

Methodologies for Calculating FRAND Royalty Rates and Damages

October 22, 2014

Koren W. Wong-Ervin
Counsel for Intellectual Property
and International Antitrust
U.S. Federal Trade Commission
Office of International Affairs

The views in this presentation do not necessarily represent the views of the Federal Trade Commission or any individual Commissioner

FRAND Royalty Decisions

- Judge Posner in *Apple v. Motorola*
- Judge Robart in *Microsoft v. Motorola*
- Judge Holderman in *In re Innovatio IP Ventures*
- Judge Davis in
 - *Ericsson v. D-Link*
 - *Wi-Lan v. Alcatel-Lucent*
 - *CSIRO v. Cisco*
- Judge Whyte in *Realtek v. LSI*
- Judge Koh in *GPNE v. Apple*
- Magistrate Judge Grewal in *Golden Bridge Techn. v. Apple*

Common Principles

These rulings exhibit a number of differences, but some common principles have emerged:

- FRAND royalties must provide the patent holder with reasonable compensation;
- FRAND royalties should limit the patent holder to a reasonable royalty on the economic value of the patented technology itself, apart from the value associated with the patent's incorporation into an industry standard; and
- In determining a FRAND royalty rate, courts should consider comparable licenses.

Disputed and Open Issues

The primary disputed and open issues include:

- Whether concerns about patent hold-up and royalty stacking must be taken into consideration, or whether implementers must provide proof of *actual* hold-up or royalty stacking;
- Whether courts should apply the incremental value rule;
- What constitutes a “comparable license”; and
- Whether the appropriate royalty base is limited to the “smallest salable patent practicing unit,” and what that actually means.

Hold-Up and Royalty Stacking

- Patent hold-up = the potential problem that arises when a SEP holder has made a commitment to license on FRAND terms but then seeks to use standard-lock-in to obtain an unjustifiably higher royalty than would have been possible before the patent(s) were included in the standard.
- Royalty stacking theory = patent holders will set their royalty rates without regard to the other strictly complementary patent holders, potentially leading to a cumulative royalty payment for the good's producer that is so high that it cripples the product market, or at a minimum severely restricts output.

Conflicting Approaches to Hold-Up and Royalty Stacking

- Judge Robart in *Microsoft* and Judge Holderman in *Innovatio*
 - Addressed the risk of royalty stacking by considering the aggregate royalties that would apply if other SEP holders made similar royalty demands of the implementer, without requiring the implementers to show what royalties they were currently paying.
- In contrast, Judge Davis in *Ericsson v. D-Link*
 - Refused to reduce the FRAND royalty rate determined by the jury based on *theoretical* concerns about hold-up and royalty stacking, noting that Defendants’ experts “never even attempted to determine the actual amount of royalties Defendants currently pay for the patents.”

Incremental Value Approach

- The FTC has recommended that:
 - “Courts should recognize that, when it can be determined, the incremental value of the patented technology over the next-best alternative establishes the maximum amount that a willing licensee would pay in a hypothetical negotiation. Courts should not award reasonable royalty damages higher than this amount.” —2011 IP Report at 189.

Incremental Value Approach

- In *Microsoft v. Motorola*, Judge Robart:
 - Rejected in part an incremental value approach on the grounds that it lacks “real-world applicability” given that “explicit multilateral *ex ante* negotiations cannot be conducted under the auspices of many SSOs,” and is impractical with respect to implementation by courts.
 - Concluded that the incremental value approach is “realized, in part” through Factor 9 of *Georgia-Pacific*, which considers the utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
- In *Innovatio*, Judge Holderman:
 - Rejected the manufacturers’ “bottom up” approach for calculating a FRAND royalty, which shared a number of commonalities with the incremental value rule.

Comparable Licenses— Patent Pools

In determining a FRAND royalty rate or damages, courts have generally considered royalties received by the patentee for the licensing of the patent-in-suit in other circumstances comparable to FRAND–licensing circumstances.

- In *Microsoft*, Judge Robart added patent pool rates to the list.
 - Although the court agreed “as a general matter that patent pools tend to produce lower rates than those that could be achieved through bilateral negotiation,” it nevertheless found that rates offered by certain patent pools “served as good indicators of a FRAND royalty rate” for Motorola’s SEPs.
- In contrast, in *Innovatio*, Judge Holderman found that the pool was not an appropriate comparable license, distinguishing Judge Robart’s decision on the grounds that he determined that Motorola’s 802.11 patents were not important to the 802.11 standard, whereas Innovatio’s patent portfolio is of “moderate to moderate-high importance to the 802.11 standard.”

Comparable Licenses— Patent Pools

In *Innovatio*, Judge Holderman identified numerous additional problems with using the pool rate as a comparable, including that the pool:

- Had not been successful (5 licensors, 35 patents, and 11 licensees);
- Did not include high value patents;
- Did not distinguish between patents in the pool on the basis of technical merit, but rather gave the exact same royalty to all patents in the pool; and
- Did not consider the importance of the patents to the implementer's products.

Comparable Licenses

- In *Innovatio*, Judge Holderman rejected proposed comparable licenses on various grounds, including that the rates:
 - Were “adopted under the duress of litigation”;
 - Were determined only as part of a package deal involving a larger patent;
 - Were based on large patent portfolios, such that the rate would not be appropriate for an agreement including a significantly smaller number of patents;
 - Were based on different standards; or
 - Failed to provide any indication of how valuable the patents were compared to other patents in the portfolio.
- In *Golden Bridge v. Apple Inc.*, Magistrate Judge Grewal excluded expert testimony on the grounds that:
 - “[U]nder established Federal Circuit law, an expert may not rely on broad licenses that cover technologies far beyond the patents-in-suit without accounting for the differences in his calculations.”

Appropriate Base and the SSPPU

In *LaserDynamic v. Quanta*, the Federal Circuit held that:

“Where small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product. Thus, it is generally required that royalties be based not on the entire product, but instead on the ‘smallest salable patent-practicing unit’” (SSPPU).

The SSPPU

- In *GPNE v. Apple*, Judge Koh found that the baseband processor chip was the proper SSPPU.
 - Rejected GPNE’s arguments that (1) the SSPPU must be an item that is sold by Apple, and (2) because the patent claims are directed to the entire device and not just the chip, the baseband processor chips cannot practice the entire patent claim.
- In contrast, in *CSIRO v. Cisco*, Judge Davis:
 - Rejected Cisco’s damages model basing royalties on chip prices, reasoning that, although it was largely undisputed that the inventive aspect of CSIRO’s patent is carried out in the PHY layer of the wireless chip, “the chip itself is not the invention.”
 - “Basing a royalty solely on chip price is like valuing a copyrighted book based only on the costs of the binding, paper, and ink needed to actually produce the physical product. While such a calculation captures the cost of the physical product, it provides no indication of its actual value.”

Sources

- Anne Layne-Farrar and Koren W. Wong-Ervin, “Methodologies for Calculating FRAND Damages,” Law360 (Oct. 8-10, 2014)
 - Part 1, *available at* <http://www.law360.com/competition/articles/584906/methodologies-for-calculating-frand-damages-part-1>.
 - Part 2, *available at* <http://www.law360.com/competition/articles/584909/methodologies-for-calculating-frand-damages-part-2>.
 - Part 3, *available at* <http://www.law360.com/competition/articles/584917/methodologies-for-calculating-frand-damages-part-3>.

Sources cont.

- *Apple v. Motorola*, 869 F.Supp.2d 901 (N.D. Ill. 2012).
- *Microsoft v. Motorola*, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).
- *In re Innovatio IP Ventures*, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013).
- *Ericsson v. D-Link*, 2013 WL 4046225 (E.D. Tex. Aug. 6, 2013).
- *Wi-Lan v. Alcatel-Lucent* (E.D. Tex. June 28, 2013), available at <http://www.essentialpatentblog.com/wp-content/uploads/sites/234/2013/07/13.06.28-Wi-LAN-v.-Alcatel-Lucent-Daubert-Order.pdf>.
- *CSIRO v. Cisco*, 2014 WL 3805817 (E.D. Tex. July 23, 2014).
- *GPNE v. Apple*, 2014 WL 1494247 (N.D.Cal. Apr. 16, 2014).
- *Realtek v. LSI* (N.D.Cal. June 16, 2014), available at <http://assets.law360news.com/0548000/548585/Order%202.pdf>.
- *Golden Bridge v. Apple*, 2014 WL 2194501 (N.D.Cal. May 18, 2014).