RIETI Policy Seminar

Standards and Intellectual Property: Strategies Japan should adopt in light of current global trends

Handout

Anne LAYNE-FARRAR

Vice President, Charles River Associates Adjunct Professor Northwestern University

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Standards and IP – From the Viewpoint of Economics

Anne Layne-Farrar

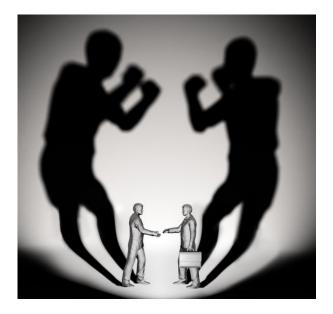
Vice President CRA & Adjunct Professor Northwestern University

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Negotiation vs. Litigation

Arm's Length Negotiations and Litigation FRAND Determinations are very different exercises



- Bilateral negotiations
 - Typically involve NDAs
 - Licensees ask for these to protect business information revealed in negotiation and in the concluded license
 - Royalties center on the value the patents bring to the implementer and its customers, not the patent's essentiality to a standard
 - Valuation relies on a relatively small number of patents representative of the full portfolio



Common Arm's Length License Terms

- In high tech sectors, the following terms and conditions are the norm
 - Full portfolio rights, combining SEPs and non-SEPs for efficiency reasons
 - A single rate or volume-tiered rate table for global rights
 - Many SDOs mandate worldwide rights (e.g., ISO, IEEE)
 - A blended rate accounts for differential patent strength across jurisdictions
 - Occasional carve out rates for developing nations
 - Discounts
 - Volume and lump sum payments





Litigation Is Different than Negotiation



- While many litigation FRAND determinations rely on a "hypothetical negotiation scenario", this "but-for" world does not mirror real world negotiations
 - Litigation ignores most non-pecuniary terms of a license, setting only rates or damages based on rates



Legal Limitations

- SEP Portfolios tend to be global
 - But patents are national rights
 - Efficient and fair court treatment of FRAND requires careful balance of jurisdictional issues
- SEP Portfolios are often very large
 - But patent infringement litigation typically involves in-depth review for just a few patents
 - Fitting FRAND cases into legal frameworks requires new approaches



Apportionment is Still the Same



- FRAND, like patent damages, must reflect the value conveyed to the licensee (and its customers), but NOT more
 - This means apportionment is an important element of FRAND determination



But, Standards are Joint Ventures

- Apportionment does NOT mean SEP holders receive no value due to standardization
 - Adoption of a standard will reflect the joint value contributed by all active participants
 - So created value must be shared among all participants
- Unwired Planet v Huawei (UK)
 - "it is not necessary to deprive the patentee of its fair share of those two sources of value [inclusion in the standard and contribution to the product] in order to eliminate hold up and fulfil the purpose of FRAND."





Patent Counting in FRAND Determination and Apportionment

- In litigation FRAND determination, patent counting is often a necessary evil
 - Well accepted that the number of patents licensed, by single SEP holder or in the aggregate, is a very poor proxy for patent value
 - However, accurate patent valuation in relation to other SEPs requires time consuming and costly analysis (~\$10k per patent) => hard for portfolios
 - Thus, patent counting is often used in court decisions for apportionment
- Unwired Planet v Huawei (UK):
 - "[I]f another SEP holder charges 5% but has contributed twice as many SEPs to the standard than the SEP holder of interest, then absent any reliable value weighting, this fact would suggest a rate of 2.5% for the current case."
 - "Indeed when one thinks about it some sort of patent counting is the only practical approach at least for a portfolio of any size. Trying to evaluate the importance of individual inventions becomes disproportionate very quickly."



Patent Counting Cautions

- Patent counts cannot be used to estimate a "royalty stack"
 - Using a single rate to extrapolate the aggregate royalty burden leads to both false positives and false negatives
 - Specific evidence is required
 - Ericsson v. D-Link (US) and CISCO v. CSIRO (US)): "Certainly something more than a general argument that these phenomena are possibilities is necessary."
- Do best to account for different values across patents





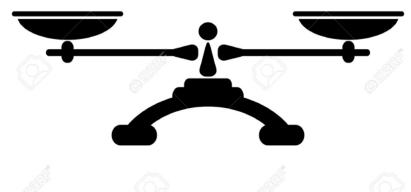
Balance Is Important

Courts Around the World Confirm FRAND Obligations for Both Parties

 ECJ in Huawei v. ZTE; UK Chancellery Court in Unwired Planet v Huawei; Delhi High Court in Telefonaktiebolaget LM Ericsson v. Mercury Elecs., CS(OS) No. 442/2013; Beijing Intellectual Property Court in IWNCOMM v. Sony

> SEP holders must disclose patents, explain how implementers infringe, and must make a FRAND license offer

Implementers must "diligently respond" to the SEP holder's offer in writing with a good faith counter-offer and must avoid delay tactics



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FRAND Determination Methods

- Using comparable licenses as FRAND benchmarks is the most common method because they can reflect fair market value:
 - CSIRO v Cisco (US) : "[C]omparable license valuations [...] may be the most effective method of estimating the asserted patent's value."
 - Unwired Planet v Huawei (UK) : "The relevance of comparables is that they are evidence of what real parties in real negotiations have agreed upon."
- Most comparables will be global
 - Microsoft v Motorola (US), St. Lawrence vs. Vodafone (Germany), and Unwired Planet v Huawei (UK) upheld the use of worldwide portfolio licensing because it is efficient and avoids evasion of "nondiscriminatory" prong of FRAND





FRAND Comparable Cautions

- Pay attention to non-pecuniary terms
 - License scope, both geographical and product
 - Patent coverage and capture periods
 - License duration



- Lump sum payments are difficult to convert to effective running royalty rates
 - Cannot use ex post actual sales will bias royalty (up or down)
 - Need contemporaneous sales forecasts
 - Back out likely discounts for upfront payment
- Market conditions matter as well
 - May indicate either higher or lower royalties



Patent Pools as Comparables

- Patent pool licenses can be informative, but tend to fall on lower end of the FRAND spectrum
 - Microsoft v Motorola (US): "patent pools tend to produce lower rates than those that could be achieved through bilateral negotiation"
 - In Re Innovatio (US): "pool rates may be considerably depressed"
- Must assess commercial success first
 - Too few SEP contributors can signal sub-FRAND rates
 - Too few licensees can signal supra-FRAND rates









Incremental Value Method

- Heavily discussed by policymakers, but not yet seen in court decisions
 - Attempts to measure the additional value a SEP contributes
- Problems:
 - Microsoft v Motorola (US): The incremental value approach lacks "realworld applicability."
 - Measured at what point in time? How to deal with technology trade-offs?

• But it can be a reference point

 Microsoft v Motorola (US): "[C]omparison of the patented technology to the alternatives that the SSO could have written into the standard is a consideration in determining a RAND royalty."



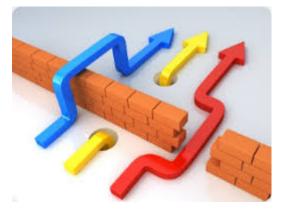


"Bottom Up" Method

Similar to Incremental Value

- Determine the costs of implementing reasonable alternatives that could have been adopted into the standard
- The method is only relevant when viable alternatives exist and sufficient information about them is available
 - Existence not enough, must show alternative is equally valuable
- Cautions
 - Must pay close attention to why alternatives not chosen
 - Trade-offs differ across alternatives
 Microsoft v. Motorola (US):

"[P]erformance of the standard is multidimensional, different people value different aspects."





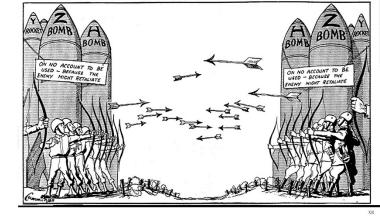
"Top Down" Method

- Theoretically easy to understand:
 - Starts with "reasonable" total royalty burden for a standard compliant product
 - Divides that amount among relevant SEP holders based on share of contributions
 - NOTE: The number of SEPs can be misleading due to complementarity; it is generally the number of SEP holders that matters given that each SEP holder licenses on a portfolio basis
- Cautions here too
 - Without detailed information on the value all IP contributes to a standard, any aggregate royalty figure will be an arbitrary guess
 - If product prices or profit margins are used as starting point
 - Can be a disconnect between the physical location vs value of technology
 - Must account for infringement depressing prices and profits



Litigation Deterrence

Important policy goal for FRAND is reducing litigation



- Must consider incentives to negotiate in good faith
 - If courts require implementers pay no more than ex ante FRAND rate, why would implementers ever take a FRAND license?
 - Licensee hold out is a low cost option:
 - Zero royalties owed if the SEP holder does not sue; or
 - Even if lose litigation, get deferred and lower net present value payment
- *St. Lawrence v. Vodafone* (Germany):
 - A SEP holder has a "legitimate interest to settle all acts of use" by a single license agreement rather than on a patent-by-patent basis around the world
 - Patentees would "incur high costs," including transaction and monitoring costs, if forced to license its portfolio "in diverse agreements (for a plurality of patents and a plurality of countries)."



Concluding Thoughts

- Consensus is emerging around the world slowly as cases reach decisions
 - Global portfolio licenses are most consistent with FRAND
 - Both licensee and patentee have good faith obligations under FRAND
- Courts and regulators need to keep incentives on both sides of the table in mind
 - Want to encourage good faith negotiations and limit litigation
 - Balance between the sides is crucial



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