20	0	20	0	0	0	50	40	10	20	10
13 Gas	7	42.86	28.57	28.57	14.29	14.29	42.86	14.29	28.57	57.14	0	0	0	0
14 Organic Compounds	37	32.43	18.92	18.92	5.41	16.22	24.32	5.41	2.7	43.24	18.92	8.11	2.7	8.11
15 Resins	42	35.71	30.95	19.05	7.14	9.52	23.81	2.38	4.76	42.86	26.19	2.38	4.76	7.14
19 Miscellaneous-chemical	103	30.1	25.24	31.07	5.83	11.65	16.5	9.71	13.59	50.49	18.45	11.65	3.88	2.91
21 Communications	70	28.57	21.43	35.71	4.29	15.71	37.14	4.29	11.43	30	15.71	8.57	5.71	11.43
22 Computer Hardware	16	18.75	6.25	25	6.25	25	31.25	0	0	37.5	6.25	12.5	0	6.25
77 Computer Software	38	39.47	18.42	26.32	13.16	15.79	23.68	5.26	7.89	31.58	18.42	5.26	5.26	5.26
23 Computer Peripherals	18	5.56	11.11	50	5.56	11.11	33.33	0	11.11	33.33	38.89	11.11	11.11	0
24 Information Storage	16	12.5	6.25	43.75	0	6.25	56.25	37.5	0	43.75	31.25	12.5	18.75	6.25
31 Drugs	64	37.5	21.88	20.31	9.38	15.63	20.31	6.25	1.56	59.38	17.19	9.38	1.56	6.25
32 Surgery & Medical Instruments	52	48.08	32.69	25	5.77	5.77	11.54	3.85	13.46	46.15	15.38	3.85	11.54	7.69
33 Biotechnology	14	7.14	7.14	21.43	14.29	21.43	28.57	0	0	42.86	28.57	14.29	7.14	0
39 Miscellaneous-Drug&Med	8	37.5	37.5	12.5	25	12.5	25	12.5	12.5	50	37.5	12.5	0	12.5
41 Electrical Devices	20	35	30	30	0	15	40	20	25	15	20	5	0	5
42 Electrical Lighting	13	38.46	15.38	23.08	7.69	0	15.38	15.38	15.38	61.54	30.77	15.38	23.08	15.38
43 Measuring & Testing	19	36.84	0	42.11	5.26	10.53	10.53	5.26	10.53	36.84	15.79	5.26	0	5.26
44 Nuclears & X-rays	19	36.84	26.32	26.32	5.26	5.26	10.53	10.53	5.26	36.84	10.53	5.26	5.26	5.26
45 Power Systems	36	50	30.56	27.78	0	16.67	13.89	13.89	2.78	47.22	13.89	5.56	13.89	5.56
46 Semiconductor Devices	33	36.36	33.33	24.24	3.03	3.03	18.18	6.06	15.15	39.39	24.24	9.09	3.03	9.09
49 Miscellaneous-Elec.	8	25	25	25	12.5	25	62.5	12.5	12.5	37.5	12.5	12.5	12.5	12.5
51 Materials Processing & Handling	23	39.13	30.43	39.13	0	4.35	8.7	8.7	4.35	52.17	17.39	17.39	8.7	13.04
52 Metal Working	23	52.17	13.04	17.39	17.39	8.7	17.39	8.7	4.35	47.83	13.04	4.35	0	8.7
53 Motors, Engines & Parts	21	28.57	9.52	28.57	19.05	14.29	9.52	4.76	14.29	57.14	23.81	9.52	4.76	9.52
54 Optics	27	22.22	25.93	40.74	3.7	14.81	37.04	18.52	11.11	40.74	7.41	7.41	11.11	11.11
55 Transportation	14	35.71	28.57	35.71	7.14	14.29	14.29	0	14.29	28.57	21.43	7.14	7.14	7.14
59 Miscellaneous Mechanical	16	43.75	18.75	31.25	12.5	12.5	12.5	6.25	6.25	25	18.75	18.75	6.25	12.5
61 Agriculture, Husbandry, Food	6	16.67	16.67	0	0	0	16.67	0	0	33.33	16.67	16.67	16.67	16.67
63 Apparel & Textile	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
66 Heating	4	25	25	0	0	25	0	0	0	75	25	25	0	25
67 Pipes & Joints	7	42.86	28.57	0	0	14.29	0	0	0	71.43	0	0	0	42.86
68 Receptacles	9	33.33	33.33	0	0	0	0	0	0	77.78	11.11	0	0	11.11
69 Miscellaneous-Others	51	39.22	31.37	23.53	5.88	7.84	9.8	5.88	15.69	56.86	21.57	7.84	9.8	3.92
NBER US-JP weighted		34.33	22.91	28.01	6.52	11.68	21.71	7.79	8.56	44.72	18.81	8.64	6.46	7.89

Japan

Question 6-9 Did you publish a scientific/technical paper describing this invention?
（当該発明の内容を科学技術論文として公表したか）

	All	yes	no	no response
All	3658	704	2872	82
Agriculture, Food, Textiles	60	8	52	0
Coating	80	11	68	1
Gas	45	10	34	1
Organic Compounds	120	28	90	2
Resins	125	18	105	2
Miscellaneous-chemical	208	40	162	6
Communications	160	46	111	3
Computer Hardware	59	7	48	4
Computer Software	123	21	100	2
Computer Peripherals	76	10	63	3
Information Storage	120	14	106	0
Drugs	127	42	80	5
Surgery & Medical Instruments	85	15	68	2
Biotechnology	87	55	30	2
Miscellaneous-Drug&Med	45	10	35	0
Electrical Devices	91	16	74	1
Electrical Lighting	96	20	76	0
Measuring & Testing	111	31	80	0
Nuclears & X-rays	72	19	50	3
Power Systems	172	35	137	0
Semiconductor Devices	129	36	91	2
Miscellaneous-Elec.	120	19	99	2
Materials Processing & Handling	103	11	88	4
Metal Working	137	43	86	8
Motors, Engines & Parts	145	26	116	3
Optics	100	15	81	4
Transportation	73	7	64	2
Miscellaneous Mechanical	124	11	108	5
Agriculture, Husbandry, Food	87	20	66	1
Apparel & Textile	77	2	73	2
Earth Working & Wells	20	2	16	2
Furniture, House Fixtures	51	5	45	1
Heating	84	15	69	0
Pipes & Joints	66	5	58	3
Receptacles	55	5	48	2
Miscellaneous-Others	225	26	195	4

国内特許出願と当該論文公表の関係について、重複回答あり
If Yes, which of the following choices apply to the relationship between the patent application of your invention co-production with another firm to bring it to the market? You can check all relevant boxes.

	論文公表の前に関連発明の特許出願義務の規則があり、それに該当した The patent application of the inventions was mandatory prior to the publication because of the internal rule of the employer.	論文公表の結果、他社による自社技術使用防止のため出願した The patent application before the publication of your paper was necessary to prevent the free use of the technology of your firm as disclosed in your publication	特許出願手続きのために当該論文公表が遅れた The patent application procedure led to the delay of you publication	特許出願と論文公表は無関係であった The timing of the patent application had no effect on the timing of publications.	無回答 no response
All	418	190	87	119	9
Agriculture, Food, Textiles	2	1	2	2	1
Coating	4	5	1	3	0
Gas	8	3	1	1	0
Organic Compounds	16	4	6	6	0
Resins	11	5	2	2	0
Miscellaneous-chemical	20	13	3	8	1
Communications	36	9	1	6	1
Computer Hardware	5	2	1	1	0
Computer Software	17	6	1	0	0
Computer Peripherals	8	4	0	0	0
Information Storage	12	1	1	2	0
Drugs	25	9	8	9	0
Surgery & Medical Instruments	5	6	3	5	0
Biotechnology	26	17	19	8	0
Miscellaneous-Drug&Med	1	2	2	5	0
Electrical Devices	12	9	0	1	0
Electrical Lighting	13	8	3	2	0
Measuring & Testing	19	5	5	4	1
Nuclears & X-rays	15	4	1	2	0
Power Systems	22	4	2	8	2
Semiconductor Devices	24	12	4	5	0
Miscellaneous-Elec.	10	5	3	4	0
Materials Processing & Handling	4	6	0	2	0
Metal Working	35	6	6	4	0
Motors, Engines & Parts	12	7	2	5	1
Optics	9	6	0	3	1
Transportation	4	3	0	1	0
Miscellaneous Mechanical	3	4	2	2	1
Agriculture, Husbandry, Food	9	3	4	6	0
Apparel & Textile	0	0	0	2	0
Earth Working & Wells	0	2	0	0	0
Furniture, House Fixtures	3	1	0	1	0
Heating	8	6	0	3	0
Pipes & Joints	2	3	0	1	0
Receptacles	2	3	0	1	0
Miscellaneous-Others	16	6	4	4	0

%	N	yes	no	Total
All	3576	19.69	80.31	100
Agriculture, Food, Textiles	60	13.33	86.67	100
Coating	79	13.92	86.08	100
Gas	44	22.73	77.27	100
Organic Compounds	118	23.73	76.27	100
Resins	123	14.63	85.37	100
Miscellaneous-chemical	202	19.8	80.2	100
Communications	157	29.3	70.7	100
Computer Hardware	55	12.73	87.27	100
Computer Software	121	17.36	82.64	100
Computer Peripherals	73	13.7	86.3	100
Information Storage	120	11.67	88.33	100
Drugs	122	34.43	65.57	100
Surgery & Medical Instruments	83	18.07	81.93	100
Biotechnology	85	64.71	35.29	100
Miscellaneous-Drug&Med	45	22.22	77.78	100
Electrical Devices	90	17.78	82.22	100
Electrical Lighting	96	20.83	79.17	100
Measuring & Testing	111	27.93	72.07	100
Nuclears & X-rays	69	27.54	72.46	100
Power Systems	172	20.35	79.65	100
Semiconductor Devices	127	28.35	71.65	100
Miscellaneous-Elec.	118	16.1	83.9	100
Materials Processing & Handling	99	11.11	88.89	100
Metal Working	129	33.33	66.67	100
Motors, Engines & Parts	142	18.31	81.69	100
Optics	96	15.63	84.38	100
Transportation	71	9.86	90.14	100
Miscellaneous Mechanical	119	9.24	90.76	100
Agriculture, Husbandry, Food	86	23.26	76.74	100
Apparel & Textile	75	2.67	97.33	100
Earth Working & Wells	18	11.11	88.89	100
Furniture, House Fixtures	50	10	90	100
Heating	84	17.86	82.14	100
Pipes & Joints	63	7.94	92.06	100
Receptacles	53	9.43	90.57	100
Miscellaneous-Others	221	11.76	88.24	100
JP weighted		19.13	80.87	100

	The patent application of the inventions was mandatory prior to the publication because of the internal rule of the employer.	The patent application before the publication of your paper was necessary to prevent the free use of the technology of your firm as disclosed in your publication	The patent application procedure led to the delay of you publication	The timing of the patent application had no effect on the timing of publications.
All	60.14	27.34	12.52	17.12
Agriculture, Food, Textiles	28.57	14.29	28.57	28.57
Coating	36.36	45.45	9.09	27.27
Gas	80.00	30.00	10.00	10.00
Organic Compounds	57.14	14.29	21.43	21.43
Resins	61.11	27.78	11.11	11.11
Miscellaneous-chemical	51.28	33.33	7.69	20.51
Communications	80.00	20.00	2.22	13.33
Computer Hardware	71.43	28.57	14.29	14.29
Computer Software	80.95	28.57	4.76	0.00
Computer Peripherals	80.00	40.00	0.00	0.00
Information Storage	85.71	7.14	7.14	14.29
Drugs	59.52	21.43	19.05	21.43
Surgery & Medical Instruments	33.33	40.00	20.00	33.33
Biotechnology	47.27	30.91	34.55	14.55
Miscellaneous-Drug&Med	10.00	20.00	20.00	50.00
Electrical Devices	75.00	56.25	0.00	6.25
Electrical Lighting	65.00	40.00	15.00	10.00
Measuring & Testing	63.33	16.67	16.67	13.33
Nuclears & X-rays	78.95	21.05	5.26	10.53
Power Systems	66.67	12.12	6.06	24.24
Semiconductor Devices	66.67	33.33	11.11	13.89
Miscellaneous-Elec.	52.63	26.32	15.79	21.05
Materials Processing & Handling	36.36	54.55	0.00	18.18
Metal Working	81.40	13.95	13.95	9.30
Motors, Engines & Parts	48.00	28.00	8.00	20.00
Optics	64.29	42.86	0.00	21.43
Transportation	57.14	42.86	0.00	14.29
Miscellaneous Mechanical	30.00	40.00	20.00	20.00
Agriculture, Husbandry, Food	45.00	15.00	20.00	30.00
Apparel & Textile	0.00	0.00	0.00	100.00
Earth Working & Wells	0.00	100.00	0.00	0.00
Furniture, House Fixtures	60.00	20.00	0.00	20.00
Heating	53.33	40.00	0.00	20.00
Pipes & Joints	40.00	60.00	0.00	20.00
Receptacles	40.00	60.00	0.00	20.00
Miscellaneous-Others	61.54	23.08	15.38	15.38
JP weighted	63.15	28.03	10.45	15.91

US

Reference: In the three years prior to the focal patent, how many articles did you publish in scientific journals? (参考：当該特許の前の三年間に何本の論文を公表したか)

Count, Any Publications (公表の有無　　%

	C.4 (mean)	All	mean(article)	S.D	N	median	p90	interquartile range	Missing	Yes	no	missing	%yes	%No	Total
NBER	All	1,919	3.28	9.05	1794	0	9	3	125	884	910	125	49.28	50.72	100
11	Agriculture, Food, Textiles	8	1	1.41	8	0	3	2.5	0	3	5	0	37.5	62.5	100
12	Coating	34	2.09	2.56	32	1	5	4	2	17	15	2	53.13	46.88	100
13	Gas	11	1.33	2.18	9	0	6	3	2	3	6	2	33.33	66.67	100
14	Organic Compounds	61	3.25	5.6	61	2	6	4	0	39	22	0	63.93	36.07	100
15	Resins	84	3.53	9.74	76	1	10	3	8	41	35	8	53.95	46.05	100
19	Miscellaneous-chemical	233	3.32	7.79	223	1	8	3	10	112	111	10	50.22	49.78	100
21	Communications	149	2.88	6.59	137	1	8	3	12	69	68	12	50.36	49.64	100
22	Computer Hardware	42	5.45	10.53	40	0.5	15	6.5	2	20	20	2	50	50	100
77	Computer Software	93	2.06	4.54	89	0	5	2	4	43	46	4	48.31	51.69	100
23	Computer Peripherals	33	1.19	2.18	32	0	3	1.5	1	13	19	1	40.63	59.38	100
24	Information Storage	42	2.34	3.05	38	2	5	4	4	21	17	4	55.26	44.74	100
31	Drugs	101	9.24	22.7	88	5	15	6	13	76	12	13	86.36	13.64	100
32	Surgery & Medical Instruments	123	2.5	5.43	116	0	10	2.5	7	49	67	7	42.24	57.76	100
33	Biotechnology	41	9.31	11.05	39	4	26	16	2	33	6	2	84.62	15.38	100
39	Miscellaneous-Drug&Med	29	3.28	5.79	25	0	10	4	4	12	13	4	48	52	100
41	Electrical Devices	45	4.35	19.78	43	0	6	2	2	16	27	2	37.21	62.79	100
42	Electrical Lighting	33	6.17	18.14	30	1.5	10	5	3	19	11	3	63.33	36.67	100
43	Measuring & Testing	62	2.85	5.9	61	1	5	3	1	36	25	1	59.02	40.98	100
44	Nuclears & X-rays	39	3.14	5.37	37	0	15	4	2	15	22	2	40.54	59.46	100
45	Power Systems	89	1.97	5.38	87	0	5	2	2	35	52	2	40.23	59.77	100
46	Semiconductor Devices	55	5.46	8.12	50	3	16	4	5	38	12	5	76	24	100
49	Miscellaneous-Elec.	32	0.77	1.33	30	0	2.5	1	2	10	20	2	33.33	66.67	100
51	Materials Processing & Handling	56	3.92	8.67	49	0	15	3	7	19	30	7	38.78	61.22	100
52	Metal Working	49	1.96	3.25	46	0	6	3	3	18	28	3	39.13	60.87	100
53	Motors, Engines & Parts	56	2.12	5.26	51	0	6	2	5	17	34	5	33.33	66.67	100
54	Optics	43	2.81	4.94	42	1	6	4	1	24	18	1	57.14	42.86	100
55	Transportation	33	0.78	1.95	32	0	3	0.5	1	8	24	1	25	75	100
59	Miscellaneous Mechanical	42	1.82	3.07	38	0	6	2	4	16	22	4	42.11	57.89	100
61	Agriculture, Husbandry, Food	14	0.45	1.04	11	0	2	0	3	2	9	3	18.18	81.82	100
63	Apparel & Textile	9	1.67	3.24	9	0	10	2	0	4	5	0	44.44	55.56	100
64	Earth Working & Wells	5	0.5	1	4	0	2	1	1	1	3	1	25	75	100
65	Furniture, House Fixtures	9	3.88	7.38	8	0	20	5.5	1	3	5	1	37.5	62.5	100
66	Heating	8	2.38	1.92	8	2.5	5	3.5	0	6	2	0	75	25	100
67	Pipes & Joints	13	0.17	0.39	12	0	1	0	1	2	10	1	16.67	83.33	100
68	Receptacles	20	0.5	1.2	18	0	3	0	2	3	15	2	16.67	83.33	100
69	Miscellaneous-Others	123	2.68	8.71	115	0	5	2	8	41	74	8	35.65	64.35	100
	US-JP weighted		**3.28**	**9.18**									**49.97**	**50.03**	100

Japan (1/6)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention?
(1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

当該発明を補完・補強する技術開発、特許網構築における先行優位
First mover's advantage in the development of complementary technologies and the patent portfolio

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	25	54	214	1046	606	53
Agriculture, Food, Textiles	27	1	0	1	16	9	0
Coating	49	1	2	2	26	15	3
Gas	23	0	0	1	15	6	1
Organic Compounds	44	0	3	3	28	10	0
Resins	62	0	1	8	32	18	3
Miscellaneous-chemical	119	1	3	13	59	40	3
Communications	72	0	0	8	40	24	0
Computer Hardware	37	0	1	4	19	12	1
Computer Software	72	1	3	9	36	23	0
Computer Peripherals	41	0	1	6	22	12	0
Information Storage	62	2	2	6	34	18	0
Drugs	33	0	0	5	13	14	1
Surgery & Medical Instruments	44	0	2	2	28	10	2
Biotechnology	39	0	0	3	20	14	2
Miscellaneous-Drug&Med	25	0	0	2	17	4	2
Electrical Devices	53	0	1	4	33	12	3
Electrical Lighting	51	0	1	6	31	11	2
Measuring & Testing	60	1	1	8	28	19	3
Nuclears & X-rays	39	0	3	2	18	14	2
Power Systems	77	3	2	4	38	28	2
Semiconductor Devices	64	0	1	7	32	23	1
Miscellaneous-Elec.	76	0	3	9	40	23	1
Materials Processing & Handling	68	1	1	9	38	15	4
Metal Working	84	1	1	7	45	29	1
Motors, Engines & Parts	72	1	2	3	37	28	1
Optics	51	1	2	3	26	19	0
Transportation	43	2	3	5	23	8	2
Miscellaneous Mechanical	79	1	2	13	43	17	3
Agriculture, Husbandry, Food	56	0	0	5	29	20	2
Apparel & Textile	60	2	1	7	30	18	2
Earth Working & Wells	15	1	0	1	4	7	2
Furniture, House Fixtures	39	1	3	5	19	10	1
Heating	46	1	1	11	19	13	1
Pipes & Joints	39	0	2	7	17	12	1
Receptacles	39	1	3	5	20	9	1
Miscellaneous-Others	138	2	3	20	71	42	0

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

市場投入における先行優位
First mover's advantage in commercialization (short lead-time between the patenting and its exploitation in the market)

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	21	38	245	1076	566	52
Agriculture, Food, Textiles	27	0	0	2	16	9	0
Coating	49	1	1	3	24	17	3
Gas	23	0	0	3	10	8	2
Organic Compounds	44	1	2	3	27	9	2
Resins	62	1	1	7	30	22	1
Miscellaneous-chemical	119	1	4	15	68	26	5
Communications	72	1	2	8	39	21	1
Computer Hardware	37	0	1	6	22	7	1
Computer Software	72	0	2	8	43	19	0
Computer Peripherals	41	0	0	5	26	10	0
Information Storage	62	1	3	7	37	14	0
Drugs	33	0	0	3	15	14	1
Surgery & Medical Instruments	44	0	0	8	23	12	1
Biotechnology	39	1	1	5	16	16	0
Miscellaneous-Drug&Med	25	0	0	5	14	4	2
Electrical Devices	53	0	0	7	26	19	1
Electrical Lighting	51	0	2	9	25	13	2
Measuring & Testing	60	1	0	9	29	19	2
Nuclears & X-rays	39	0	2	3	18	14	2
Power Systems	77	1	1	4	43	25	3
Semiconductor Devices	64	0	1	7	41	14	1
Miscellaneous-Elec.	76	2	2	8	43	21	0
Materials Processing & Handling	68	1	1	9	32	22	3
Metal Working	84	0	1	18	42	22	1
Motors, Engines & Parts	72	0	1	7	45	18	1
Optics	51	2	2	5	29	13	0
Transportation	43	1	2	6	23	11	0
Miscellaneous Mechanical	79	0	2	7	42	25	3
Agriculture, Husbandry, Food	56	0	0	10	25	16	5
Apparel & Textile	60	0	0	7	38	15	0
Earth Working & Wells	15	1	0	1	6	5	2
Furniture, House Fixtures	39	1	0	6	18	11	3
Heating	46	1	2	6	21	15	1
Pipes & Joints	39	0	0	7	21	9	2
Receptacles	39	1	0	6	22	9	1
Miscellaneous-Others	138	2	2	15	77	42	0

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

%	N	1	2	3	4	5	Total
All	1945	1.29	2.78	11	53.78	31.16	100
Agriculture, Food, Textiles	27	3.7	0	3.7	59.26	33.33	100
Coating	46	2.17	4.35	4.35	56.52	32.61	100
Gas	22	0	0	4.55	68.18	27.27	100
Organic Compounds	44	0	6.82	6.82	63.64	22.73	100
Resins	59	0	1.69	13.56	54.24	30.51	100
Miscellaneous-chemical	116	0.86	2.59	11.21	50.86	34.48	100
Communications	72	0	0	11.11	55.56	33.33	100
Computer Hardware	36	0	2.78	11.11	52.78	33.33	100
Computer Software	72	1.39	4.17	12.5	50	31.94	100
Computer Peripherals	41	0	2.44	14.63	53.66	29.27	100
Information Storage	62	3.23	3.23	9.68	54.84	29.03	100
Drugs	32	0	0	15.63	40.63	43.75	100
Surgery & Medical Instruments	42	0	4.76	4.76	66.67	23.81	100
Biotechnology	37	0	0	8.11	54.05	37.84	100
Miscellaneous-Drug&Med	23	0	0	8.7	73.91	17.39	100
Electrical Devices	50	0	2	8	66	24	100
Electrical Lighting	49	0	2.04	12.24	63.27	22.45	100
Measuring & Testing	57	1.75	1.75	14.04	49.12	33.33	100
Nuclears & X-rays	37	0	8.11	5.41	48.65	37.84	100
Power Systems	75	4	2.67	5.33	50.67	37.33	100
Semiconductor Devices	63	0	1.59	11.11	50.79	36.51	100
Miscellaneous-Elec.	75	0	4	12	53.33	30.67	100
Materials Processing & Handling	64	1.56	1.56	14.06	59.38	23.44	100
Metal Working	83	1.2	1.2	8.43	54.22	34.94	100
Motors, Engines & Parts	71	1.41	2.82	4.23	52.11	39.44	100
Optics	51	1.96	3.92	5.88	50.98	37.25	100
Transportation	41	4.88	7.32	12.2	56.1	19.51	100
Miscellaneous Mechanical	76	1.32	2.63	17.11	56.58	22.37	100
Agriculture, Husbandry, Food	54	0	0	9.26	53.7	37.04	100
Apparel & Textile	58	3.45	1.72	12.07	51.72	31.03	100
Earth Working & Wells	13	7.69	0	7.69	30.77	53.85	100
Furniture, House Fixtures	38	2.63	7.89	13.16	50	26.32	100
Heating	45	2.22	2.22	24.44	42.22	28.89	100
Pipes & Joints	38	0	5.26	18.42	44.74	31.58	100
Receptacles	38	2.63	7.89	13.16	52.63	23.68	100
Miscellaneous-Others	138	1.45	2.17	14.49	51.45	30.43	100
US-JP weighted	1945	1.09	2.65	10.91	54.04	31.32	100
JP weighted	1945	1.21	2.7	11.28	53.78	31.03	100

	N	1	2	3	4	5	Total
All	1946	1.08	1.95	12.59	55.29	29.09	100
Agriculture, Food, Textiles	27	0	0	7.41	59.26	33.33	100
Coating	46	2.17	2.17	6.52	52.17	36.96	100
Gas	21	0	0	14.29	47.62	38.1	100
Organic Compounds	42	2.38	4.76	7.14	64.29	21.43	100
Resins	61	1.64	1.64	11.48	49.18	36.07	100
Miscellaneous-chemical	114	0.88	3.51	13.16	59.65	22.81	100
Communications	71	1.41	2.82	11.27	54.93	29.58	100
Computer Hardware	36	0	2.78	16.67	61.11	19.44	100
Computer Software	72	0	2.78	11.11	59.72	26.39	100
Computer Peripherals	41	0	0	12.2	63.41	24.39	100
Information Storage	62	1.61	4.84	11.29	59.68	22.58	100
Drugs	32	0	0	9.38	46.88	43.75	100
Surgery & Medical Instruments	43	0	0	18.6	53.49	27.91	100
Biotechnology	39	2.56	2.56	12.82	41.03	41.03	100
Miscellaneous-Drug&Med	23	0	0	21.74	60.87	17.39	100
Electrical Devices	52	0	0	13.46	50	36.54	100
Electrical Lighting	49	0	4.08	18.37	51.02	26.53	100
Measuring & Testing	58	1.72	0	15.52	50	32.76	100
Nuclears & X-rays	37	0	5.41	8.11	48.65	37.84	100
Power Systems	74	1.35	1.35	5.41	58.11	33.78	100
Semiconductor Devices	63	0	1.59	11.11	65.08	22.22	100
Miscellaneous-Elec.	76	2.63	2.63	10.53	56.58	27.63	100
Materials Processing & Handling	65	1.54	1.54	13.85	49.23	33.85	100
Metal Working	83	0	1.2	21.69	50.6	26.51	100
Motors, Engines & Parts	71	0	1.41	9.86	63.38	25.35	100
Optics	51	3.92	3.92	9.8	56.86	25.49	100
Transportation	43	2.33	4.65	13.95	53.49	25.58	100
Miscellaneous Mechanical	76	0	2.63	9.21	55.26	32.89	100
Agriculture, Husbandry, Food	51	0	0	19.61	49.02	31.37	100
Apparel & Textile	60	0	0	11.67	63.33	25	100
Earth Working & Wells	13	7.69	0	7.69	46.15	38.46	100
Furniture, House Fixtures	36	2.78	0	16.67	50	30.56	100
Heating	45	2.22	4.44	13.33	46.67	33.33	100
Pipes & Joints	37	0	0	18.92	56.76	24.32	100
Receptacles	38	2.63	0	15.79	57.89	23.68	100
Miscellaneous-Others	138	1.45	1.45	10.87	55.8	30.43	100
1946	1.02	2.08	12.25	55.78	28.87	100	
1946	1.05	2.16	12.34	55.51	28.93	100	

US (1/5)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

B7A First mover's advantage in the development of complementary technologies and the patent portfolio

	all	1	2	3	4	5	Don't know	missing
NBER All	946	49	62	158	246	288	55	88
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	22	1	4	2	4	9	0	2
13 Gas	4	0	0	0	3	1	0	0
14 Organic Compounds	20	2	2	4	5	5	1	1
15 Resins	40	2	3	11	12	10	0	2
19 Miscellaneous-chemical	112	5	5	21	38	32	6	5
21 Communications	70	4	3	11	20	17	6	9
22 Computer Hardware	19	3	1	5	3	4	1	2
77 Computer Software	54	4	3	9	18	16	2	2
23 Computer Peripherals	10	0	0	4	2	3	1	0
24 Information Storage	20	1	0	2	5	8	0	4
31 Drugs	29	1	1	1	7	13	0	6
32 Surgery & Medical Instruments	59	0	0	7	15	23	8	6
33 Biotechnology	19	0	3	3	3	8	0	2
39 Miscellaneous-Drug&Med	17	2	0	5	4	2	1	3
41 Electrical Devices	28	2	1	6	8	9	2	0
42 Electrical Lighting	16	1	1	0	5	4	1	4
43 Measuring & Testing	41	3	4	6	12	5	7	4
44 Nuclears & X-rays	18	0	2	3	4	4	2	3
45 Power Systems	47	3	5	10	11	13	2	3
46 Semiconductor Devices	19	0	0	2	3	9	1	4
49 Miscellaneous-Elec.	20	0	1	7	4	7	0	1
51 Materials Processing & Handlir	34	1	2	2	11	12	3	3
52 Metal Working	24	4	3	4	6	1	4	2
53 Motors, Engines & Parts	32	2	2	7	5	9	3	4
54 Optics	18	1	3	2	1	8	2	1
55 Transportation	17	1	2	1	2	10	0	1
59 Miscellaneous Mechanical	26	1	4	5	6	7	0	3
61 Agriculture, Husbandry, Food	11	0	1	0	4	5	0	1
63 Apparel & Textile	7	0	0	2	2	3	0	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	0	1	3	1	1	0	0
66 Heating	5	0	1	0	1	2	0	1
67 Pipes & Joints	5	0	0	2	1	2	0	0
68 Receptacles	10	1	0	2	3	2	0	2
69 Miscellaneous-Others	60	4	4	8	17	21	1	5

B7B First mover's advantage in commercialization

	all	1	2	3	4	5	Don't know	missing
NBER All	946	38	46	132	235	359	48	88
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	22	0	3	3	5	9	0	2
13 Gas	XX	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	20	1	2	7	3	6	0	1
15 Resins	40	2	4	9	12	11	0	2
19 Miscellaneous-chemical	112	5	5	19	30	41	5	7
21 Communications	70	2	4	6	23	20	6	9
22 Computer Hardware	19	4	1	3	2	6	1	2
77 Computer Software	54	4	6	8	14	16	3	3
23 Computer Peripherals	10	0	0	2	3	4	1	0
24 Information Storage	20	0	0	1	4	12	0	3
31 Drugs	29	1	0	0	8	13	0	7
32 Surgery & Medical Instruments	59	2	2	5	15	24	6	5
33 Biotechnology	19	1	0	2	7	7	0	2
39 Miscellaneous-Drug&Med	17	1	2	5	1	4	1	3
41 Electrical Devices	28	1	1	3	11	10	1	1
42 Electrical Lighting	16	0	0	2	4	7	1	2
43 Measuring & Testing	41	3	2	4	11	12	5	4
44 Nuclears & X-rays	18	0	1	1	3	9	2	2
45 Power Systems	47	1	1	9	14	16	3	3
46 Semiconductor Devices	19	0	1	0	2	11	1	4
49 Miscellaneous-Elec.	20	0	1	6	5	7	0	1
51 Materials Processing & Handlir	34	2	1	4	6	16	2	3
52 Metal Working	24	0	0	5	7	7	3	2
53 Motors, Engines & Parts	32	2	1	6	4	12	3	4
54 Optics	18	1	1	2	4	7	2	1
55 Transportation	17	1	1	3	3	8	0	1
59 Miscellaneous Mechanical	26	1	3	1	6	12	0	3
61 Agriculture, Husbandry, Food	11	0	0	0	3	8	0	0
63 Apparel & Textile	7	0	1	1	1	4	0	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	0	1	2	1	2	0	0
66 Heating	5	0	0	1	2	1	0	1
67 Pipes & Joints	5	0	0	1	1	3	0	0
68 Receptacles	10	0	0	1	2	6	0	1
69 Miscellaneous-Others	60	3	1	8	16	24	1	7

%	N	1	2	3	4	5	Total
NBER All	803	6.1	7.72	19.68	30.64	35.87	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12 Coating	20	5	20	10	20	45	100
13 Gas	4	0	0	0	75	25	100
14 Organic Compounds	18	11.11	11.11	22.22	27.78	27.78	100
15 Resins	38	5.26	7.89	28.95	31.58	26.32	100
19 Miscellaneous-chemical	101	4.95	4.95	20.79	37.62	31.68	100
21 Communications	55	7.27	5.45	20	36.36	30.91	100
22 Computer Hardware	16	18.75	6.25	31.25	18.75	25	100
77 Computer Software	50	8	6	18	36	32	100
23 Computer Peripherals	9	0	0	44.44	22.22	33.33	100
24 Information Storage	16	6.25	0	12.5	31.25	50	100
31 Drugs	23	4.35	4.35	4.35	30.43	56.52	100
32 Surgery & Medical Instruments	45	0	0	15.56	33.33	51.11	100
33 Biotechnology	17	0	17.65	17.65	17.65	47.06	100
39 Miscellaneous-Drug&Med	13	15.38	0	38.46	30.77	15.38	100
41 Electrical Devices	26	7.69	3.85	23.08	30.77	34.62	100
42 Electrical Lighting	11	9.09	9.09	0	45.45	36.36	100
43 Measuring & Testing	30	10	13.33	20	40	16.67	100
44 Nuclears & X-rays	13	0	15.38	23.08	30.77	30.77	100
45 Power Systems	42	7.14	11.9	23.81	26.19	30.95	100
46 Semiconductor Devices	14	0	0	14.29	21.43	64.29	100
49 Miscellaneous-Elec.	19	0	5.26	36.84	21.05	36.84	100
51 Materials Processing & Handlir	28	3.57	7.14	7.14	39.29	42.86	100
52 Metal Working	18	22.22	16.67	22.22	33.33	5.56	100
53 Motors, Engines & Parts	25	8	8	28	20	36	100
54 Optics	15	6.67	20	13.33	6.67	53.33	100
55 Transportation	16	6.25	12.5	6.25	12.5	62.5	100
59 Miscellaneous Mechanical	23	4.35	17.39	21.74	26.09	30.43	100
61 Agriculture, Husbandry, Food	10	0	10	0	40	50	100
63 Apparel & Textile	7	0	0	28.57	28.57	42.86	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	0	16.67	50	16.67	16.67	100
66 Heating	4	0	25	0	25	50	100
67 Pipes & Joints	5	0	0	40	20	40	100
68 Receptacles	8	12.5	0	25	37.5	25	100
69 Miscellaneous-Others	54	7.41	7.41	14.81	31.48	38.89	100
US-JP weighted	**803**	**6.05**	**7.62**	**18.95**	**30.69**	**36.69**	100

	N	1	2	3	4	5	Total
NBER All	810	4.69	5.68	16.3	29.01	44.32	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12 Coating	20	0	15	15	25	45	100
13 Gas	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	19	5.26	10.53	36.84	15.79	31.58	100
15 Resins	38	5.26	10.53	23.68	31.58	28.95	100
19 Miscellaneous-chemical	100	5	5	19	30	41	100
21 Communications	55	3.64	7.27	10.91	41.82	36.36	100
22 Computer Hardware	16	25	6.25	18.75	12.5	37.5	100
77 Computer Software	48	8.33	12.5	16.67	29.17	33.33	100
23 Computer Peripherals	9	0	0	22.22	33.33	44.44	100
24 Information Storage	17	0	0	5.88	23.53	70.59	100
31 Drugs	22	4.55	0	0	36.36	59.09	100
32 Surgery & Medical Instruments	48	4.17	4.17	10.42	31.25	50	100
33 Biotechnology	17	5.88	0	11.76	41.18	41.18	100
39 Miscellaneous-Drug&Med	13	7.69	15.38	38.46	7.69	30.77	100
41 Electrical Devices	26	3.85	3.85	11.54	42.31	38.46	100
42 Electrical Lighting	13	0	0	15.38	30.77	53.85	100
43 Measuring & Testing	32	9.38	6.25	12.5	34.38	37.5	100
44 Nuclears & X-rays	14	0	7.14	7.14	21.43	64.29	100
45 Power Systems	41	2.44	2.44	21.95	34.15	39.02	100
46 Semiconductor Devices	14	0	7.14	0	14.29	78.57	100
49 Miscellaneous-Elec.	19	0	5.26	31.58	26.32	36.84	100
51 Materials Processing & Handlir	29	6.9	3.45	13.79	20.69	55.17	100
52 Metal Working	19	0	0	26.32	36.84	36.84	100
53 Motors, Engines & Parts	25	8	4	24	16	48	100
54 Optics	15	6.67	6.67	13.33	26.67	46.67	100
55 Transportation	16	6.25	6.25	18.75	18.75	50	100
59 Miscellaneous Mechanical	23	4.35	13.04	4.35	26.09	52.17	100
61 Agriculture, Husbandry, Food	11	0	0	0	27.27	72.73	100
63 Apparel & Textile	7	0	14.29	14.29	14.29	57.14	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	0	16.67	33.33	16.67	33.33	100
66 Heating	4	0	0	25	50	25	100
67 Pipes & Joints	5	0	0	20	20	60	100
68 Receptacles	9	0	0	11.11	22.22	66.67	100
69 Miscellaneous-Others	52	5.77	1.92	15.38	30.77	46.15	100
US-JP weighted	**810**	**4.55**	**5.58**	**15.86**	**28.67**	**45.34**	100

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

事業化に必要な優れた製造能力
Complementary manufacturing capability

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	45	83	396	959	461	54
Agriculture, Food, Textiles	27	0	0	5	15	7	0
Coating	49	1	1	8	21	15	3
Gas	23	0	1	5	8	6	3
Organic Compounds	44	1	1	0	28	14	0
Resins	62	0	2	9	26	23	2
Miscellaneous-chemical	119	2	4	15	56	38	4
Communications	72	2	4	25	24	16	1
Computer Hardware	37	2	1	14	16	3	1
Computer Software	72	5	9	17	31	10	0
Computer Peripherals	41	1	2	12	21	5	0
Information Storage	62	3	5	9	31	14	0
Drugs	33	0	0	3	20	9	1
Surgery & Medical Instruments	44	2	2	8	20	11	1
Biotechnology	39	2	1	3	19	13	1
Miscellaneous-Drug&Med	25	0	3	3	10	8	1
Electrical Devices	53	2	0	13	29	8	1
Electrical Lighting	51	0	0	6	31	11	3
Measuring & Testing	60	3	3	11	27	14	2
Nuclears & X-rays	39	0	4	9	16	8	2
Power Systems	77	1	4	13	35	21	3
Semiconductor Devices	64	1	1	6	36	19	1
Miscellaneous-Elec.	76	2	7	25	34	8	0
Materials Processing & Handling	68	2	1	18	34	10	3
Metal Working	84	0	0	8	49	27	0
Motors, Engines & Parts	72	3	1	19	34	14	1
Optics	51	2	4	11	23	11	0
Transportation	43	2	2	13	17	8	1
Miscellaneous Mechanical	79	0	8	17	36	15	3
Agriculture, Husbandry, Food	56	0	2	5	33	13	3
Apparel & Textile	60	0	1	13	37	8	1
Earth Working & Wells	15	1	1	2	6	2	3
Furniture, House Fixtures	39	1	3	5	22	5	3
Heating	46	1	1	10	22	11	1
Pipes & Joints	39	0	0	11	12	14	2
Receptacles	39	1	1	12	15	9	1
Miscellaneous-Others	138	2	3	33	65	33	2

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

%	N	1	2	3	4	5	Total
All	1944	2.31	4.27	20.37	49.33	23.71	100
Agriculture, Food, Textiles	27	0	0	18.52	55.56	25.93	100
Coating	46	2.17	2.17	17.39	45.65	32.61	100
Gas	20	0	5	25	40	30	100
Organic Compounds	44	2.27	2.27	0	63.64	31.82	100
Resins	60	0	3.33	15	43.33	38.33	100
Miscellaneous-chemical	115	1.74	3.48	13.04	48.7	33.04	100
Communications	71	2.82	5.63	35.21	33.8	22.54	100
Computer Hardware	36	5.56	2.78	38.89	44.44	8.33	100
Computer Software	72	6.94	12.5	23.61	43.06	13.89	100
Computer Peripherals	41	2.44	4.88	29.27	51.22	12.2	100
Information Storage	62	4.84	8.06	14.52	50	22.58	100
Drugs	32	0	0	9.38	62.5	28.13	100
Surgery & Medical Instruments	43	4.65	4.65	18.6	46.51	25.58	100
Biotechnology	38	5.26	2.63	7.89	50	34.21	100
Miscellaneous-Drug&Med	24	0	12.5	12.5	41.67	33.33	100
Electrical Devices	52	3.85	0	25	55.77	15.38	100
Electrical Lighting	48	0	0	12.5	64.58	22.92	100
Measuring & Testing	58	5.17	5.17	18.97	46.55	24.14	100
Nuclears & X-rays	37	0	10.81	24.32	43.24	21.62	100
Power Systems	74	1.35	5.41	17.57	47.3	28.38	100
Semiconductor Devices	63	1.59	1.59	9.52	57.14	30.16	100
Miscellaneous-Elec.	76	2.63	9.21	32.89	44.74	10.53	100
Materials Processing & Handling	65	3.08	1.54	27.69	52.31	15.38	100
Metal Working	84	0	0	9.52	58.33	32.14	100
Motors, Engines & Parts	71	4.23	1.41	26.76	47.89	19.72	100
Optics	51	3.92	7.84	21.57	45.1	21.57	100
Transportation	42	4.76	4.76	30.95	40.48	19.05	100
Miscellaneous Mechanical	76	0	10.53	22.37	47.37	19.74	100
Agriculture, Husbandry, Food	53	0	3.77	9.43	62.26	24.53	100
Apparel & Textile	59	0	1.69	22.03	62.71	13.56	100
Earth Working & Wells	12	8.33	8.33	16.67	50	16.67	100
Furniture, House Fixtures	36	2.78	8.33	13.89	61.11	13.89	100
Heating	45	2.22	2.22	22.22	48.89	24.44	100
Pipes & Joints	37	0	0	29.73	32.43	37.84	100
Receptacles	38	2.63	2.63	31.58	39.47	23.68	100
Miscellaneous-Others	136	1.47	2.21	24.26	47.79	24.26	100
US-JP weighted	1944	2.59	4.5	20.85	48.32	23.73	100
JP weighted	1944	2.5	4.52	21.45	48.18	23.35	100

事業化に必要なすぐれた販売・サービス能力
Complementary sales/service capability

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	66	116	558	841	351	66
Agriculture, Food, Textiles	27	0	2	5	14	5	1
Coating	49	1	1	9	22	12	4
Gas	23	0	2	6	7	5	3
Organic Compounds	44	2	1	9	19	10	3
Resins	62	0	3	14	29	13	3
Miscellaneous-chemical	119	2	6	34	48	25	4
Communications	72	3	3	28	25	12	1
Computer Hardware	37	2	3	10	14	7	1
Computer Software	72	4	7	17	24	20	0
Computer Peripherals	41	1	2	14	16	8	0
Information Storage	62	2	5	17	30	8	0
Drugs	33	0	2	3	20	7	1
Surgery & Medical Instruments	44	4	3	7	17	11	2
Biotechnology	39	2	0	7	20	7	3
Miscellaneous-Drug&Med	25	2	0	7	9	5	2
Electrical Devices	53	2	2	17	26	5	1
Electrical Lighting	51	0	3	18	19	8	3
Measuring & Testing	60	5	3	17	24	8	3
Nuclears & X-rays	39	0	3	14	18	3	1
Power Systems	77	2	5	26	27	13	4
Semiconductor Devices	64	1	6	14	33	9	1
Miscellaneous-Elec.	76	2	7	33	23	10	1
Materials Processing & Handling	68	5	3	23	24	9	4
Metal Working	84	2	4	26	40	11	1
Motors, Engines & Parts	72	3	5	26	27	10	1
Optics	51	3	5	14	22	7	0
Transportation	43	2	5	16	12	8	0
Miscellaneous Mechanical	79	4	6	20	33	13	3
Agriculture, Husbandry, Food	56	0	0	7	32	14	3
Apparel & Textile	60	0	1	16	33	8	2
Earth Working & Wells	15	1	0	2	6	3	3
Furniture, House Fixtures	39	1	4	9	12	10	3
Heating	46	1	4	13	23	4	1
Pipes & Joints	39	1	4	9	15	10	0
Receptacles	39	2	2	14	15	6	0
Miscellaneous-Others	138	4	4	37	63	27	3

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

N	1	2	3	4	5	Total
1932	3.42	6	28.88	43.53	18.17	100
26	0	7.69	19.23	53.85	19.23	100
45	2.22	2.22	20	48.89	26.67	100
20	0	10	30	35	25	100
41	4.88	2.44	21.95	46.34	24.39	100
59	0	5.08	23.73	49.15	22.03	100
115	1.74	5.22	29.57	41.74	21.74	100
71	4.23	4.23	39.44	35.21	16.9	100
36	5.56	8.33	27.78	38.89	19.44	100
72	5.56	9.72	23.61	33.33	27.78	100
41	2.44	4.88	34.15	39.02	19.51	100
62	3.23	8.06	27.42	48.39	12.9	100
32	0	6.25	9.38	62.5	21.88	100
42	9.52	7.14	16.67	40.48	26.19	100
36	5.56	0	19.44	55.56	19.44	100
23	8.7	0	30.43	39.13	21.74	100
52	3.85	3.85	32.69	50	9.62	100
48	0	6.25	37.5	39.58	16.67	100
57	8.77	5.26	29.82	42.11	14.04	100
38	0	7.89	36.84	47.37	7.89	100
73	2.74	6.85	35.62	36.99	17.81	100
63	1.59	9.52	22.22	52.38	14.29	100
75	2.67	9.33	44	30.67	13.33	100
64	7.81	4.69	35.94	37.5	14.06	100
83	2.41	4.82	31.33	48.19	13.25	100
71	4.23	7.04	36.62	38.03	14.08	100
51	5.88	9.8	27.45	43.14	13.73	100
43	4.65	11.63	37.21	27.91	18.6	100
76	5.26	7.89	26.32	43.42	17.11	100
53	0	0	13.21	60.38	26.42	100
58	0	1.72	27.59	56.9	13.79	100
12	8.33	0	16.67	50	25	100
36	2.78	11.11	25	33.33	27.78	100
45	2.22	8.89	28.89	51.11	8.89	100
39	2.56	10.26	23.08	38.46	25.64	100
39	5.13	5.13	35.9	38.46	15.38	100
135	2.96	2.96	27.41	46.67	20	100
1932	3.66	5.99	29.24	42.54	18.57	100
1932	3.44	5.99	30.34	41.89	18.34	100

US (2/5)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

B7C Complementary manufacturing capability

	all	1	2	3	4	5	Don't know	missing
NBER All	945	157	106	171	180	129	110	92
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	22	4	3	3	6	3	1	2
13 Gas	XX	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	20	2	1	4	4	4	3	2
15 Resins	40	3	4	7	14	9	1	2
19 Miscellaneous-chemical	112	11	14	28	27	11	14	7
21 Communications	69	8	10	9	16	6	11	9
22 Computer Hardware	19	6	2	0	4	3	2	2
77 Computer Software	54	16	5	7	7	2	15	2
23 Computer Peripherals	10	1	0	3	1	1	4	0
24 Information Storage	20	7	0	3	3	2	1	4
31 Drugs	29	8	3	4	4	3	1	6
32 Surgery & Medical Instruments	59	9	6	9	12	6	10	7
33 Biotechnology	19	3	4	5	2	1	1	3
39 Miscellaneous-Drug&Med	17	3	3	3	2	2	1	3
41 Electrical Devices	28	6	3	7	8	2	1	1
42 Electrical Lighting	16	0	0	3	6	1	4	2
43 Measuring & Testing	41	5	5	9	8	2	7	5
44 Nuclears & X-rays	18	0	3	3	2	4	3	3
45 Power Systems	47	8	5	11	12	2	6	3
46 Semiconductor Devices	19	0	2	2	3	6	2	4
49 Miscellaneous-Elec.	20	3	2	4	4	4	1	2
51 Materials Processing & Handling	34	4	2	5	6	12	3	2
52 Metal Working	24	4	2	4	3	6	4	1
53 Motors, Engines & Parts	32	9	4	4	3	4	4	4
54 Optics	18	8	1	5	0	1	2	1
55 Transportation	17	2	0	4	4	4	2	1
59 Miscellaneous Mechanical	26	9	3	2	2	7	0	3
61 Agriculture, Husbandry, Food	11	0	3	2	2	3	0	1
63 Apparel & Textile	7	1	1	1	1	3	0	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	2	0	3	1	0	0	0
66 Heating	5	1	1	1	0	1	0	1
67 Pipes & Joints	5	0	1	1	1	1	1	0
68 Receptacles	10	1	1	3	1	3	0	1
69 Miscellaneous-Others	60	13	10	9	11	7	4	6

B7D Complementary sales/service capability

	all	1	2	3	4	5	Don't know	missing
NBER All	945	152	104	157	197	125	106	104
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	22	4	4	2	5	4	0	3
13 Gas	4	0	0	1	3	0	0	0
14 Organic Compounds	20	5	1	2	2	2	6	2
15 Resins	40	4	4	9	13	6	1	3
19 Miscellaneous-chemical	112	14	16	19	23	17	15	8
21 Communications	69	10	10	7	15	9	8	10
22 Computer Hardware	19	6	1	1	3	4	2	2
77 Computer Software	54	9	4	8	14	5	12	2
23 Computer Peripherals	10	3	0	2	0	0	5	0
24 Information Storage	20	6	2	3	3	1	0	5
31 Drugs	29	7	6	3	5	0	2	6
32 Surgery & Medical Instruments	59	7	4	12	14	9	6	7
33 Biotechnology	19	5	4	2	2	2	1	3
39 Miscellaneous-Drug&Med	17	2	2	3	2	2	2	4
41 Electrical Devices	28	6	3	5	9	2	1	2
42 Electrical Lighting	16	2	2	2	4	1	3	2
43 Measuring & Testing	41	8	5	7	8	1	7	5
44 Nuclears & X-rays	18	2	3	3	3	2	2	3
45 Power Systems	47	6	7	12	9	3	5	5
46 Semiconductor Devices	19	0	4	1	3	2	5	4
49 Miscellaneous-Elec.	20	5	0	5	2	5	1	2
51 Materials Processing & Handling	34	5	3	4	4	10	4	4
52 Metal Working	24	4	1	5	6	3	3	2
53 Motors, Engines & Parts	32	6	0	5	9	3	5	4
54 Optics	18	8	1	3	3	0	2	1
55 Transportation	17	2	1	4	2	5	2	1
59 Miscellaneous Mechanical	26	4	2	3	7	6	1	3
61 Agriculture, Husbandry, Food	11	1	1	2	3	3	0	1
63 Apparel & Textile	7	1	0	3	2	1	0	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	1	1	1	2	1	0	0
66 Heating	5	0	1	1	0	2	0	1
67 Pipes & Joints	5	0	1	1	2	1	0	0
68 Receptacles	10	1	2	3	1	2	0	1
69 Miscellaneous-Others	60	8	8	10	14	9	5	6

%	N	1	2	3	4	5	Total
NBER All	743	21.13	14.27	23.01	24.23	17.36	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12 Coating	19	21.05	15.79	15.79	31.58	15.79	100
13 Gas	XX	XX	XX	XX	XX	XX	XX
14 Organic Compounds	15	13.33	6.67	26.67	26.67	26.67	100
15 Resins	37	8.11	10.81	18.92	37.84	24.32	100
19 Miscellaneous-chemical	91	12.09	15.38	30.77	29.67	12.09	100
21 Communications	49	16.33	20.41	18.37	32.65	12.24	100
22 Computer Hardware	15	40	13.33	0	26.67	20	100
77 Computer Software	37	43.24	13.51	18.92	18.92	5.41	100
23 Computer Peripherals	6	16.67	0	50	16.67	16.67	100
24 Information Storage	15	46.67	0	20	20	13.33	100
31 Drugs	22	36.36	13.64	18.18	18.18	13.64	100
32 Surgery & Medical Instruments	42	21.43	14.29	21.43	28.57	14.29	100
33 Biotechnology	15	20	26.67	33.33	13.33	6.67	100
39 Miscellaneous-Drug&Med	13	23.08	23.08	23.08	15.38	15.38	100
41 Electrical Devices	26	23.08	11.54	26.92	30.77	7.69	100
42 Electrical Lighting	10	0	0	30	60	10	100
43 Measuring & Testing	29	17.24	17.24	31.03	27.59	6.9	100
44 Nuclears & X-rays	12	0	25	25	16.67	33.33	100
45 Power Systems	38	21.05	13.16	28.95	31.58	5.26	100
46 Semiconductor Devices	13	0	15.38	15.38	23.08	46.15	100
49 Miscellaneous-Elec.	17	17.65	11.76	23.53	23.53	23.53	100
51 Materials Processing & Handling	29	13.79	6.9	17.24	20.69	41.38	100
52 Metal Working	19	21.05	10.53	21.05	15.79	31.58	100
53 Motors, Engines & Parts	24	37.5	16.67	16.67	12.5	16.67	100
54 Optics	15	53.33	6.67	33.33	0	6.67	100
55 Transportation	14	14.29	0	28.57	28.57	28.57	100
59 Miscellaneous Mechanical	23	39.13	13.04	8.7	8.7	30.43	100
61 Agriculture, Husbandry, Food	10	0	30	20	20	30	100
63 Apparel & Textile	7	14.29	14.29	14.29	14.29	42.86	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	33.33	0	50	16.67	0	100
66 Heating	4	25	25	25	0	25	100
67 Pipes & Joints	4	0	25	25	25	25	100
68 Receptacles	9	11.11	11.11	33.33	11.11	33.33	100
69 Miscellaneous-Others	50	26	20	18	22	14	100
US-JP weighted	**743**	**21.55**	**13.56**	**22.81**	**23.97**	**18.1**	100

	N	1	2	3	4	5	Total
NBER All	735	20.68	14.15	21.36	26.8	17.01	100
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12 Coating	19	21.05	21.05	10.53	26.32	21.05	100
13 Gas	4	0	0	25	75	0	100
14 Organic Compounds	12	41.67	8.33	16.67	16.67	16.67	100
15 Resins	36	11.11	11.11	25	36.11	16.67	100
19 Miscellaneous-chemical	89	15.73	17.98	21.35	25.84	19.1	100
21 Communications	51	19.61	19.61	13.73	29.41	17.65	100
22 Computer Hardware	15	40	6.67	6.67	20	26.67	100
77 Computer Software	40	22.5	10	20	35	12.5	100
23 Computer Peripherals	5	60	0	40	0	0	100
24 Information Storage	15	40	13.33	20	20	6.67	100
31 Drugs	21	33.33	28.57	14.29	23.81	0	100
32 Surgery & Medical Instruments	46	15.22	8.7	26.09	30.43	19.57	100
33 Biotechnology	15	33.33	26.67	13.33	13.33	13.33	100
39 Miscellaneous-Drug&Med	11	18.18	18.18	27.27	18.18	18.18	100
41 Electrical Devices	25	24	12	20	36	8	100
42 Electrical Lighting	11	18.18	18.18	18.18	36.36	9.09	100
43 Measuring & Testing	29	27.59	17.24	24.14	27.59	3.45	100
44 Nuclears & X-rays	13	15.38	23.08	23.08	23.08	15.38	100
45 Power Systems	37	16.22	18.92	32.43	24.32	8.11	100
46 Semiconductor Devices	10	0	40	10	30	20	100
49 Miscellaneous-Elec.	17	29.41	0	29.41	11.76	29.41	100
51 Materials Processing & Handling	26	19.23	11.54	15.38	15.38	38.46	100
52 Metal Working	19	21.05	5.26	26.32	31.58	15.79	100
53 Motors, Engines & Parts	23	26.09	0	21.74	39.13	13.04	100
54 Optics	15	53.33	6.67	20	20	0	100
55 Transportation	14	14.29	7.14	28.57	14.29	35.71	100
59 Miscellaneous Mechanical	22	18.18	9.09	13.64	31.82	27.27	100
61 Agriculture, Husbandry, Food	10	10	10	20	30	30	100
63 Apparel & Textile	7	14.29	0	42.86	28.57	14.29	100
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	6	16.67	16.67	16.67	33.33	16.67	100
66 Heating	4	0	25	25	0	50	100
67 Pipes & Joints	5	0	20	20	40	20	100
68 Receptacles	9	11.11	22.22	33.33	11.11	22.22	100
69 Miscellaneous-Others	49	16.33	16.33	20.41	28.57	18.37	100
US-JP weighted	**735**	**21.38**	**13.83**	**21.35**	**26.31**	**17.12**	100

Japan (3/6)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important) (当該発明の商業的成功のための企業戦略としての重要度)

その特許権の内外におけるエンフォースメント
Enforcement of the patents domestically and internationally

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	36	119	684	928	156	75
Agriculture, Food, Textiles	27	0	3	12	9	3	0
Coating	49	2	5	9	24	5	4
Gas	23	0	2	6	10	2	3
Organic Compounds	44	1	2	17	22	1	1
Resins	62	1	5	25	22	4	5
Miscellaneous-chemical	119	1	12	45	45	11	5
Communications	72	2	2	36	21	10	1
Computer Hardware	37	1	1	14	18	3	0
Computer Software	72	0	4	23	38	7	0
Computer Peripherals	41	1	1	12	24	3	0
Information Storage	62	2	4	18	33	5	0
Drugs	33	0	3	7	19	2	2
Surgery & Medical Instruments	44	2	5	6	27	2	2
Biotechnology	39	0	3	11	18	3	4
Miscellaneous-Drug&Med	25	0	0	14	7	2	2
Electrical Devices	53	0	4	17	28	3	1
Electrical Lighting	51	0	2	16	25	5	3
Measuring & Testing	60	1	4	21	27	5	2
Nuclears & X-rays	39	0	2	11	21	3	2
Power Systems	77	2	3	26	37	5	4
Semiconductor Devices	64	0	3	24	35	1	1
Miscellaneous-Elec.	76	2	2	31	30	10	1
Materials Processing & Handling	68	3	3	30	26	4	2
Metal Working	84	1	6	32	41	3	1
Motors, Engines & Parts	72	2	3	22	35	9	1
Optics	51	1	6	16	27	1	0
Transportation	43	1	3	14	20	3	2
Miscellaneous Mechanical	79	1	8	25	37	5	3
Agriculture, Husbandry, Food	56	0	1	15	29	6	5
Apparel & Textile	60	0	2	21	29	3	5
Earth Working & Wells	15	1	0	3	7	1	3
Furniture, House Fixtures	39	1	3	12	17	3	3
Heating	46	2	2	19	18	4	1
Pipes & Joints	39	1	1	21	14	1	1
Receptacles	39	2	1	12	21	2	1
Miscellaneous-Others	138	2	8	41	67	16	4

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

%	N	1	2	3	4	5	Total
All	1923	1.87	6.19	35.57	48.26	8.11	100
Agriculture, Food, Textiles	27	0	11.11	44.44	33.33	11.11	100
Coating	45	4.44	11.11	20	53.33	11.11	100
Gas	20	0	10	30	50	10	100
Organic Compounds	43	2.33	4.65	39.53	51.16	2.33	100
Resins	57	1.75	8.77	43.86	38.6	7.02	100
Miscellaneous-chemical	114	0.88	10.53	39.47	39.47	9.65	100
Communications	71	2.82	2.82	50.7	29.58	14.08	100
Computer Hardware	37	2.7	2.7	37.84	48.65	8.11	100
Computer Software	72	0	5.56	31.94	52.78	9.72	100
Computer Peripherals	41	2.44	2.44	29.27	58.54	7.32	100
Information Storage	62	3.23	6.45	29.03	53.23	8.06	100
Drugs	31	0	9.68	22.58	61.29	6.45	100
Surgery & Medical Instruments	42	4.76	11.9	14.29	64.29	4.76	100
Biotechnology	35	0	8.57	31.43	51.43	8.57	100
Miscellaneous-Drug&Med	23	0	0	60.87	30.43	8.7	100
Electrical Devices	52	0	7.69	32.69	53.85	5.77	100
Electrical Lighting	48	0	4.17	33.33	52.08	10.42	100
Measuring & Testing	58	1.72	6.9	36.21	46.55	8.62	100
Nuclears & X-rays	37	0	5.41	29.73	56.76	8.11	100
Power Systems	73	2.74	4.11	35.62	50.68	6.85	100
Semiconductor Devices	63	0	4.76	38.1	55.56	1.59	100
Miscellaneous-Elec.	75	2.67	2.67	41.33	40	13.33	100
Materials Processing & Handling	66	4.55	4.55	45.45	39.39	6.06	100
Metal Working	83	1.2	7.23	38.55	49.4	3.61	100
Motors, Engines & Parts	71	2.82	4.23	30.99	49.3	12.68	100
Optics	51	1.96	11.76	31.37	52.94	1.96	100
Transportation	41	2.44	7.32	34.15	48.78	7.32	100
Miscellaneous Mechanical	76	1.32	10.53	32.89	48.68	6.58	100
Agriculture, Husbandry, Food	51	0	1.96	29.41	56.86	11.76	100
Apparel & Textile	55	0	3.64	38.18	52.73	5.45	100
Earth Working & Wells	12	8.33	0	25	58.33	8.33	100
Furniture, House Fixtures	36	2.78	8.33	33.33	47.22	8.33	100
Heating	45	4.44	4.44	42.22	40	8.89	100
Pipes & Joints	38	2.63	2.63	55.26	36.84	2.63	100
Receptacles	38	5.26	2.63	31.58	55.26	5.26	100
Miscellaneous-Others	134	1.49	5.97	30.6	50	11.94	100
US-JP weighted	1923	1.83	6.47	35.47	47.88	8.35	100
JP weighted	1923	1.89	6.17	36.17	47.06	8.72	100

企業機密
Secrecy (such as manufacturing know-how)

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	58	128	529	881	333	69
Agriculture, Food, Textiles	27	0	0	9	12	6	0
Coating	49	2	2	7	25	9	4
Gas	23	0	0	4	8	8	3
Organic Compounds	44	1	0	8	24	9	2
Resins	62	0	2	9	35	13	3
Miscellaneous-chemical	119	4	8	29	49	24	5
Communications	72	3	8	19	33	8	1
Computer Hardware	37	1	5	12	15	3	1
Computer Software	72	2	4	26	30	10	0
Computer Peripherals	41	1	3	17	17	3	0
Information Storage	62	4	7	19	25	7	0
Drugs	33	0	4	3	19	6	1
Surgery & Medical Instruments	44	0	4	16	18	4	2
Biotechnology	39	0	2	6	18	10	3
Miscellaneous-Drug&Med	25	2	2	10	4	5	2
Electrical Devices	53	1	4	16	22	9	1
Electrical Lighting	51	0	3	12	25	8	3
Measuring & Testing	60	2	4	16	22	14	2
Nuclears & X-rays	39	0	5	11	15	7	1
Power Systems	77	4	3	24	31	11	4
Semiconductor Devices	64	1	2	13	33	14	1
Miscellaneous-Elec.	76	4	6	29	27	9	1
Materials Processing & Handling	68	2	2	24	25	10	5
Metal Working	84	3	1	12	52	15	1
Motors, Engines & Parts	72	1	6	26	25	13	1
Optics	51	5	5	10	27	4	0
Transportation	43	4	4	12	12	9	2
Miscellaneous Mechanical	79	1	9	20	37	9	3
Agriculture, Husbandry, Food	56	0	3	10	27	12	4
Apparel & Textile	60	2	2	22	24	8	2
Earth Working & Wells	15	1	1	4	7	0	2
Furniture, House Fixtures	39	1	3	10	15	7	3
Heating	46	1	2	9	26	8	0
Pipes & Joints	39	0	2	9	17	9	2
Receptacles	39	0	3	12	15	8	1
Miscellaneous-Others	138	5	7	34	65	24	3

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

	N	1	2	3	4	5	Total
All	1929	3.01	6.64	27.42	45.67	17.26	100
Agriculture, Food, Textiles	27	0	0	33.33	44.44	22.22	100
Coating	45	4.44	4.44	15.56	55.56	20	100
Gas	20	0	0	20	40	40	100
Organic Compounds	42	2.38	0	19.05	57.14	21.43	100
Resins	59	0	3.39	15.25	59.32	22.03	100
Miscellaneous-chemical	114	3.51	7.02	25.44	42.98	21.05	100
Communications	71	4.23	11.27	26.76	46.48	11.27	100
Computer Hardware	36	2.78	13.89	33.33	41.67	8.33	100
Computer Software	72	2.78	5.56	36.11	41.67	13.89	100
Computer Peripherals	41	2.44	7.32	41.46	41.46	7.32	100
Information Storage	62	6.45	11.29	30.65	40.32	11.29	100
Drugs	32	0	12.5	9.38	59.38	18.75	100
Surgery & Medical Instruments	42	0	9.52	38.1	42.86	9.52	100
Biotechnology	36	0	5.56	16.67	50	27.78	100
Miscellaneous-Drug&Med	23	8.7	8.7	43.48	17.39	21.74	100
Electrical Devices	52	1.92	7.69	30.77	42.31	17.31	100
Electrical Lighting	48	0	6.25	25	52.08	16.67	100
Measuring & Testing	58	3.45	6.9	27.59	37.93	24.14	100
Nuclears & X-rays	38	0	13.16	28.95	39.47	18.42	100
Power Systems	73	5.48	4.11	32.88	42.47	15.07	100
Semiconductor Devices	63	1.59	3.17	20.63	52.38	22.22	100
Miscellaneous-Elec.	75	5.33	8	38.67	36	12	100
Materials Processing & Handling	63	3.17	3.17	38.1	39.68	15.87	100
Metal Working	83	3.61	1.2	14.46	62.65	18.07	100
Motors, Engines & Parts	71	1.41	8.45	36.62	35.21	18.31	100
Optics	51	9.8	9.8	19.61	52.94	7.84	100
Transportation	41	9.76	9.76	29.27	29.27	21.95	100
Miscellaneous Mechanical	76	1.32	11.84	26.32	48.68	11.84	100
Agriculture, Husbandry, Food	52	0	5.77	19.23	51.92	23.08	100
Apparel & Textile	58	3.45	3.45	37.93	41.38	13.79	100
Earth Working & Wells	13	7.69	7.69	30.77	53.85	0	100
Furniture, House Fixtures	36	2.78	8.33	27.78	41.67	19.44	100
Heating	46	2.17	4.35	19.57	56.52	17.39	100
Pipes & Joints	37	0	5.41	24.32	45.95	24.32	100
Receptacles	38	0	7.89	31.58	39.47	21.05	100
Miscellaneous-Others	135	3.7	5.19	25.19	48.15	17.78	100
US-JP weighted	1929	3.12	7.05	27.86	45.44	16.53	100
JP weighted	1929	3.32	6.99	28.2	45.14	16.36	100

US (3/5)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

B7E Patents

		all	1	2	3	4	5	Don't know	missing
NBER	All	1832	49	78	169	238	276	48	87
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	32	0	2	4	8	6	0	2
13	Gas	11	0	1	1	1	1	0	0
14	Organic Compounds	60	0	2	8	3	5	1	1
15	Resins	82	2	2	5	13	16	0	2
19	Miscellaneous-chemical	227	4	9	19	29	36	9	6
21	Communications	140	2	9	8	22	14	5	9
22	Computer Hardware	40	3	3	3	6	1	1	2
77	Computer Software	90	2	8	12	13	10	6	3
23	Computer Peripherals	33	0	1	4	3	1	1	0
24	Information Storage	39	1	1	8	4	2	1	3
31	Drugs	95	2	3	3	3	12	0	6
32	Surgery & Medical Instruments	115	2	1	7	18	20	3	8
33	Biotechnology	39	4	4	1	6	2	0	2
39	Miscellaneous-Drug&Med	26	1	1	1	4	5	2	3
41	Electrical Devices	44	2	4	2	10	9	0	1
42	Electrical Lighting	32	0	1	3	4	6	1	1
43	Measuring & Testing	58	3	3	8	8	11	4	4
44	Nuclears & X-rays	37	0	0	6	4	5	1	2
45	Power Systems	86	2	3	11	15	12	1	3
46	Semiconductor Devices	51	0	2	1	5	5	2	4
49	Miscellaneous-Elec.	30	0	2	4	4	7	1	2
51	Materials Processing & Handling	54	2	1	10	5	13	1	2
52	Metal Working	46	0	2	4	5	8	2	3
53	Motors, Engines & Parts	52	2	0	7	9	7	3	4
54	Optics	42	1	1	4	6	5	0	1
55	Transportation	33	1	2	1	5	7	1	0
59	Miscellaneous Mechanical	39	2	4	5	6	6	0	3
61	Agriculture, Husbandry, Food	14	0	0	3	3	5	0	0
63	Apparel & Textile	9	2	0	1	0	4	0	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	0	2	2	2	0	0	0
66	Heating	7	0	0	0	0	4	0	1
67	Pipes & Joints	13	1	0	0	1	3	0	0
68	Receptacles	19	1	0	2	2	4	0	1
69	Miscellaneous-Others	117	7	4	10	11	20	2	6

B7F Secrecy

		all	1	2	3	4	5	Don't know	missing
NBER	All	945	145	136	161	173	141	88	101
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	22	3	2	7	1	5	1	3
13	Gas	XX	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	20	2	2	2	6	4	2	2
15	Resins	40	3	5	8	14	6	2	2
19	Miscellaneous-chemical	112	8	24	21	22	15	16	6
21	Communications	69	11	12	12	9	10	6	9
22	Computer Hardware	19	8	1	1	4	1	1	3
77	Computer Software	54	14	5	10	10	2	11	2
23	Computer Peripherals	10	0	4	1	3	1	1	0
24	Information Storage	20	2	2	4	3	3	1	5
31	Drugs	29	3	6	3	3	6	0	8
32	Surgery & Medical Instruments	59	5	10	6	13	10	7	8
33	Biotechnology	19	6	2	2	3	4	0	2
39	Miscellaneous-Drug&Med	17	3	3	3	2	1	2	3
41	Electrical Devices	28	6	4	8	5	4	0	1
42	Electrical Lighting	16	0	5	1	4	2	2	2
43	Measuring & Testing	41	9	4	6	7	5	6	4
44	Nuclears & X-rays	18	2	1	7	2	3	1	2
45	Power Systems	47	10	7	7	12	5	2	4
46	Semiconductor Devices	19	1	3	2	5	1	3	4
49	Miscellaneous-Elec.	20	3	5	5	2	3	1	1
51	Materials Processing & Handling	34	7	3	5	5	8	3	3
52	Metal Working	24	2	2	3	4	8	3	2
53	Motors, Engines & Parts	32	6	5	6	4	3	3	5
54	Optics	18	4	2	4	2	2	2	2
55	Transportation	17	2	0	4	4	4	2	1
59	Miscellaneous Mechanical	26	4	5	1	7	3	2	4
61	Agriculture, Husbandry, Food	11	3	0	3	2	2	0	1
63	Apparel & Textile	7	0	1	2	1	3	0	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	1	0	2	1	2	0	0
66	Heating	5	0	1	1	1	1	0	1
67	Pipes & Joints	5	0	3	0	1	1	0	0
68	Receptacles	10	4	0	1	1	3	0	1
69	Miscellaneous-Others	60	12	6	10	9	8	7	8

		%	N	1	2	3	4	5	Total
NBER	All		810	6.05	9.63	20.86	29.38	34.07	100
11	Agriculture, Food, Textiles		XX	XX	XX	XX	XX	XX	XX
12	Coating		20	0	10	20	40	30	100
13	Gas		4	0	25	25	25	25	100
14	Organic Compounds		18	0	11.11	44.44	16.67	27.78	100
15	Resins		38	5.26	5.26	13.16	34.21	42.11	100
19	Miscellaneous-chemical		97	4.12	9.28	19.59	29.9	37.11	100
21	Communications		55	3.64	16.36	14.55	40	25.45	100
22	Computer Hardware		16	18.75	18.75	18.75	37.5	6.25	100
77	Computer Software		45	4.44	17.78	26.67	28.89	22.22	100
23	Computer Peripherals		9	0	11.11	44.44	33.33	11.11	100
24	Information Storage		16	6.25	6.25	50	25	12.5	100
31	Drugs		23	8.7	13.04	13.04	13.04	52.17	100
32	Surgery & Medical Instruments		48	4.17	2.08	14.58	37.5	41.67	100
33	Biotechnology		17	23.53	23.53	5.88	35.29	11.76	100
39	Miscellaneous-Drug&Med		12	8.33	8.33	8.33	33.33	41.67	100
41	Electrical Devices		27	7.41	14.81	7.41	37.04	33.33	100
42	Electrical Lighting		14	0	7.14	21.43	28.57	42.86	100
43	Measuring & Testing		33	9.09	9.09	24.24	24.24	33.33	100
44	Nuclears & X-rays		15	0	0	40	26.67	33.33	100
45	Power Systems		43	4.65	6.98	25.58	34.88	27.91	100
46	Semiconductor Devices		13	0	15.38	7.69	38.46	38.46	100
49	Miscellaneous-Elec.		17	0	11.76	23.53	23.53	41.18	100
51	Materials Processing & Handling		31	6.45	3.23	32.26	16.13	41.94	100
52	Metal Working		19	0	10.53	21.05	26.32	42.11	100
53	Motors, Engines & Parts		25	8	0	28	36	28	100
54	Optics		17	5.88	5.88	23.53	35.29	29.41	100
55	Transportation		16	6.25	12.5	6.25	31.25	43.75	100
59	Miscellaneous Mechanical		23	8.7	17.39	21.74	26.09	26.09	100
61	Agriculture, Husbandry, Food		11	0	0	27.27	27.27	45.45	100
63	Apparel & Textile		7	28.57	0	14.29	0	57.14	100
64	Earth Working & Wells		XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures		6	0	33.33	33.33	33.33	0	100
66	Heating		4	0	0	0	0	100	100
67	Pipes & Joints		5	20	0	0	20	60	100
68	Receptacles		9	11.11	0	22.22	22.22	44.44	100
69	Miscellaneous-Others		52	13.46	7.69	19.23	21.15	38.46	100
	US-JP weighted		**810**	**5.73**	**9.38**	**21.64**	**28.71**	**34.54**	**100**

		N	1	2	3	4	5	Total
NBER	All	756	19.18	17.99	21.3	22.88	18.65	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12	Coating	18	16.67	11.11	38.89	5.56	27.78	100
13	Gas	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	16	12.5	12.5	12.5	37.5	25	100
15	Resins	36	8.33	13.89	22.22	38.89	16.67	100
19	Miscellaneous-chemical	90	8.89	26.67	23.33	24.44	16.67	100
21	Communications	54	20.37	22.22	22.22	16.67	18.52	100
22	Computer Hardware	15	53.33	6.67	6.67	26.67	6.67	100
77	Computer Software	41	34.15	12.2	24.39	24.39	4.88	100
23	Computer Peripherals	9	0	44.44	11.11	33.33	11.11	100
24	Information Storage	14	14.29	14.29	28.57	21.43	21.43	100
31	Drugs	21	14.29	28.57	14.29	14.29	28.57	100
32	Surgery & Medical Instruments	44	11.36	22.73	13.64	29.55	22.73	100
33	Biotechnology	17	35.29	11.76	11.76	17.65	23.53	100
39	Miscellaneous-Drug&Med	12	25	25	25	16.67	8.33	100
41	Electrical Devices	27	22.22	14.81	29.63	18.52	14.81	100
42	Electrical Lighting	12	0	41.67	8.33	33.33	16.67	100
43	Measuring & Testing	31	29.03	12.9	19.35	22.58	16.13	100
44	Nuclears & X-rays	15	13.33	6.67	46.67	13.33	20	100
45	Power Systems	41	24.39	17.07	17.07	29.27	12.2	100
46	Semiconductor Devices	12	8.33	25	16.67	41.67	8.33	100
49	Miscellaneous-Elec.	18	16.67	27.78	27.78	11.11	16.67	100
51	Materials Processing & Handling	28	25	10.71	17.86	17.86	28.57	100
52	Metal Working	19	10.53	10.53	15.79	21.05	42.11	100
53	Motors, Engines & Parts	24	25	20.83	25	16.67	12.5	100
54	Optics	14	28.57	14.29	28.57	14.29	14.29	100
55	Transportation	14	14.29	0	28.57	28.57	28.57	100
59	Miscellaneous Mechanical	20	20	25	5	35	15	100
61	Agriculture, Husbandry, Food	10	30	0	30	20	20	100
63	Apparel & Textile	7	0	14.29	28.57	14.29	42.86	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	16.67	0	33.33	16.67	33.33	100
66	Heating	4	0	25	25	25	25	100
67	Pipes & Joints	5	0	60	0	20	20	100
68	Receptacles	9	44.44	0	11.11	11.11	33.33	100
69	Miscellaneous-Others	45	26.67	13.33	22.22	20	17.78	100
	US-JP weighted	**756**	**18.89**	**18.06**	**21.3**	**22.65**	**19.11**	**100**

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

製品および生産プロセスの複雑性
Product/process complexity

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	121	302	966	449	75	85
Agriculture, Food, Textiles	27	0	4	14	5	4	0
Coating	49	3	4	26	8	4	4
Gas	23	2	3	7	5	2	4
Organic Compounds	44	1	5	21	12	2	3
Resins	62	1	12	26	17	3	3
Miscellaneous-chemical	119	6	21	55	24	7	6
Communications	72	7	8	43	12	1	1
Computer Hardware	37	6	7	19	4	0	1
Computer Software	72	9	13	33	16	1	0
Computer Peripherals	41	2	7	21	10	0	1
Information Storage	62	3	7	31	18	3	0
Drugs	33	1	6	14	9	2	1
Surgery & Medical Instruments	44	2	10	17	13	0	2
Biotechnology	39	0	5	17	13	1	3
Miscellaneous-Drug&Med	25	2	3	13	5	0	2
Electrical Devices	53	1	10	29	10	2	1
Electrical Lighting	51	2	7	30	8	1	3
Measuring & Testing	60	2	13	26	15	2	2
Nuclears & X-rays	39	1	5	21	8	2	2
Power Systems	77	8	16	34	12	3	4
Semiconductor Devices	64	5	7	30	20	1	1
Miscellaneous-Elec.	76	10	10	42	10	3	1
Materials Processing & Handling	68	3	12	29	16	2	6
Metal Working	84	4	1	40	36	1	2
Motors, Engines & Parts	72	7	9	37	14	4	1
Optics	51	5	12	19	13	2	0
Transportation	43	4	9	17	6	4	3
Miscellaneous Mechanical	79	2	19	31	23	1	3
Agriculture, Husbandry, Food	56	0	7	28	11	5	5
Apparel & Textile	60	3	8	33	11	1	4
Earth Working & Wells	15	1	4	6	0	0	4
Furniture, House Fixtures	39	4	4	22	5	1	3
Heating	46	2	5	25	13	0	1
Pipes & Joints	39	1	5	23	7	1	2
Receptacles	39	2	7	16	11	2	1
Miscellaneous-Others	138	9	17	71	29	7	5

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

補完的な技術を有する企業との協力
Collaboration with the firms with complementary technologies

	All	全く重要でない	重要でない	どちらでもない	重要である	非常に重要である	無回答
	All	**1**	**2**	**3**	**4**	**5**	**no response**
All	1998	141	264	824	578	116	75
Agriculture, Food, Textiles	27	1	1	9	10	6	0
Coating	49	3	3	22	15	2	4
Gas	23	2	4	6	7	1	3
Organic Compounds	44	2	8	18	12	2	2
Resins	62	2	6	26	19	6	3
Miscellaneous-chemical	119	6	17	46	35	10	5
Communications	72	4	6	32	25	5	0
Computer Hardware	37	1	3	23	6	2	2
Computer Software	72	4	14	33	19	2	0
Computer Peripherals	41	2	4	15	18	2	0
Information Storage	62	6	10	23	19	4	0
Drugs	33	1	5	5	17	4	1
Surgery & Medical Instruments	44	3	5	20	12	2	2
Biotechnology	39	2	5	12	12	5	3
Miscellaneous-Drug&Med	25	2	6	9	6	0	2
Electrical Devices	53	4	6	31	10	1	1
Electrical Lighting	51	2	10	23	11	2	3
Measuring & Testing	60	5	9	19	20	5	2
Nuclears & X-rays	39	4	5	18	9	2	1
Power Systems	77	7	9	35	19	3	4
Semiconductor Devices	64	3	11	26	22	1	1
Miscellaneous-Elec.	76	9	6	39	16	5	1
Materials Processing & Handling	68	10	3	25	24	2	4
Metal Working	84	3	12	32	31	5	1
Motors, Engines & Parts	72	9	7	30	18	7	1
Optics	51	3	10	22	14	2	0
Transportation	43	5	6	16	10	2	4
Miscellaneous Mechanical	79	4	13	31	26	2	3
Agriculture, Husbandry, Food	56	4	3	26	15	3	5
Apparel & Textile	60	5	10	25	14	2	4
Earth Working & Wells	15	1	5	4	3	0	2
Furniture, House Fixtures	39	5	9	12	8	2	3
Heating	46	1	7	21	13	3	1
Pipes & Joints	39	3	7	15	10	3	1
Receptacles	39	4	6	17	8	3	1
Miscellaneous-Others	138	9	13	58	45	8	5

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

%	N	**1**	**2**	**3**	**4**	**5**	**Total**
All	1913	6.33	15.79	50.5	23.47	3.92	100
Agriculture, Food, Textiles	27	0	14.81	51.85	18.52	14.81	100
Coating	45	6.67	8.89	57.78	17.78	8.89	100
Gas	19	10.53	15.79	36.84	26.32	10.53	100
Organic Compounds	41	2.44	12.2	51.22	29.27	4.88	100
Resins	59	1.69	20.34	44.07	28.81	5.08	100
Miscellaneous-chemical	113	5.31	18.58	48.67	21.24	6.19	100
Communications	71	9.86	11.27	60.56	16.9	1.41	100
Computer Hardware	36	16.67	19.44	52.78	11.11	0	100
Computer Software	72	12.5	18.06	45.83	22.22	1.39	100
Computer Peripherals	40	5	17.5	52.5	25	0	100
Information Storage	62	4.84	11.29	50	29.03	4.84	100
Drugs	32	3.13	18.75	43.75	28.13	6.25	100
Surgery & Medical Instruments	42	4.76	23.81	40.48	30.95	0	100
Biotechnology	36	0	13.89	47.22	36.11	2.78	100
Miscellaneous-Drug&Med	23	8.7	13.04	56.52	21.74	0	100
Electrical Devices	52	1.92	19.23	55.77	19.23	3.85	100
Electrical Lighting	48	4.17	14.58	62.5	16.67	2.08	100
Measuring & Testing	58	3.45	22.41	44.83	25.86	3.45	100
Nuclears & X-rays	37	2.7	13.51	56.76	21.62	5.41	100
Power Systems	73	10.96	21.92	46.58	16.44	4.11	100
Semiconductor Devices	63	7.94	11.11	47.62	31.75	1.59	100
Miscellaneous-Elec.	75	13.33	13.33	56	13.33	4	100
Materials Processing & Handling	62	4.84	19.35	46.77	25.81	3.23	100
Metal Working	82	4.88	1.22	48.78	43.9	1.22	100
Motors, Engines & Parts	71	9.86	12.68	52.11	19.72	5.63	100
Optics	51	9.8	23.53	37.25	25.49	3.92	100
Transportation	40	10	22.5	42.5	15	10	100
Miscellaneous Mechanical	76	2.63	25	40.79	30.26	1.32	100
Agriculture, Husbandry, Food	51	0	13.73	54.9	21.57	9.8	100
Apparel & Textile	56	5.36	14.29	58.93	19.64	1.79	100
Earth Working & Wells	11	9.09	36.36	54.55	0	0	100
Furniture, House Fixtures	36	11.11	11.11	61.11	13.89	2.78	100
Heating	45	4.44	11.11	55.56	28.89	0	100
Pipes & Joints	37	2.7	13.51	62.16	18.92	2.7	100
Receptacles	38	5.26	18.42	42.11	28.95	5.26	100
Miscellaneous-Others	133	6.77	12.78	53.38	21.8	5.26	100
US-JP weighted	1913	6.68	16.41	49.93	23.3	3.67	100
JP weighted	1913	6.87	16.29	50.15	22.85	3.83	100

	N	**1**	**2**	**3**	**4**	**5**	**Total**
All	1923	7.33	13.73	42.85	30.06	6.03	100
Agriculture, Food, Textiles	27	3.7	3.7	33.33	37.04	22.22	100
Coating	45	6.67	6.67	48.89	33.33	4.44	100
Gas	20	10	20	30	35	5	100
Organic Compounds	42	4.76	19.05	42.86	28.57	4.76	100
Resins	59	3.39	10.17	44.07	32.2	10.17	100
Miscellaneous-chemical	114	5.26	14.91	40.35	30.7	8.77	100
Communications	72	5.56	8.33	44.44	34.72	6.94	100
Computer Hardware	35	2.86	8.57	65.71	17.14	5.71	100
Computer Software	72	5.56	19.44	45.83	26.39	2.78	100
Computer Peripherals	41	4.88	9.76	36.59	43.9	4.88	100
Information Storage	62	9.68	16.13	37.1	30.65	6.45	100
Drugs	32	3.13	15.63	15.63	53.13	12.5	100
Surgery & Medical Instruments	42	7.14	11.9	47.62	28.57	4.76	100
Biotechnology	36	5.56	13.89	33.33	33.33	13.89	100
Miscellaneous-Drug&Med	23	8.7	26.09	39.13	26.09	0	100
Electrical Devices	52	7.69	11.54	59.62	19.23	1.92	100
Electrical Lighting	48	4.17	20.83	47.92	22.92	4.17	100
Measuring & Testing	58	8.62	15.52	32.76	34.48	8.62	100
Nuclears & X-rays	38	10.53	13.16	47.37	23.68	5.26	100
Power Systems	73	9.59	12.33	47.95	26.03	4.11	100
Semiconductor Devices	63	4.76	17.46	41.27	34.92	1.59	100
Miscellaneous-Elec.	75	12	8	52	21.33	6.67	100
Materials Processing & Handling	64	15.63	4.69	39.06	37.5	3.13	100
Metal Working	83	3.61	14.46	38.55	37.35	6.02	100
Motors, Engines & Parts	71	12.68	9.86	42.25	25.35	9.86	100
Optics	51	5.88	19.61	43.14	27.45	3.92	100
Transportation	39	12.82	15.38	41.03	25.64	5.13	100
Miscellaneous Mechanical	76	5.26	17.11	40.79	34.21	2.63	100
Agriculture, Husbandry, Food	51	7.84	5.88	50.98	29.41	5.88	100
Apparel & Textile	56	8.93	17.86	44.64	25	3.57	100
Earth Working & Wells	13	7.69	38.46	30.77	23.08	0	100
Furniture, House Fixtures	36	13.89	25	33.33	22.22	5.56	100
Heating	45	2.22	15.56	46.67	28.89	6.67	100
Pipes & Joints	38	7.89	18.42	39.47	26.32	7.89	100
Receptacles	38	10.53	15.79	44.74	21.05	7.89	100
Miscellaneous-Others	133	6.77	9.77	43.61	33.83	6.02	100
US-JP weighted	1923	7.01	13.3	42.95	30.78	5.95	100
JP weighted	1923	7.26	13.15	43.42	30.33	5.84	100

US (4/5)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention? (1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

B7G Product/Process complexity

		all	1	2	3	4	5	Don't know	missing
NBER	All	1823	126	133	190	207	114	79	96
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	31	2	7	7	1	1	1	3
13	Gas	11	0	0	1	1	2	0	0
14	Organic Compounds	59	2	3	2	6	3	2	2
15	Resins	82	4	8	5	18	3	0	2
19	Miscellaneous-chemical	226	9	20	27	22	17	10	7
21	Communications	140	11	10	10	11	8	10	9
22	Computer Hardware	40	4	0	4	5	3	1	2
77	Computer Software	90	7	9	8	11	6	10	3
23	Computer Peripherals	33	2	2	0	4	0	2	0
24	Information Storage	38	1	3	4	4	3	1	4
31	Drugs	95	4	2	8	4	4	1	6
32	Surgery & Medical Instruments	115	7	6	14	14	4	6	8
33	Biotechnology	39	2	3	4	4	3	1	2
39	Miscellaneous-Drug&Med	26	2	5	2	3	0	2	3
41	Electrical Devices	44	6	4	10	6	1	0	1
42	Electrical Lighting	30	0	3	2	5	1	2	3
43	Measuring & Testing	58	6	4	5	12	4	6	4
44	Nuclears & X-rays	37	2	2	6	2	3	1	2
45	Power Systems	85	6	3	11	13	4	6	4
46	Semiconductor Devices	51	0	2	2	7	1	3	4
49	Miscellaneous-Elec.	31	3	6	3	4	2	1	1
51	Materials Processing & Handlin	53	5	4	6	5	9	2	3
52	Metal Working	48	3	1	6	6	3	4	1
53	Motors, Engines & Parts	51	6	8	5	5	1	2	5
54	Optics	42	5	0	6	3	2	1	1
55	Transportation	32	3	0	3	4	4	2	1
59	Miscellaneous Mechanical	39	2	4	7	5	4	1	3
61	Agriculture, Husbandry, Food	13	2	2	1	2	3	0	1
63	Apparel & Textile	9	1	2	0	3	1	0	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	9	2	1	2	1	0	0	0
66	Heating	7	0	1	0	2	1	0	1
67	Pipes & Joints	13	0	0	3	0	2	0	0
68	Receptacles	19	2	0	4	2	1	0	1
69	Miscellaneous-Others	116	13	7	11	12	9	1	7

B7H Collaboration with the firms with complementary technologies

		all	1	2	3	4	5	Don't know	missing
NBER	All	945	387	141	90	79	42	111	95
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12	Coating	22	7	2	3	4	1	3	2
13	Gas	XX	XX	XX	XX	XX	XX	XX	XX
14	Organic Compounds	20	11	2	2	0	0	3	2
15	Resins	40	20	6	4	5	1	2	2
19	Miscellaneous-chemical	112	41	21	9	13	4	18	6
21	Communications	69	23	13	9	5	1	9	9
22	Computer Hardware	19	9	3	2	1	0	2	2
77	Computer Software	54	21	8	8	2	2	10	3
23	Computer Peripherals	10	4	1	1	0	1	3	0
24	Information Storage	20	8	3	2	0	3	0	4
31	Drugs	29	9	6	2	2	2	1	7
32	Surgery & Medical Instruments	59	19	10	2	4	6	10	8
33	Biotechnology	19	6	2	2	3	2	2	2
39	Miscellaneous-Drug&Med	17	8	3	0	0	1	2	3
41	Electrical Devices	28	16	5	5	1	0	0	1
42	Electrical Lighting	16	4	1	3	3	0	3	2
43	Measuring & Testing	41	12	5	5	6	1	8	4
44	Nuclears & X-rays	18	5	5	2	2	1	1	2
45	Power Systems	47	25	4	6	2	3	4	3
46	Semiconductor Devices	19	2	5	0	4	2	2	4
49	Miscellaneous-Elec.	20	10	2	1	3	2	1	1
51	Materials Processing & Handlin	34	15	3	2	3	1	6	4
52	Metal Working	24	11	3	2	2	0	3	3
53	Motors, Engines & Parts	32	12	4	5	2	0	5	4
54	Optics	18	9	3	1	3	0	1	1
55	Transportation	17	6	3	3	0	2	2	1
59	Miscellaneous Mechanical	26	11	5	3	0	0	4	3
61	Agriculture, Husbandry, Food	11	6	1	0	1	1	1	1
63	Apparel & Textile	7	6	0	1	0	0	0	0
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	4	1	0	0	0	0	1
66	Heating	5	1	1	0	1	1	0	1
67	Pipes & Joints	5	4	0	1	0	0	0	0
68	Receptacles	10	8	0	0	1	0	0	1
69	Miscellaneous-Others	60	31	8	4	4	4	3	6

	%	N	1	2	3	4	5	Total
NBER	All	770	16.36	17.27	24.68	26.88	14.81	100
11	Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX
12	Coating	18	11.11	38.89	38.89	5.56	5.56	100
13	Gas	4	0	0	25	25	50	100
14	Organic Compounds	16	12.5	18.75	12.5	37.5	18.75	100
15	Resins	38	10.53	21.05	13.16	47.37	7.89	100
19	Miscellaneous-chemical	95	9.47	21.05	28.42	23.16	17.89	100
21	Communications	50	22	20	20	22	16	100
22	Computer Hardware	16	25	0	25	31.25	18.75	100
77	Computer Software	41	17.07	21.95	19.51	26.83	14.63	100
23	Computer Peripherals	8	25	25	0	50	0	100
24	Information Storage	15	6.67	20	26.67	26.67	20	100
31	Drugs	22	18.18	9.09	36.36	18.18	18.18	100
32	Surgery & Medical Instruments	45	15.56	13.33	31.11	31.11	8.89	100
33	Biotechnology	16	12.5	18.75	25	25	18.75	100
39	Miscellaneous-Drug&Med	12	16.67	41.67	16.67	25	0	100
41	Electrical Devices	27	22.22	14.81	37.04	22.22	3.7	100
42	Electrical Lighting	11	0	27.27	18.18	45.45	9.09	100
43	Measuring & Testing	31	19.35	12.9	16.13	38.71	12.9	100
44	Nuclears & X-rays	15	13.33	13.33	40	13.33	20	100
45	Power Systems	37	16.22	8.11	29.73	35.14	10.81	100
46	Semiconductor Devices	12	0	16.67	16.67	58.33	8.33	100
49	Miscellaneous-Elec.	18	16.67	33.33	16.67	22.22	11.11	100
51	Materials Processing & Handlin	29	17.24	13.79	20.69	17.24	31.03	100
52	Metal Working	19	15.79	5.26	31.58	31.58	15.79	100
53	Motors, Engines & Parts	25	24	32	20	20	4	100
54	Optics	16	31.25	0	37.5	18.75	12.5	100
55	Transportation	14	21.43	0	21.43	28.57	28.57	100
59	Miscellaneous Mechanical	22	9.09	18.18	31.82	22.73	18.18	100
61	Agriculture, Husbandry, Food	10	20	20	10	20	30	100
63	Apparel & Textile	7	14.29	28.57	0	42.86	14.29	100
64	Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX
65	Furniture, House Fixtures	6	33.33	16.67	33.33	16.67	0	100
66	Heating	4	0	25	0	50	25	100
67	Pipes & Joints	5	0	0	60	0	40	100
68	Receptacles	9	22.22	0	44.44	22.22	11.11	100
69	Miscellaneous-Others	52	25	13.46	21.15	23.08	17.31	100
	US-JP weighted	**770**	**16.26**	**17.29**	**24.11**	**26.99**	**15.34**	**100**

	N	1	2	3	4	5	Total
NBER	739	52.37	19.08	12.18	10.69	5.68	100
11	XX	XX	XX	XX	XX	XX	XX
12	17	41.18	11.76	17.65	23.53	5.88	100
13	XX	XX	XX	XX	XX	XX	XX
14	15	73.33	13.33	13.33	0	0	100
15	36	55.56	16.67	11.11	13.89	2.78	100
19	88	46.59	23.86	10.23	14.77	4.55	100
21	51	45.1	25.49	17.65	9.8	1.96	100
22	15	60	20	13.33	6.67	0	100
77	41	51.22	19.51	19.51	4.88	4.88	100
23	7	57.14	14.29	14.29	0	14.29	100
24	16	50	18.75	12.5	0	18.75	100
31	21	42.86	28.57	9.52	9.52	9.52	100
32	41	46.34	24.39	4.88	9.76	14.63	100
33	15	40	13.33	13.33	20	13.33	100
39	12	66.67	25	0	0	8.33	100
41	27	59.26	18.52	18.52	3.7	0	100
42	11	36.36	9.09	27.27	27.27	0	100
43	29	41.38	17.24	17.24	20.69	3.45	100
44	15	33.33	33.33	13.33	13.33	6.67	100
45	40	62.5	10	15	5	7.5	100
46	13	15.38	38.46	0	30.77	15.38	100
49	18	55.56	11.11	5.56	16.67	11.11	100
51	24	62.5	12.5	8.33	12.5	4.17	100
52	18	61.11	16.67	11.11	11.11	0	100
53	23	52.17	17.39	21.74	8.7	0	100
54	16	56.25	18.75	6.25	18.75	0	100
55	14	42.86	21.43	21.43	0	14.29	100
59	19	57.89	26.32	15.79	0	0	100
61	9	66.67	11.11	0	11.11	11.11	100
63	7	85.71	0	14.29	0	0	100
64	XX	XX	XX	XX	XX	XX	XX
65	5	80	20	0	0	0	100
66	4	25	25	0	25	25	100
67	5	80	0	20	0	0	100
68	9	88.89	0	0	11.11	0	100
69	51	60.78	15.69	7.84	7.84	7.84	100
US-JP weighted	739	**51.85**	**19.12**	**12.3**	**10.71**	**6.01**	100

Japan (5/6)

Question 6-10 In your opinion, how important are the following corporate strategies for the successful commercialization of this invention?
(1 = not important, 5 = very important)（当該発明の商業的成功のための企業戦略としての重要度）

その他
others

	All	全く重要でない	重要である	非常に重要である	無回答
	All	**1**	**4**	**5**	**no response**
All	1998	1	1	1	1995
Agriculture, Food, Textiles	27	0	0	0	27
Coating	49	0	0	0	49
Gas	23	0	0	0	23
Organic Compounds	44	0	0	0	44
Resins	62	0	0	0	62
Miscellaneous-chemical	119	1	0	0	118
Communications	72	0	0	0	72
Computer Hardware	37	0	0	0	37
Computer Software	72	0	0	0	72
Computer Peripherals	41	0	0	0	41
Information Storage	62	0	0	0	62
Drugs	33	0	0	0	33
Surgery & Medical Instruments	44	0	0	1	43
Biotechnology	39	0	0	0	39
Miscellaneous-Drug&Med	25	0	0	0	25
Electrical Devices	53	0	0	0	53
Electrical Lighting	51	0	0	0	51
Measuring & Testing	60	0	0	0	60
Nuclears & X-rays	39	0	0	0	39
Power Systems	77	0	0	0	77
Semiconductor Devices	64	0	0	0	64
Miscellaneous-Elec.	76	0	0	0	76
Materials Processing & Handling	68	0	0	0	68
Metal Working	84	0	0	0	84
Motors, Engines & Parts	72	0	0	0	72
Optics	51	0	0	0	51
Transportation	43	0	0	0	43
Miscellaneous Mechanical	79	0	0	0	79
Agriculture, Husbandry, Food	56	0	0	0	56
Apparel & Textile	60	0	0	0	60
Earth Working & Wells	15	0	0	0	15
Furniture, House Fixtures	39	0	1	0	38
Heating	46	0	0	0	46
Pipes & Joints	39	0	0	0	39
Receptacles	39	0	0	0	39
Miscellaneous-Others	138	0	0	0	138

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

%	N	1	4	5	Total
All	3	33.33	33.33	33.33	100
Agriculture, Food, Textiles					
Coating					
Gas					
Organic Compounds					
Resins					
Miscellaneous-chemical	1	100	0	0	100
Communications					
Computer Hardware					
Computer Software					
Computer Peripherals					
Information Storage					
Drugs					
Surgery & Medical Instruments	1	0	0	100	100
Biotechnology					
Miscellaneous-Drug&Med					
Electrical Devices					
Electrical Lighting					
Measuring & Testing					
Nuclears & X-rays					
Power Systems					
Semiconductor Devices					
Miscellaneous-Elec.					
Materials Processing & Handling					
Metal Working					
Motors, Engines & Parts					
Optics					
Transportation					
Miscellaneous Mechanical					
Agriculture, Husbandry, Food					
Apparel & Textile					
Earth Working & Wells					
Furniture, House Fixtures	1	0	100	0	100
Heating					
Pipes & Joints					
Receptacles					
Miscellaneous-Others					
US-JP weighted		44.92	11.17	43.91	100
JP weighted		66.2	8.41	25.38	100

Japan (6/6)

Question 6-10 Summary

4 or 5

%	First mover's advantage in the development of complementary technologies and the patent portfolio	First mover's advantage in commercialization (short lead-time between the patenting and its exploitation in the market)	Complementary manufacturing capability	Complementary sales/service capability	Enforcement of the patents domestically and internationally	Secrecy (such as manufacturing know-how)	Product/process complexity	Collaboration with the firms with complementary technologies
All	84.94	84.38	73.05	61.70	56.37	62.93	27.39	36.09
Agriculture, Food, Textiles	92.59	92.59	81.48	73.08	44.44	66.67	33.33	59.26
Coating	89.13	89.13	78.26	75.56	64.44	75.56	26.67	37.78
Gas	95.45	85.71	70.00	60.00	60.00	80.00	36.84	40.00
Organic Compounds	86.36	85.71	95.45	70.73	53.49	78.57	34.15	33.33
Resins	84.75	85.25	81.67	71.19	45.61	81.36	33.90	42.37
Miscellaneous-chemical	85.34	82.46	81.74	63.48	49.12	64.04	27.43	39.47
Communications	88.89	84.51	56.34	52.11	43.66	57.75	18.31	41.67
Computer Hardware	86.11	80.56	52.78	58.33	56.76	50.00	11.11	22.86
Computer Software	81.94	86.11	56.94	61.11	62.50	55.56	23.61	29.17
Computer Peripherals	82.93	87.80	63.41	58.54	65.85	48.78	25.00	48.78
Information Storage	83.87	82.26	72.58	61.29	61.29	51.61	33.87	37.10
Drugs	84.38	90.63	90.63	84.38	67.74	78.13	34.38	65.63
Surgery & Medical Instruments	90.48	81.40	72.09	66.67	69.05	52.38	30.95	33.33
Biotechnology	91.89	82.05	84.21	75.00	60.00	77.78	38.89	47.22
Miscellaneous-Drug&Med	91.30	78.26	75.00	60.87	39.13	39.13	21.74	26.09
Electrical Devices	90.00	86.54	71.15	59.62	59.62	59.62	23.08	21.15
Electrical Lighting	85.71	77.55	87.50	56.25	62.50	68.75	18.75	27.08
Measuring & Testing	82.46	82.76	70.69	56.14	55.17	62.07	29.31	43.10
Nuclears & X-rays	86.49	86.49	64.86	55.26	64.86	57.89	27.03	28.95
Power Systems	88.00	91.89	75.68	54.79	57.53	57.53	20.55	30.14
Semiconductor Devices	87.30	87.30	87.30	66.67	57.14	74.60	33.33	36.51
Miscellaneous-Elec.	84.00	84.21	55.26	44.00	53.33	48.00	17.33	28.00
Materials Processing & Handling	82.81	83.08	67.69	51.56	45.45	55.56	29.03	40.63
Metal Working	89.16	77.11	90.48	61.45	53.01	80.72	45.12	43.37
Motors, Engines & Parts	91.55	88.73	67.61	52.11	61.97	53.52	25.35	35.21
Optics	88.24	82.35	66.67	56.86	54.90	60.78	29.41	31.37
Transportation	75.61	79.07	59.52	46.51	56.10	51.22	25.00	30.77
Miscellaneous Mechanical	78.95	88.16	67.11	60.53	55.26	60.53	31.58	36.84
Agriculture, Husbandry, Food	90.74	80.39	86.79	86.79	68.63	75.00	31.37	35.29
Apparel & Textile	82.76	88.33	76.27	70.69	58.18	55.17	21.43	28.57
Earth Working & Wells	84.62	84.62	66.67	75.00	66.67	53.85	0.00	23.08
Furniture, House Fixtures	76.32	80.56	75.00	61.11	55.56	61.11	16.67	27.78
Heating	71.11	80.00	73.33	60.00	48.89	73.91	28.89	35.56
Pipes & Joints	76.32	81.08	70.27	64.10	39.47	70.27	21.62	34.21
Receptacles	76.32	81.58	63.16	53.85	60.53	60.53	34.21	28.95
Miscellaneous-Others	81.88	86.23	72.06	66.67	61.94	65.93	27.07	39.85
US-JP weighted	85.36	84.65	72.05	61.11	56.24	61.97	26.97	36.73
JP weighted	84.81	84.44	71.52	60.23	55.77	61.49	26.69	36.16

Note: When the answer of Question 6-3 is 1 (The invention are used by applicants)

US (5/5)

Question 6-10 Summary

B7 (4 or 5) %	A First mover's advantage in the development of complementary technologies and the patent portfolio	B First mover's advantage in commercialization	C Complementary manufacturing capability	D Complementary sales/service capability	E Patents	F Secrecy	G Product/Process complexity	H Collaboration with the firms with complementary technologies
NBER All	66.5	73.33	41.59	43.81	63.46	41.53	41.69	16.37
11 Agriculture, Food, Textiles	XX	XX	XX	XX	XX	XX	XX	XX
12 Coating	65	70	47.37	47.37	70	33.33	11.11	29.41
13 Gas	100	XX	XX	75	50	XX	75	XX
14 Organic Compounds	55.56	47.37	53.33	33.33	44.44	62.5	56.25	0
15 Resins	57.89	60.53	62.16	52.78	76.32	55.56	55.26	16.67
19 Miscellaneous-chemical	69.31	71	41.76	44.94	67.01	41.11	41.05	19.32
21 Communications	67.27	78.18	44.9	47.06	65.45	35.19	38	11.76
22 Computer Hardware	43.75	50	46.67	46.67	43.75	33.33	50	6.67
77 Computer Software	68	62.5	24.32	47.5	51.11	29.27	41.46	9.76
23 Computer Peripherals	55.56	77.78	33.33	0	44.44	44.44	50	14.29
24 Information Storage	81.25	94.12	33.33	26.67	37.5	42.86	46.67	18.75
31 Drugs	86.96	95.45	31.82	23.81	65.22	42.86	36.36	19.05
32 Surgery & Medical Instruments	84.44	81.25	42.86	50	79.17	52.27	40	24.39
33 Biotechnology	64.71	82.35	20	26.67	47.06	41.18	43.75	33.33
39 Miscellaneous-Drug&Med	46.15	38.46	30.77	36.36	75	25	25	8.33
41 Electrical Devices	65.38	80.77	38.46	44	70.37	33.33	25.93	3.7
42 Electrical Lighting	81.82	84.62	70	45.45	71.43	50	54.55	27.27
43 Measuring & Testing	56.67	71.88	34.48	31.03	57.58	38.71	51.61	24.14
44 Nuclears & X-rays	61.54	85.71	50	38.46	60	33.33	33.33	20
45 Power Systems	57.14	73.17	36.84	32.43	62.79	41.46	45.95	12.5
46 Semiconductor Devices	85.71	92.86	69.23	50	76.92	50	66.67	46.15
49 Miscellaneous-Elec.	57.89	63.16	47.06	41.18	64.71	27.78	33.33	27.78
51 Materials Processing & Handling	82.14	75.86	62.07	53.85	58.06	46.43	48.28	16.67
52 Metal Working	38.89	73.68	47.37	47.37	68.42	63.16	47.37	11.11
53 Motors, Engines & Parts	56	64	29.17	52.17	64	29.17	24	8.7
54 Optics	60	73.33	6.67	20	64.71	28.57	31.25	18.75
55 Transportation	75	68.75	57.14	50	75	57.14	57.14	14.29
59 Miscellaneous Mechanical	56.52	78.26	39.13	59.09	52.17	50	40.91	0
61 Agriculture, Husbandry, Food	90	100	50	60	72.73	40	50	22.22
63 Apparel & Textile	71.43	71.43	57.14	42.86	57.14	57.14	57.14	0
64 Earth Working & Wells	XX	XX	XX	XX	XX	XX	XX	XX
65 Furniture, House Fixtures	33.33	50	16.67	50	33.33	50	16.67	0
66 Heating	75	75	25	50	100	50	75	50
67 Pipes & Joints	60	80	50	60	80	40	40	0
68 Receptacles	62.5	88.89	44.44	33.33	66.67	44.44	33.33	11.11
69 Miscellaneous-Others	70.37	76.92	36	46.94	59.62	37.78	40.38	15.69
US-JP weighted	**67.38**	**74.01**	**42.07**	**43.43**	**63.25**	**41.76**	**42.34**	**16.73**