Chapter – 8

SEP Licensing and Competition

SEP LICENSISING AND COMPETITION

8.0. Introduction

SEP licenses, eventually, will be reduced into a written agreement. In addition to determination and agreement on reasonable royalty and appropriateness of injunctions, there are "other terms", which may be included in a FRAND licensing agreement and these "other terms" may put one of the parties (to the agreement) in a superior or elevated position while putting the other party in an humble (or a submissive position). Such "other terms" provide a non-level playing field for the parties to negotiate fairly and reasonably and having such "other terms" may be anti-competitive and provide the superior party an unfair advantage. The SEP holder may impose a condition on the SEP implementer to agree not be challenge the validity and/or essentiality of a SEP. Another example may be that the SEP holder (having SEPs in standard 1) may impose a condition on the SEP implementer to agree to grant a license to SEPs of other standards (i.e., SEPs outside standard 1) held by the SEP implementer. In another example, the SEP holder may impose a condition that the SEP implementer has to agree to get a license to a portfolio of patents, which may include SEPs and non-SEPs as well and the condition would not allow the SEP implementer to choose from the patent portfolio. This chapter discusses some of these conditions imposed by the SEP holder in detail.

8.1. Reciprocity, Grantbacks, Bundling SEPs and Non-SEPs, and Cross-licenses

Entering a cross-license that covers the parties' entire portfolios (whether for SEPs to a particular standard, all patents relevant to a particular type of device, or to a company's entire portfolio) can be an attractive choice for companies because it can reduce costs and administrative burdens. Rather than having to license patents piecemeal, a portfolio-wide cross-license can provide "patent peace" between companies for a number of years. Further, the broader the license, the greater the "freedom to operate" without fear of entanglement in the licensor's patents. Cross-licensing can also have the benefit of reducing the cash expenditures needed for a license as payment is made through patent

rights. The practice of cross-licensing can be abused and used to avoid FRAND commitments.

The practice of cross-licensing can also be abused and used to avoid FRAND commitments. SEP holders may demand that as a condition of licensing their SEPs, the licensee also agree to license its non-SEPs. Doing so may allow the SEP holder to obtain greater royalties or obscure the non-FRAND royalties it is charging for its SEPs by clouding the picture with the inclusion of non-SEPs. Further, allowing a licensor to demand broad cross-licenses that encompass the licensees non-SEPs or SEPs that do not relate to the standard that the SEP holder is licensing, devalues the licensee's patents and intellectual capital.

The solution to this problem is to ensure that licensees maintain the right to license only those patents they wish to license. A potential licensee should have the right to take a license to less than the full portfolio—which it may wish to do for a number of proper reasons. A provider of cellular phones or Components likely will have no need for a license for a SEP holder's network infrastructure SEPs. Likewise, a company that operates only in a particular country or geographic region may have no interest in paying for worldwide rights that it does not need. Or, a prospective licensee may be skeptical regarding the essentiality or validity of certain patents in a given portfolio, but convinced of the essentiality and validity of certain others. As these examples illustrate, prospective licensees may be well-justified in wanting to license only a subset of a given portfolio, and the law—and procedures for adjudicating FRAND disputes—should protect their right to do so. Therefore, it is important that licensees maintain the right to license only those patents they wish to license. Prospective licensees may be well-justified in wanting to license only a subset of a given portfolio, and the law—and procedures for adjudicating FRAND disputes—should protect their right to do so. This principle has been recognised by courts in UK and US. Further, the National Development and Reforms Commission (NDRC) of China has provided guidance regarding licensing of SEPs in Qualcomm's decision.

This principle has been recognized in litigation between Vringo and ZTE[1] before the English (UK) High Court, which observed that *"although it is a truism that disputes of this kind often end up with a global license, **one needs to be careful turning that truism into something like a right to compel a defendant to enter into such a license**" (please see point 56 of the judgement at footnote 192).*

As the U.S. Department of Justice has observed[2] (portions reproduced and emphasis added):

Reciprocity – Grantbacks

The Update permits a licensor to require a potential licensee to grant back a license to its own patents essential to the same standard, so that the licensor is not precluded from implementing the standard. This provision mitigates the concern that a firm taking advantage of the commitments others made to the standard can then engage in hold up of the same standard by asserting essential claims it has refused to license on RAND terms.

*The Update prohibits **licensors from demanding licenses to applicants' patents that are not essential to the same standard as part of their licensing terms and from forcing an applicant to take a license to patent claims that are not essential to the referenced standard**. **These prohibitions will reduce the possibility that a holder of a RAND-encumbered patent could leverage that patent to force a cross-license of, among other things, a potential licensee's differentiating patents and limit the potential for anticompetitive tying. A compulsory cross-license can, in some cases, decrease incentives to innovate**.*

Significantly, the Update leaves parties free to negotiate these types of

[1] Viringo infrastructure, Inc. vs. ZTE (UK) Limited, HC 12D03895 and HC 12B04711, available at http://www.vringoip.com/documents/FG/vringo/ip/35145_CMC_Judgement.pdf, last visited on April 14, 2016.

[2] Renata B. Hesse, acting assistant attorney general, US Dept. of Justice, Antitrust division in Response to institute of electrical and electronics engineers, incorporated, available at https://www.justice.gov/atr/response-institute-electrical-and-electronics-engineers-incorporated , last visited on April 14, 2016.

terms voluntarily. It does not prohibit them from voluntarily negotiating licenses for entire patent portfolios, but adds clarity to the scope of permissible demands under the Policy[3]. ***By permitting voluntary cross licenses and package licensing, the Update seems likely to preserve the efficiencies of these arrangements, while addressing concerns about coercive cross-licensing and tying, and does not appear likely to result in competitive harm.allowing a compulsory cross-license that includes patents beyond SEPs for a particular standard "can, in some cases, decrease incentives to innovate."***

Similarly, China's National Development and Reforms Commission (NDRC) provided a guidance [4] regarding licensing of SEPs in Qualcomm decision (portions reproduced below here and emphasis added):

Qualcomm charged excessive royalties. First, Qualcomm engaged in portfolio licensing that included expired patents in the portfolio. In doing so, Qualcomm did not provide licensees with lists of patents covered by the licenses, and did not demonstrate that newly added patents were of the same value as patents that were expiring. Even if that were true, the NDRC said that it was unreasonable not to provide licensees with a list of patents when Qualcomm offered long-term or even non-fixed term licenses. Second, Qualcomm required some licensees to provide royalty-free grantback licenses for relevant wireless communications patents that are not SEPs. The NDRC determined that this practice is not reasonable, and that Qualcomm should take into account the value of grantback licenses when negotiating licensing terms. Third, Qualcomm required licensees to pay royalties based on the price of the finished product,

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[3] Letter from Thomas O. Barnett, Assistant Att'y Gen., Antitrust Div., U.S. Dep't of Justice, to William F. Dolan & Geoffrey Oliver, Partners, Jones Day, at 10-11 (Oct. 21, 2008), available at **http://www.justice.gov/atr/public/busreview/238429.htm** (concluding that a "narrowly tailored" clause requiring patent pool licensees to grant back to the pool the non-exclusive right to license patents essential to the standard covered by the pool was not likely to harm competition), last visited on April 14, 2016.

[4] China's NDRC Provides Guidance Regarding Licensing of Standard-Essential Patents in *Qualcomm* Decision, available at http://blogs.orrick.com/antitrust/2015/04/24/chinas-ndrc-provides-guidance-regarding-licensing-of-standard-essential-patents-in-qualcomm-decision-2/, last visited on April 14, 2016 (original mandarin version available at: http://www.ndrc.gov.cn/gzdt/201503/t20150302_666209.html).

which the NDRC concluded misappropriated value based on unpatented components. Finally, Qualcomm included ***in its license portfolio non-SEPs that some licensees did not want to license. The NDRC also noted that the practice of requiring royalty-free grantbacks could discourage licensees from technical innovation and have the effect of restricting or eliminating market competition****.*

Qualcomm ***unreasonably bundled the sale of non-SEPs with SEPs as a package at a constant licensing rate. The NDRC rejected Qualcomm's three reasons for bundling non-SEPs with SEPs****: (1) it offered to license SEPs separately but licensees prefer the package of non-SEPs and SEPs; (2) it is difficult to differentiate non-SEPs from SEPs so licensees are at risk if they license only SEPs; and (3) bundling non-SEPs with SEPs does not restrict competition and licensees are free to license a competing technology.* ***The NDRC did not accept these explanations, finding that some licensees were not offered a license to SEPs only; non-SEPs and SEPs can be differentiated on a patent list; and bundling non-SEPs with SEPs restricted competition in the market for non-SEPs, hampered innovation, and harmed consumers****.*

The court also cautioned against the contention that SEP disputes resulting in global portfolio licenses does not mean that Vringo has the right to impose such a license on ZTE because Vringo's "rights are and are nothing more than patent rights":

In some ways I believe the position adopted by Vringo in this dispute confuses the true nature of its legal rights. Its rights are and are nothing more than patent rights. Although it is a truism that disputes of this kind often end up with a global licence, one needs to be careful turning that truism into something like a right to compel a defendant to enter into such a licence. The truism does not alter the character of Vringo's underlying rights.

Similarly, a U.S. court has reached the same conclusion in a case where a SEP licensor claimed that adjudication of a handful of its patents would not resolve what it framed as a portfolio-wide dispute between the parties. The court rejected the contention that the potential licensee was under any obligation to license the SEP holder's entire portfolio, even if that outcome were likely as a matter of "business realities":

Even if the "actual controversy" were framed as Ericsson sees it—namely that the dispute is only about "the terms (particularly the royalty rate) on which Apple will take a license to Ericsson's portfolio of standard-essential patents"—Ericsson states a partial presentation of a business dispute, not the carving up of a legal claim. And Ericsson notably uses the word "will," not "must." This is because . . . there exists no legal basis upon which Apple may be compelled to take a license for Ericsson's patents on a portfolio-wide basis, as much as Ericsson may be able to point to business realities that make such an outcome unlikely, imprudent or uneconomical on Apple's part.

SEP licensors may claim that an unwillingness to agree to a portfolio-wide license constitutes so-called "reverse hold-up," but that claim is unfounded. There is no basis in law or policy to accord SEPs special treatment not given to other patents. As one court has observed, "the court is not persuaded that reverse hold-up is a significant concern in general, as it is not unique to standard-essential patents." Also, declared SEPs fare extremely poorly in litigation. There is, thus, no reason that they should be a shortcut that is unavailable to ordinary patents simply because the owner claims that they are essential.

8.2. Essentiality and Validity of SEPs

While the goal of more transparency of which declared SEPs are actually essential sounds self-evidently beneficial, caution is needed in pursuing this goal. As noted above, the greatest threat to the benefits of standardization is abusive licensing through the refusal to honor the commitment to license on FRAND terms. Ensuring adherence to FRAND commitments and the underlying principles behind such commitments is the way to safeguard standard setting

and prevent abusive licensing. SSOs typically rely on self-determinations of essentiality or ***potential*** essentiality by members, meaning that there is no initial check on essentiality and thus limited value from declassification of a small number of SEPs that are found not to be essential or are expired. As an example, the ETSI IPR Policy requires that "a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR ***which might be ESSENTIAL if that proposal is adopted***." By requiring disclosure before a standard is set, ETSI necessarily encourages over declaration because not every "technical proposal" that "might be ESSENTIAL if that proposal is adopted" will actually be adopted. Accordingly, ETSI makes clear that it has made no evaluation of the patents listed in its online database of declared patents: "ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential. "Further, some organizations that require disclosure do not even supply a database to access those disclosures, further limiting the usefulness of this information for decision making.

Reviews of essentiality undertaken by an SSO itself may provide a better view of the scope of patent coverage for a standard, but would impose significant costs on SSOs, and there are already third-party groups that do such work. Likewise, reviews of validity or enforceability would be difficult to perform in a meaningful manner and would be of marginal value without access to information often only available through litigation and without incurring significant costs. The European Commission's *Patents and Standards* report estimates a range of costs for additional analyses of declared-essential patents. For an "extensive essentiality and/or infringement test in the context of a court case," the report estimates a cost of "Approx. > 20,000 Euro per patent." The low end of this estimate is extremely conservative, with the cost of conducting the evaluation necessary for litigation—including retaining attorneys, technical experts, and

often engaging a search firm to locate prior art—likely to be multiples of €20,000 per patent. It is not practical for most SSOs to undertake such reviews. But short of such a thorough analysis, the benefits of additional checks by an SSO on declared SEPs are unclear.

Further, even if increased disclosure and verification obligations were imposed on standard-setting participants and SSOs, it still would not ensure that potential implementers have all of the information they require to assess the licensing landscape for the standard. To the extent that SEP holders are able to engage in abusive licensing, simply knowing more about the scope of their portfolios is not enough. Rather, implementers of standards, from large enterprises like Intel to medium or small enterprises, would benefit most from consistent application of FRAND principles. If royalties for SEPs are set with reference to the price (or profit margin) of the component (such as a cellular processing chip) that implements the standard, it provides a degree of cost certainty that cannot be achieved through disclosure alone (and just as importantly, ensures that compensation is closely tied to the actual inventive contribution of the patent).

Moreover, each patent system provides its own process for ensuring that only valid patents that are actually infringed will generate reward, and—where parties are unable to resolve their differences through private negotiations—this process usually is based on litigation in courts. It is not until a patent is tested in litigation that problems with validity (which may be affected by the particular claims of infringement—*e.g.*, the claims of a patent are stretched by the patent holder in an attempt to prove infringement to a degree that, if accepted, would render the patent invalid) or enforceability (*e.g.*, seeking non-FRAND royalties after failing to disclose a patent) surface.

When parties negotiate patent licenses, there are invariably disputes about the value, coverage, validity, and sometimes enforceability of the patents

at issue. That happens whether or not patents have been declared essential to a standard. Because of these disputes, not all parties do reach agreement and the patent system anticipates that some disputes may need to be adjudicated in court where both parties have an opportunity to defend their views on the patent(s)—in particular, patent litigation processes have built in safeguards against invalid or non-infringed patents. The same is true with SEPs. The best test for determining the essentiality of a claimed-essential patent is through litigation or arbitration on the merits. Until patents are litigated or arbitrated, they typically are not subjected to the rigorous examination required to determine whether or not the patent is actually essential to the standard and, more importantly, whether a given product that supports the standard actually practices the patent.

Outcomes from the assertion of declared SEPs in litigation demonstrate that even SEP holders are often not able to accurately gauge the strength of their patents. In litigation with Wi-LAN, Inc., Intel prevailed on summary judgment of non-infringement with respect to ten patents asserted against 802.16 (WiMAX)-compliant products. Likewise, in an English case, Nokia challenged the claimed essentiality of twenty-nine patents that InterDigital had declared essential to 3GPP cellular standards. At trial, InterDigital only sought to support the essentiality of four of the twenty-nine patents. But of those four, the court determined only one of them to be essential to the standard. That translates to a rate of essentiality for those patents of only 3.4%. Similarly, a study of 380 declared SEPs that were asserted in the United States (either in federal district courts or at the U.S. International Trade Commission (ITC)) from January 1, 2005 to June 30, 2014, found that of SEPs asserted in cases that went to judgment, they resulted in findings of infringement of valid patents only 16% of the time. Non-SEPs had a 34% success rate in similar circumstances. A smaller study of SEP assertions in fifteen cases in the U.S., Germany, Korea, and Japan found that only 12% of SEPs (7 out of 58) resulted in a finding of infringement of a valid patent. In the remaining 88% of cases, the declared SEPs were found not

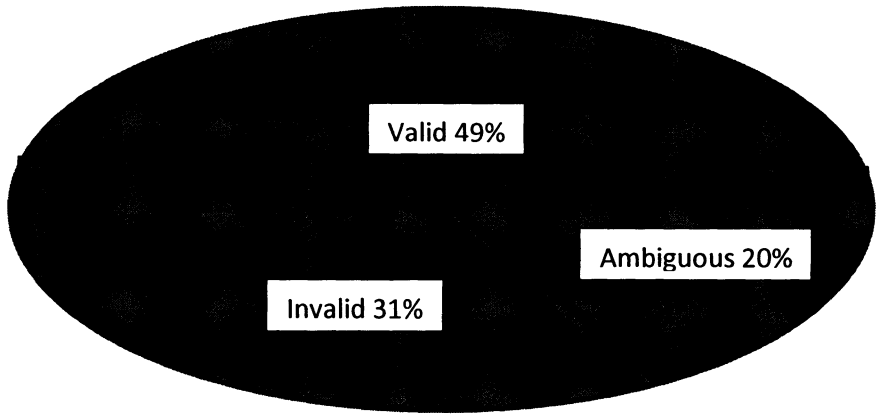
infringed, found invalid, dismissed on other grounds, or voluntarily withdrawn by the patent holder.

In all of these litigations, the SEP holder presumably had available to it a significant amount of information by which it could judge whether or not the patent was likely to be found essential, and thus more likely to be found infringed. But the low rate of success underscores that a searching examination is often not conducted until the adversarial process of litigation. Even short of litigation, industry studies in which claims in a patent family that has been declared as essential are compared against the text of the standard have concluded levels of essentiality of only 27% to 54% of declared SEPs. These data points demonstrate that a declaration of essentiality is not an effective predictor of whether a patent is actually essential, and is even a weaker predictor of whether the patent would be found to be infringed by a specific product supporting the standard. Further, it underscores that, the patent merits should be addressed in SEP litigation and essentiality and infringement simply cannot be assumed. Given the complexity of determining essentiality and the rigor that is required to determine essentiality of a patent to a standard, the courts are best suited to carry out this exercise. The courts would typically consider conducting deep analysis of claim charts and such other complex and sophisticated means.

Validity

Jurisdictions worldwide have struggled with striking the appropriate balance between encouraging true inventiveness and discouraging exclusion through weak patents in the initial assessment of whether a patent should issue, and many patents that are issued ultimately do not withstand scrutiny. One study of patent litigation outcomes in France, Germany, Spain, the Netherlands, and the United Kingdom between 2000 and 2010 concluded that in cases where at least one invalidity defence was raised, the defendant succeeded 31% of the time in obtaining a finding of invalidity (*i.e.*, all claims challenged as invalid were

held invalid).[5] In another 20% of such cases, the defendant succeeded to some extent in challenging invalidity (*i.e.*, one or more claims were held invalid but one or more claims were also held valid)—those cases are referred to as "ambiguous" by the study. Finally, in 49% of the cases studied, an invalidity challenge was entirely unsuccessful and the claims were held valid.



European Litigation Validity Outcomes.

Likewise, a study of patent litigation outcomes in the United States between 2009 and 2013 found that accused infringers were successful in challenging the validity of a patent 42% of the time.[6] (Even higher findings of invalidity have been found in the new U.S. *inter partes* review proceedings discussed below.)

While it is not realistic to expect that the patent application process can match the scrutiny to which patents are exposed through litigation, these figures suggest that there is room for improvement in the patent review process. A full accounting of the steps that could be taken to improve patent quality is beyond the scope of this response. In general, Intel supports steps that will lead to increased patent quality, including improved training and access to information for patent examiners. The challenge, of course, is balancing increased rigor in

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[5] Stuart J.H. Graham & Nicolas Van Zeebroeck, *Comparing Patent Litigation Across Europe: A First Look*, 17 STAN. TECH. L. REV. 655, 694-695 (2014), *available at* http://journals.law.stanford.edu/sites/default/files/stanford-technology-law-review/online/patentlitacrosseurope.pdf.

[6] John R. Allison, Mark A. Lemley & David L. Schwartz, *Understanding the Realities of Modern Patent Litigation*, 92 TEXAS L. REV. 1769, 1786-87 (2014).

the review process with the costs and time required to conduct such reviews.

In the United Sates, one approach for addressing patent validity after issuance, *inter partes* review proceedings, was instituted in 2012 and appears to be off to a promising start. An *inter partes* review allows third parties to challenge patent validity based solely on published prior art. The *inter partes* review is an adversarial proceeding and is conducted by the judges of the Patent Trials and Appeals Board (PTAB), rather than patent examiners. The proceeding allows for limited discovery (*e.g.*, deposition of the opponent's witnesses who submit written testimony) and includes oral hearings. The intended time frame for conducting the proceeding is 12-18 months. The benefits of *inter partes* review are that it allows more timely and less expensive decisions on validity than engaging in full scale patent litigation. Accordingly, instituting an *inter partes* review has been an attractive option for many parties facing demands from patent holders with patents of dubious validity.

A study of the early results of *inter partes* review proceedings suggests that they are being used to good effect to challenge invalid patents and avoid litigation expense. The study found that the PTAB has instituted review of at least one claim that is challenged in a patent 84% of the time and instituted review for all challenged claims 74% of the time.[7] Of reviews instituted and that have reached a final determination, the PTAB found invalid all claims 78% of the time.[8] The study also found that the *inter partes* review proceeding has been a particular benefit to patent defendants to stay the litigation in favour of the PTAB review process. In 80% of the *inter partes* reviews, the patent at issue was also pending in litigation between the same parties, and a request to stay the litigation in favour of the PTAB review was granted (at least in part) 82% of the time.[9]

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[7] Brian J. Love & Shawn Ambwani, *Inter Partes Review: An Early Look at the Numbers*, 81 U. CHICAGO L. REV. DIALOGUE 93, 99-100 (2014).

[8] *Id.* at 201.

[9] *Id.* at 201.

Also, court rulings in different parts of the world have emphasized the need for providing licensees a right to question the essentiality and validity of a SEP. In Viringo v ZTE, Justice Briss (of UK high court of justice, chancery division patents court) observed that "ZTE would not agree to pay a global FRAND rate for Vringo's portfolio without a showing that its products were actually practicing the claims of Vringo's patents at issue, and that *those patents are in fact valid*. The court refused to compel ZTE to agree to pay royalties for patents it was *not using and/or are invalid*, and, moreover, ruled that ZTE's position did not make it a so-called "unwilling licensee":

In this case ZTE is not willing to be ***a licensee of invalid and/or not infringed patents****. So ZTE is not prepared to be bound by the outcome of the determination that Vringo proposes. This raises the question of what is a willing licensee. The suggestion from Vringo was that this stance showed that ZTE was not really a willing licensee at all (see point 42 of the judgement at footnote 195).*

I reject the idea that the stance being taken by ZTE in this jurisdiction can fairly be said to mean that ZTE is not a willing licensee. ZTE has ***said it is willing to take a FRAND license on any patent found valid and infringed****. In my judgment, a defendant accused of patent infringement by a patentee who claims to have a standards essential patent is and must be entitled to say,* ***"I wish to know if this patent is valid or infringed or not before I take a license"****. Such a stance cannot fairly be described as unwillingness (see point 43 of the judgement at footnote 195). So here the defendant is entitled, in my judgment, to adopt a contingent position. In a contingent case like this, there is no basis on* ***which the court could compel the defendants to accept a license arrived at by approaching the matter as if the licensee was willing to take a license without having a judicial determination of validity and/or infringement****.*

China's NDRC in its guidance objected to Qualcomm's requirement that the licensee should not "challenge" the essentiality, validity, and infringement of a

SEPs in the baseband chips. NDRC opined that given the nature of the issues in Qualcomm's license agreements, it was improper for Qualcomm to require its licensees to waive their right to challenge the agreements. NDRC further directed Qualcomm to (1) provide a patent list for which it is expecting royalties and such patent list should not include expired patents; (2) not to expect grantbacks without reasonable consideration paid to the licensees; (3) apply royalty rates to sale price of the relevant components embodying the SEPs rather than the net sales price of the end product itself; (4) not to bundle non-SEPs and SEPs without a reasonable cause and it should allow the licensees to select the non-SEPs that it would deem fit to get a license. Further, NDRC imposed a fine of US$975 million (equal to 8% of Qualcomm's total revenue earned in China).

These statistics on patent validity provide insights into poor success rates of SEPs in litigation (studies concluding that SEPs lead to findings of infringement of a valid SEP in only 12% or 16% of cases) and it underscores that potential licensees must be allowed to challenge assertions by SEP holders and evaluation of SEP licensing demands should not start from a premise that the SEP holder is necessarily entitled to any royalties at all.

Further, even under Indian Patent Act 1970 there is no presumption of validity of a patent granted. This provision is enshrined in Section 13 (4)[10] of Indian Patent Act 1970.

8.3. Patent Pools

One of the central problem facing standardization is abusive licensing practices that undermine FRAND commitments made for SEPs and Patent pools

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[10] Section 13 (4): The examination and investigations required under section 12 and this section shall not be deemed in any way to warrant the validity of any patent, and no liability shall be incurred by the Central Government or any officer thereof by reason of, or in connection with, any such examination or investigation or any report or other proceedings consequent thereon.

are by no means a complete solution (as argued by some) to that problem, but pools that adhere to appropriate relevant competition law safeguards, include a meaningful share of SEPs for the relevant standard, and properly set FRAND rates may provide benefits. These potential benefits include demonstrating that appropriate, transparent FRAND licensing terms can benefit both licensors and licensees and stimulate the proliferation of the standardized technology. Further, the robust screening process for essential patents used by many pools can provide some insight into the total number of patents within an industry that are actually essential to the standard and for which royalty payments may be appropriate.

Conversely, where patent pools do not abide by regulatory requirements, include only a smaller portion of relevant SEPs, or do not follow appropriate FRAND principles, they undermine standard setting and become another tool for abusive licensing. In the end, the value of patent pools cannot be easily generalized and will depend on the specific patent pool at issue and the nature of the standard for which it was formed. Intel therefore recommends that Indian policy makers and regulators focus on ensuring that appropriate FRAND principles are adhered to in the first instance, rather than pool formation, as a way to ensure pro-competitive standard setting and FRAND licensing.

This focus on substance over form is particularly significant given the recent emergence of alleged "pooling" arrangements that include only a small number of licensors. Such joint licensing arrangements are not properly viewed as pools in that they do not include a meaningful number of patent owners, may develop long after market adoption of the standardized technology, and often do not operate according to FRAND licensing principles. Participants may decide against participation in a Patent pool because of some of the challenges of pools outlined below or because the contemplated pool was ultimately not formed.

Patent pools are more likely to form when the use of the technology will

benefit from widespread adoption (*i.e.*, there are significant network effects) and when there is substantial potential for downstream product sales. Further, pools may serve as licensing clearing houses for a large number of patents for a standard, which may be particularly desirable for suppliers of complex devices incorporating a variety of standards, a large number of patents, or different types of intellectual property that will need to be licensed. These factors explain why IT, telecommunications, and consumer electronics are the main industries in which patent pools have formed. But, where commercial success depends on a manufacturer's ability to exclude others from making the same product (in the pharmaceuticals sector), or where certain patent holders insist on unreasonable licensing approaches for the pool, pools have not tended to form.

In the context of standardization, patent pools sometimes provide a useful benchmark for the market, courts, and regulators about FRAND royalties for a given standard. In particular, a patent pool's royalties may be a useful benchmark for analysis of FRAND royalties where they are set by a number of licensors who have an interest in royalties that both provide an adequate return and are also attractive to licensees, thereby promoting widespread adoption of the technology. Further, so long as a patent pool's rates are determined through arm's length negotiations free of the coercive threat of litigation (including injunction threats) that may taint bilateral patent license agreements, the rates are also more likely to be fair and reasonable. The value of a particular pool as a benchmark for FRAND royalties will turn on the specific facts of whether the pool's formation and the determination of its rates was consistent with FRAND principles. In addition, as competition authorities generally mandate screening for essentiality of patents before they are added to the pool, a patent pool that implements proper screening can provide a better measure of the value being licensed than in a bilateral agreement where a portfolio of patents is merely self-declared as essential without any independent verification. Thus, when a patent pool charges a rate for a certain number of patents in the pool, it usually represents a rate for a set of patents that have been deemed (by at least one

neutral reviewer) to be essential. Further, this screening process could reduce the overall royalties payable compared to the royalties that would potentially be demanded by all the individual SEP holders licensing bilaterally. But, the screening processes to determine the essentiality of a patent to a standard vary in substance and quality, and the benefits of screening are meaningful only if the process is robust.

The litigation between Microsoft and Motorola in the U.S. District Court in the Western District of Washington illustrates how FRAND rates can be set by looking to the rates charged by a patent pool as a benchmark. In setting a FRAND rate for two groups of Motorola patents that were respectively claimed to be essential to the ITU's H.264 video coding technology standard and the IEEE's 802.11 Wi-Fi standard, the court considered patent pools for those SEPs. In particular, the court drew heavily on the MPEG LA pool's H.264 royalty rate as an "indicator of a RAND royalty rate" because of that pool's success in promoting the "widespread adoption" of that standard. The success of the MPEG LA pool in the market was central to the court's analysis: "The pool includes approximately 275 U.S. SEPs and over 2400 SEPs worldwide from over 26 licensors including leading technology firms such as Apple, Cisco, Ericsson, Fujitsu, LG, Microsoft, and Sony."

There are limitations to using a patent pool's royalties as a benchmark - *first*, it must be clear that the pool's rate reflects appropriate FRAND principles, *second*, for a pool to be used as a robust benchmark for FRAND rates, it must include a sufficiently high number of licensors and SEPs. The *Microsoft* court was more cautious when considering Via's IEEE 802.11 pool, which included far less patent owners and had "not been very successful in obtaining licensors and licensees. "Nonetheless, given its "focus exclusively on the standard" and aim to "foster widespread adoption of the 802.11 Standard consistent with the intent behind the RAND commitment," the court found that the Via pool "has certain characteristics that are indicative of a RAND royalty rate.", *third*, pools generally

set royalties for patents within the pool only as a proportionate share of the total patents in the pool, which does not give consideration to the varying technical merits of the patents within the pool, *fourth*, participation in pools must be voluntary. Among other problems, if participation is not voluntary, the pool's royalty rate would become more removed from the normal free market conditions and the rate less reliable as a benchmark for FRAND, *fifth*, some SEP holders simply refuse to participate in patent pools for fear of limitations intended to ensure adherence to appropriate FRAND principles. This often reduces the utility of the pool and discourages other SEP holders or implementers from participating in the pool. The potential benefits of patent pools lie in the reduction of transaction costs. As the European Commission's *Technology Transfer Guidelines* note: "The creation of a pool allows for one-stop licensing of the technologies covered by the pool. This is particularly important in sectors where intellectual property rights are prevalent and licenses need to be obtained from a significant number of licensors in order to operate on the market."

Appropriate safeguards are necessary to derive benefits from the patent pool. Competition authorities have long recognized that only patent pools fulfilling certain conditions are pro-competitive and enhance consumer welfare. As the European Commission's *Technology Transfer Guidelines* warn, pools present the risk of reducing competition between parties and "may also, in particular when they support an industry standard or establish a *de facto* industry standard, result in a reduction of innovation by foreclosing alternative technologies." Both the EU and the US antitrust authorities have established criteria for pro-competitive pools. The most recent European Commission *Technology Transfer Guidelines* establish a safe harbor against a finding of anticompetitive conduct provided that certain conditions are met. These conditions are a useful checklist for what constitutes a pro-competitive pool. Two conditions (of these conditions) are important for pools of SEPs – (a) the European Commission mandates that "the pooled technologies are licensed out to all potential licensees on FRAND terms." This requirement is essential to

ensure that a pool is not used as a means for concerted action to extract non-FRAND royalties. Pool licensing terms—like terms for other SEP licenses—should be set with careful adherence to proper FRAND principles. Moreover, where circumstances change, pools may need to adjust their licensing terms. For instance, per unit licensing rates that apply when unit pricing is high but unit volumes are low may later become less reasonable as the market develops, and unit pricing drops as volumes increase. Likewise, pool licensing terms should take into account patent expiration, such as where "early" or fundamental SEPs expire and a pool is left with less significant, incremental patents; and (b) the European Commission properly requires that "the parties contributing technology to the pool and the licensees are free to challenge the validity and the essentiality of the pooled technologies." This provision recognizes the patent litigation system as a safeguard that provides standards implementers with an important right—even after entering a license—to challenge a SEP and to ensure that royalties are not being paid for invalid or non-essential patents. Where such challenges are successful, pools may need to adjust their licensing terms accordingly.

8.4. A New FRAND Frame-Work

In view of the above findings, a new FRAND frame-work is proposed here:

(a) SEP holder should license his SEPs to ***all*** license seekers without being selective (this translates into Fairness principle of the FRAND). A SEP holder may approach any implementer and offer a license to his SEPs by clearly identifying the patents, which is intended to be a subject matter of the license. Alternatively, any seeker may approach the SEP holder and make a written request expressing his interest to obtain a license to SEPs.

(b) the negotiation between the SEP holder and the licensee is to potentially agree upon an acceptable reasonable royalty, which should be

based on the value of the patented invention prior to such an invention becoming a part of the standard. Patent evaluation tools and technology should be used to objectively determine the reasonable royalty based on apportionment principles or smallest saleable patent practicing unit (SSPPU). Such negotiation should be fair and free and injunctions should not be available to the SEP holder at this stage of the negotiation;

(c) if the parties to the negotiation fail to agree to a reasonable royalty, then the aggrieved party may approach the court or a mutually agreed arbitration or mediation forum only to resolve or determine the reasonable royalties and SEP holder should not seek injunctions at this stage.

(d) Injunctions should be available if and only if the licensee is not willing to pay the reasonable royalties as either mutually agreed or as determined by a binding neutral third party.

(e) Any clause that challenges the right associated with a patent should be allowed and conditions should not be imposed to restrict such actions.

(f) Licensee, through his actions, should establish that he is willing to obtain license and pay the reasonable royalties and should not bring frivolous suits or complaints to merely delay the royalty payment process.

(g) SEP holders will seek reasonable royalties, with no discrimination i.e., at the same rate from different but similarly placed licensees.

8.5. Conclusion

More than 50 % of the patents were found either invalid or ambiguous and more 80% of the patents were found either not essential or not infringed not essential. It is therefore evident that the imposing such clauses will lead to anti-competitive outcomes and since the SEP holder is in a dominant position, he/she

will be unjustifiably benefited if such clauses are allowed. It may be concluded that the license agreements should not be subject to conditions leading to anti-competitive practices. A licensing agreement having a reciprocity clause to impose on licensees a condition to grant a license to SEPs of some other standard, grant backs without reasonable compensation, bundling of non-SEPs with SEPs to extract higher royalty will lead to misuse of SEPs. The misuse of SEPs may adversely affect the position of the licensees, unnecessarily burden the consumers, and harm the innovation. Likewise, the licensees, consumers and innovation will be heavily impacted if the license agreements impose a condition that validity, essentiality, and infringement should not be challenged. Thus, to have a balanced system in which the rights of the licensors and licensees are on a level-playing field it is imperative that the above discussed anti-competitive values should be avoided in the licensing agreements and the enforcement agencies and adjudication bodies (such as courts) may consider to focus on such clauses in the agreement while hearing SEP/FRAND cases. The licensing model should be based on the new FRAND model provided here in this chapter.