INTELLECTUAL PROPERTY AND STANDARD SETTING

-- Note by Maurits Dolmans --

17-18 December 2014

This paper by Maurits Dolmans (Cleary Glottlieb, London) was submitted as background material for Item VII of the 122nd meeting of the OECD Competition Committee on 17-18 December 2014.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

More documents related to this discussion can be found at www.oecd.org/daf/competition/intellectual-property-standard-setting.htm

This document is available in pdf format only.

JT03368490

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.
As IT progresses, more and more products are compound items, made of many components manufactured by a series of different producers, and interoperating with other complex products. Computer and mobile devices, for instance, are multipart combinations of software, processors, modems, and electrical components, that are in turn part of networks that include other complex products (servers, base stations, routers, switches, servers and related network products). For these components and systems to interoperate, standards are indispensable. Standards may evolve based on a single company’s technology (such as Microsoft PC-to-server interoperability), be set by a few firms acting in ad hoc industry groups (such as the Blu-ray Disk Association), in industry-wide open standards organizations (such as the Digital Video Broadcasting consortium, DVB), or by official standard setting organizations (“SSOs”, such as the European Telecommunications Standards Institute, ETSI).

1 Application of EU competition law to standard setting

Article 101 TFEU. Standard setting by its nature involves an agreement (or a decision of an association of undertakings) to select a particular technical specification or technology for common adoption, instead of letting market forces decide which technology prevails. It is, in other words, an agreement to restrict competition between rival technologies, which in turn may limit technological development and innovation based on the technologies that were not chosen. It has aspects of a collective boycott.

Article 101(1) TFEU in principle prohibits agreements between competitors to limit inter-technology competition, including within the SSO context, and Article 101(2) TFEU declares such agreements null and void. Whether a particular standardization agreement is caught by Article 101 TFEU depends on the facts. It may be exempted by the Joint R&D Block Exemption Regulation if the conditions of the regulation are met and the parties’ market share is below the threshold. Even above the threshold, it may be found not to restrict competition appreciably, if there is effective competition between different rival standards that vie for industry-wide adoption based on technological merits:
“In the absence of market power, a standardisation agreement is not capable of producing restrictive effects on competition. Therefore, restrictive effects are most unlikely in a situation where there is effective competition between a number of voluntary standards.”

Even in the presence of market power, for instance, where a standard is used industry-wide (and network effects come into play) and the standardized technology is used in all or the great majority of products, competition law recognizes that standardization can generate efficiencies and promote innovation and competitiveness by (a) avoiding wasteful parallel investment in incompatible technologies, (b) speeding up the selection of compatible technologies that would emerge only with substantial delay (or not at all) if parties rely on market forces to identify the best compatible technologies, (c) creating a common platform for add-on innovation, and (d) avoiding market capture associated with a single-firm proprietary standard. Thus, standards agreements are shielded from Article 101 TFEU even if they are industry-wide, provided that four conditions are met:

“Where [1] participation in standard-setting is unrestricted and [2] the procedure for adopting the standard in question is transparent, standardisation agreements which [3] contain no obligation to comply with the standard and [4] provide access to the standard on fair, reasonable and non-discriminatory terms will normally not restrict competition within the meaning of Article 101(1).”

Moreover, to the extent a standard setting agreement or framework is covered by Article 101 TFEU, an exemption is available only if the four conditions of Article 101(3) TFEU are fulfilled, which require, amongst other things, that the agreement allows consumers a fair share of the benefits resulting from the standard, and does not afford anyone the possibility to eliminate competition in a substantial part of the standard-compliant products or technologies.

Even if access to a standard is open, in the sense that the specifications are public, barriers to competition may arise if implementation of the standard requires a license to intellectual property, and there is no alternative. A patent is a Standard Essential Patent or “SEP” if:

“it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of,

---

3 Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2010, para.277
4 Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C 11, 14.1.2010, para. 280. See also Case No COMP/M.6381 - Google/ Motorola Mobility, para. 57: “in order for a standard-setting agreement to fall outside Article 101(1) TFEU, the SSOs IPR policy should ensure that each entity which contributes technology to a standard must limit their freedom to exercise their "ownership" of a piece of that standard by committing to license the relevant technology to anyone wishing to use the standard on FRAND terms.” These principles are not new. As early as in 1992, the European Commission published a Communication on Intellectual Property Rights (“IPRs”) and Standardization, requiring open access to European standards on irrevocable FRAND terms. The 2001 Guidelines for Horizontal Agreements requires that “the necessary information to apply the standard must be available to those wishing to enter the market,” and that “access to the standard must be possible for third parties on fair, reasonable and non-discriminatory terms.”
repair, use or operate Equipment or Methods which comply with a Standard without infringing that IPR. For the avoidance of doubt in exceptional cases where a Standard can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered Essential.”

In case of SEPs reading on a standard, a risk of patent traps and “hold-up” may exist. Once an industry has agreed to a standard, and producers have invested in implementation and network effects arise, industry may be “locked in”. Opportunistic SEP owners could exploit this to threaten manufacturers with an injunction, to capture the market, or extract a fee that reflects the costs of switching to a new technology or (if switching is impossible) exit costs, which normally far exceeds the innovative value of the patent.

To address this concern, and to comply with the obligation under Article 101 TFEU, SSOs generally require their members to declare whether they agree to license their SEPs on FRAND terms. The ETSI IPR Rules, for instance, provide:

4.1 Subject to Clause 4.2 below, each MEMBER shall use its reasonable endeavours, in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, to inform ETSI of ESSENTIAL IPRs in a timely fashion. In particular, 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.

---


6  Hold-up is not a practice limited to patentees, but may also be used by opportunistic patent users, who may use patents without compensation and delay proceedings as long as they can. In that not infrequent case, it is referred to as a “hold-out”. This should be distinguished from “reverse hold-up”, where a patent user exploits its patents to hold up a potential licensor to extract favourable terms.

7  See, for instance, Case AT.39985 - Motorola - Enforcement of GPRS Standard Essential Patents, Dec of April 29, 2014, para. 231-236; Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 310 (3d Cir. 2007), III.A.2.b.: “Although a patent confers a lawful monopoly over the claimed invention [...] its value is limited when alternative technologies exist [...] That value becomes significantly enhanced, however, after the patent is incorporated in a standard [...] Firms may become locked in to a standard requiring the use of a competitor’s patented technology. The patent holder’s IPRs, if unconstrained, may permit it to demand supra-competitive royalties.” See also C Madero Villarejo and N Banasevic, “Standards and Market Power”, Global Competition Policy, May 2008, 3.

8  “Patent hold-up can overcompensate patentees, raise prices to consumers who lose the benefits of competition among technologies, and deter innovation by manufacturers facing the risk of hold-up. ... the incremental value of the patented invention over the next-best alternative establishes the maximum amount that a willing licensee would pay in a hypothetical negotiation... To prevent damage awards based on switching costs, courts should set the hypothetical negotiation at an early stage of product development, when the infringer is making design decisions and before it has sunk costs into using the patented technology.” U.S. FTC Report, “The Evolving IP Marketplace: Aligning Patent Notice and Remedies With Competition”, March 2011. “The market power gained as a result of standardization allows SEP owners to demand a bounty from locked-in implementers in excess of the value of their patented technology—as much as 100 times the adjudicated value of the technology.” Daryl Lim, Standard Essential Patents, Trolls and the Smartphone Wars: Triangulating the End Game, 119 Penn St. L. Rev. (2014). See also Case COMP/37.792 Microsoft, Commission Decision of 24 March 2004, para. 1008 (confirmed in Case T-167/08 Microsoft v Commission): “terms imposed by Microsoft [must] be reasonable and non-discriminatory... in particular: ... (ii) ... remuneration should not reflect the “strategic value” stemming from Microsoft’s market power...” See also Case COMP/37.792 Microsoft, Commission Decision of 27 February 2008.

9  An alternative is an agreement to avoid patents altogether as the open source community does, or requiring royalty-free licensing as W3C has chosen to do.
4.2 The obligations pursuant to Clause 4.1 above do however not imply any obligation on MEMBERS to conduct IPR searches.

6.1 When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent:

- MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;
- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.

In the event a MEMBER assigns or transfers ownership of an ESSENTIAL IPR that it disclosed to ETSI, the MEMBER shall exercise reasonable efforts to notify the assignee or transferee of any undertaking it has made to ETSI pursuant to Clause 6 with regard to that ESSENTIAL IPR. [...] If an SEP is not available on FRAND terms, the work on the standard must be suspended, and the specifications must be changed so as to use an alternative technology.  

**Article 102 TFEU.** In practice, it is difficult to enforce the requirement of FRAND access based on Article 101 TFEU. The main sanction for violation of the prohibition of restrictive agreements (apart from the imposition of fines and possible damages) is nullity of the standard. This would, however, in theory eliminate the potential efficiencies and pro-competitive benefits of the standard, and harm not just the FRAND infringer but also other industry participants and consumers. In practice, also, annulment of a standard may be ineffective since market forces and network effects may lead to the continued *de facto* use of the standard even if the agreement on which it is based has disappeared.

To avoid these problems, the Commission has relied on Article 102 TFEU, which prohibits firms from abusing dominant positions, rather than on Article 101.

**Dominance.** To determine whether an owner of an SEP is dominant, it is necessary to define the market in which the SEP competes, by reference to alternatives and substitution of demand or supply.  

---

10 ETSI IPR Policy, Clauses 6.3 and 8.

for instance); and (2) whether the patent is essential for the standard. If so, in the absence of substitutable standards and substitutable technologies, each SEP can by definition be defined as a relevant technology market unto itself.\(^\text{12}\) The SEP owner is a monopolist in that market (and may in fact be a monopolist in a series of neighbouring markets for complementary SEPs reading on a standard). The Commission has on this basis taken the position that each SEP owner is therefore by definition dominant.\(^\text{13}\)

Advocate-General Wathelet in *Huawei v Commission* has taken the position that:

> “the fact that an undertaking owns an SEP does not necessarily mean that it holds a dominant position within the meaning of Article 102 TFEU … [I]t is for the national court to determine, on a case-by-case basis, whether that is indeed the situation. Given that a finding that an undertaking has a dominant position imposes on the undertaking concerned a special responsibility not to allow its conduct to impair genuine competition, that finding cannot be based on hypotheses. If the fact that anyone who uses a standard set by a standardisation body must necessarily make use of the teaching of an SEP, thus requiring a licence from the owner of that patent, could give rise to a rebuttable presumption that the owner of that patent holds a dominant position, it must, in my view, be possible to rebut that presumption with specific, detailed evidence.”\(^\text{14}\)

When rebutting this presumption, it should be kept in mind that dominance is defined as:

> “a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers.”\(^\text{15}\)

There are various factors that may constrain an SEP owner’s ability to behave independently from SEP users (or raise prices above the competitive level), including in particular countervailing power. In a situation of “mutually assured destruction” (or “reverse hold-up”), for instance, a user of an SEP may own patents (SEPs or non-SEPs) that the SEP owner needs in turn. In such a case of patent balance, the SEP owner’s ability to behave “independently” and raise royalties may be constrained by the user’s ability to retaliate by either seeking an injunction against the SEP owner or raising royalties for its patents in turn.\(^\text{16}\) Countervailing power is absent in the case of SEPs

---


\(^\text{13}\) Case AT.39985 - Motorola - Enforcement of GPRS Standard Essential Patents, Decision of April 29, 2014, para. 269-270. See also Case No COMP/M.6381- Google/Motorola Mobility, paragraph 61.


\(^\text{15}\) Case AT.39985 - Motorola - Enforcement of GPRS Standard Essential Patents, Decision of April 29, 2014, para. 239.

\(^\text{16}\) This argument was rejected in Case AT.39985 - Motorola - Enforcement of GPRS Standard Essential Patents, Decision of April 29, 2014, para. 239-247. The Commission took the view that in such a case the appropriate approach is to find that “both a seller and … a buyer .. hold a dominant position”, which is, however, incompatible with the notion of “independence” inherent in the concept of “dominance.” The Commission argued that “even if one or more potential licensees implementing the GPRS standard were to enjoy bargaining power with regard to their own SEPs or non-SEPs, this
asserted by patent assertion entities (“PAEs”), who have nothing to lose from a counter-suit, since they do not engage in production. They will therefore normally be found to be dominant in the upstream markets for the SEPs they own.

**Abuse.** A refusal to license by a dominant company is an abuse only in “exceptional circumstances”, and in the absence of an objective justification. According to the recent decision in *Motorola*, exceptional circumstances arise, for instance, when a SEP owner has committed to license SEPs on FRAND terms and conditions, in a standard-setting context (i.e., when other participants relied legitimately on the SEP owner’s promise):

“As a general principle, a patent owner has the right both to refuse to license a patent and to obtain remuneration should it decide to license that patent.

In addition, where a competitor infringes a patent, the patent owner may suffer direct losses due to increased competition by the infringer and the resulting lower revenues from the sales of its patented products. In such a scenario, the seeking and enforcement of injunctions by a patent holder will typically be a legitimate exercise of an IP right in order to obtain the removal of infringing products from the market and protect the patent owner from further losses.

The situation is, however, different in the standard-setting context where the owner of the patent has voluntarily committed to license its essential patent on FRAND terms and conditions, and where the benefits of the standard-setting process in terms of increased compatibility, interoperability and competition, lower production and lower sales costs may be endangered by the seeking and enforcement of an injunction on the basis of a SEP by a dominant undertaking.”

The question of whether a SEP owner who has given a FRAND promise in a standard-setting context has a duty to license under Article 102 TFEU is currently before the Court of Justice in *Huawei v ZTE*. The Advocate-General has opined that it is not enough to take account only of the standard setting context and the SEP owner’s FRAND promise:

would ensure that only a particular or limited segment of customers is shielded from the market power of Motorola. ... Motorola’s interpretation of countervailing buyer power would lead to the existence of a dominant position being dependent on the bargaining position of each potential licensee relating to any patent Motorola may need access to.” This ignores the point made in the Commission’s Notice on Market Definition (above, para. 43) that “A distinct group of customers for the relevant product may constitute a narrower, distinct market when such ha group could be subject to price discrimination. This will usually be the case when two conditions are met: (a) it is possible to identify clearly which group an individual customer belongs to at the moment of selling the relevant products to him, and (b) trade among customers or arbitrage by third parties should not be feasible.”

Patent trading and PAEs are not necessarily a negative phenomenon. The existence of a market for patents may foster innovation, and allow firms or groups like the Open Innovation Network to acquire patents for defensive purposes. The key is to intervene to prevent “opportunistic behavior on the part of patent owners that threatens to impose (1) static deadweight losses that are not justified by likely increases in dynamic efficiency, or (2) dynamic efficiency losses due to reduction in the incentive to participate in standard setting organizations or to engage in follow-up innovation.” See T. Cotter, *Patent Holdup, Patent Remedies, and Antitrust Responses*, Journal of Corporations Law, July 1, 2009, available at http://www.allbusiness.com/legal/civil-procedure-injunctions/12938773-1.html.

75. It is clear that such a finding of abuse of a dominant position in the context of standardisation and the commitment to license an SEP on FRAND terms can be made only after the conduct not only of the SEP-holder but also of the infringer has been examined.” (Emphasis added)

In sum, both Article 101 and 102 TFEU impose a duty to license downstream competitors to SEPs encumbered by a FRAND promise, if the user is willing to take a license and able to comply with the FRAND terms. The question is whether a duty to license translates in a ban on seeking and enforcing injunctions. There is now initial (but, pending the outcome in 
Huawei v ZTE, not yet final) guidance from EU courts and competition authorities on the question whether injunctions are compatible with FRAND obligations.

2 No SEP injunctions against “willing licensees”

There appears to be an emerging consensus that a FRAND licensing obligation limits injunctive relief on SEPs against a “willing licensee” absent objective justification.19

- Courts in Europe have restricted availability of injunctions on essential patents covered by FRAND promises against willing licensees, including for instance the Dutch courts in 
Samsung v Apple,20 and the UK High Court in 
Nokia v IPCom.21

In the latter case, Roth J found that SEP owner IPCom (a PAE which had acquired SEPs from Robert Bosch GmbH) was bound by FRAND undertakings, and stated:

“I have to say in those circumstances I am very uncertain, to put it mildly, to see why a permanent injunction should be granted in this case at all or indeed any injunction. [...] You are willing to give a license. Nokia wants to get a license. You cannot agree on the terms. They will be determined. There will then be a license. In those circumstances [...] to get an injunction seems to me quite extraordinary.”22

- The European Commission found that Samsung and Motorola violated Article 102 TFEU by “seeking and enforcing ... an injunction on the basis of the ... SEP, for which it has given an irrevocable commitment to license on fair, reasonable and non-discriminatory (FRAND) terms and conditions to the European

---

19 This position is not new. See, for instance, the arguments made in Qualcomm’s Answer to Ericsson’s Corrected Third Amended Compliant and Amended Counterclaim, in Ericsson v. Qualcomm, No 2:96-CV183 (E.D.Texas, case settled in 1999) filed May 3, 1999, p. 20 and Declaration of Irwin M. Jacobs in support of Qualcomm’s Motion for Summary Judgment, at para. 9; see also Nokia’s Opening Pre-Trial Brief (redacted public version July 15, 2008), pp. 49-61 and Nokia’s Answering Pre-trial Brief (redacted public version filed July 18, 2008), pp. 16-19, in Case C.A. No 2330 VCS, Nokia v. Qualcomm, (Court of Chancery in the State of Delaware, case settled in July 2008).

20 Samsung Electronics C v. Apple, District Court The Hague, The Netherlands, 14 March 2012, Case numbers 400367 / HA ZA 11-2212, 400376 / HA ZA 11-2213 and 400385 / HA ZA 11-2215 (SEP holder shall not seek an injunction at the same time as it negotiates license terms to the extent this unfairly enhances its bargaining position). For a judgment in opposite direction, see, for example, District Court of The Hague in Koninklijke Philips Electronics N.V. v. SK Kassetten GmbH & Co. KG of 17 March 2010, Joint Cases No. 316533/HA ZA 08-2522 and 316535/HA ZA 08-2524, paragraph 6.25 (rejecting the approach taken by the German "Orange Book" case-law).


Although such conduct can be objectively justified if the SEP owner shows that the SEP infringer is “unwilling to enter into a licence agreement on FRAND terms and conditions.”

The Commitments Decision in Samsung develops this principle by clarifying when a licensee is “unwilling”, and what procedure can be followed. The commitments allow Samsung to seek an injunction on SEPs only against a licensee that (a) breaches the license agreement, (b) is unlikely to be able to pay, (c) refuses per-standard reciprocity in cross-license negotiations, or (d) is engaged in SEP-based litigation against the SEP holder (“defensive suspension”). A prospective licensee cannot be deemed “unwilling”, however, on the ground that it challenges validity, infringement, or essentiality of the SEP in question. The procedure that can be followed to avoid a finding of abuse is as follows:

---


24 Case AT.39985 - Motorola - Enforcement of GPRS Standard Essential Patents, Decision of April 29, 2014, para 3 and 427(c) (“A SEP holder which has given a commitment to license on FRAND terms and conditions is entitled to take reasonable steps to protect its interests by seeking and enforcing an injunction against a potential licensee in, for example, the following scenarios: ... the potential licensee is unwilling to enter into a licence agreement on FRAND terms and conditions, with the result that the SEP holder will not be appropriately remunerated for the use of its SEPs. The corollary of a patent holder committing, in the standardisation context, to license its SEPs on FRAND terms and conditions is that a potential licensee should not be unwilling to enter into a licensing agreement on FRAND terms and conditions for the SEPs in question.”)

In *Huawei v ZTE*, the Advocate-General appears to impose a rigid sequence:

84. First, unless it is established that the alleged infringer is fully aware of the infringement, the SEP-holder must alert it to that fact in writing, giving reasons, and specifying the SEP concerned and the way in which it has been infringed. ...

85. Secondly, the SEP-holder must, in any event, present to the alleged infringer a written offer for a licence on FRAND terms that contains all the terms normally included in a licence in the sector in question, in particular the precise amount if the royalty and the way in which that amount is calculated ...

87. Once those steps have been taken, what are the obligations of the alleged infringer?

88. It must respond in a diligent and serious manner to the offer made by the SEP-holder. If it does not accept that offer, it must promptly submit to the SEP-holder, in writing, a reasonable counter-offer relating to the clauses with which it disagrees. As the referring court has pointed out, the bringing of an action for a prohibitory injunction would not constitute an abuse of a dominant position if the infringer’s conduct were purely tactical and/or dilatory and/or not serious. [...] 

93. Furthermore, if negotiations are not commenced or are unsuccessful, the conduct of the alleged infringer cannot be regarded as dilatory or as not serious if it asks for those terms to be fixed either by a court or an arbitration tribunal.

Although the final word will be with the Court of Justice, this does probably not mean that this rigid sequence is the only permissible process, or that a user is absolved from the duty to negotiate in good faith and to offer license terms until after the SEP owner has made an offer. What matters is probably not the sequence of offers and negotiations, but whether, at the time a request for injunction comes to decision, the user and the SEP owner have offered to take, resp. grant a license on FRAND terms.

Similarly, the Opinion says that a patent owner must make a specific offer, at a defined royalty rate. An offer that submits the terms to adjudication or arbitration should suffice. There is no reason why such an offer should be abusive

In the whole, the situation can be summarized as follows (assuming dominance, and assessing the situation at the time an injunction request is considered by the court):
<table>
<thead>
<tr>
<th>User has offered to take a license on terms to be set by a court or arbitral tribunal</th>
<th><strong>SEP Owner has offered a license on terms to be set by a court or arbitral tribunal</strong></th>
<th><strong>SEP Owner has offered a license on specific terms, but has not agreed to be bound by terms set by a court or arbitral tribunal</strong></th>
<th><strong>SEP Owner has not offered terms and refuses to submit to court/arbitration (and has no objective justification to refuse to grant a license)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User has offered to take a license on terms to be set by a court or arbitral tribunal</strong></td>
<td>Injunction denied / irrelevant. License terms are set by court or arbitral tribunal (and injunction request, if not withdrawn, is denied or suspended)</td>
<td>Injunction suspended pending FRAND review, and granted if Court finds terms offered by SEP owner are FRAND and user does not accept</td>
<td>Injunction denied</td>
</tr>
<tr>
<td><strong>User has offered to take a license on specific terms, but has not agreed to be bound by terms set by a court or arbitral tribunal</strong></td>
<td>Injunction granted unless Court finds terms offered by user are FRAND and SEP owner does not accept</td>
<td>Same as above</td>
<td>Injunction denied</td>
</tr>
<tr>
<td><strong>User has not offered to take a license (and has no objective justification to refuse to take a license) or user’s conduct is purely tactical and/or dilatory and/or not serious</strong></td>
<td>Injunction granted</td>
<td>Same as above</td>
<td>Injunction denied, unless user has explicitly refused to take a license, or user’s conduct is purely tactical and/or dilatory and/or not serious</td>
</tr>
</tbody>
</table>

The practical effect of imposing this process, and encouraging adjudication or arbitration to set FRAND terms, may well be to encourage parties to negotiate a FRAND rate, so as to avoid surprises when it is imposed upon them by a third party. Since this uncertainty may affect both sides, the outcome of negotiation in these circumstances is more likely to reflect an appropriate balance.

It is noteworthy that courts and competition authorities in other jurisdictions adopt a comparable approach (albeit in certain cases based on contract rather than competition law). See Alexander Italianer, Director-General of DG COMP of the European Commission, “Level-playing field and innovation in technology markets”, Conference on Antitrust in Technology 28 January 2013, Palo Alto (“There is however a convergent opinion among competition regulators across the Atlantic. A FRAND commitment given in the standardisation context entails that a SEP holder can no longer have recourse to injunctive relief so long as the potential licensee is willing to negotiate a FRAND licence or to submit any dispute to a court or binding arbitration. This general position seems to be shared by the FTC and the DoJ.”) See also C Shapiro, Injunctions, Hold-Up, and Patent Royalties (August 2006), available at: http://faculty.haas.berkeley.edu/shapiro/royalties.pdf. See also Farrell Hayes, Shapiro, Sullivan, “Standard Setting, Patents and Hold-Up,” (2007) Antitrust Law Journal 74(3) 638; M Lemley, C Shapiro, “Patent Holdup and Royalty Stacking,” (2007) Texas Law Review Vol 85.
• The US Federal Trade Commission issued Orders against Bosch\textsuperscript{27} and against Google and Motorola\textsuperscript{28} based on similar principles, and establishing a comparable process involving negotiation and arbitration, considering that “[seeking and threatening injunctions against a willing licensee:] reduces the value of standard setting, as firms will be less likely to rely on the standard-setting process. Implementers wary of the risk of patent hold-up may diminish or abandon entirely their participation in the standard-setting process and their reliance on standards. If firms forego participation in the standard-setting process, consumers will no longer enjoy the benefits of interoperability that arise from standard setting, manufacturers have less incentive to innovate and differentiate product offerings, and new manufacturers will be deterred from entering the market.” \textsuperscript{29}

• In Apple v. Motorola, Posner J refused injunction to Motorola, stating:\textsuperscript{30}

  “I don’t see how, given FRAND, I would be justified in enjoining Apple from infringing the ‘898 unless Apple refuses to pay a royalty that meets the FRAND requirement. By committing to license its patents on FRAND terms, Motorola committed to license the ‘898 to anyone willing to pay a FRAND royalty and thus implicitly acknowledged that a royalty is adequate compensation for a license to use that patent. How could it do otherwise?”

\hspace{1cm}

\textsuperscript{27} Re: \textit{In the Matter of Robert Bosch GmbH}, FTC File No. 121-0081.


\textsuperscript{29} In the \textit{Matter of Motorola Mobility and Google Inc.}, File Number 121-0120, Decision and Order, http://www.ftc.gov/os/caselist/1210120/130103googlemotorolaanalysis.pdf.

\textsuperscript{30} \textit{Apple v. Motorola Mobility} (N.D. Ill. June 22, 2012). It has been suggested, not entirely tongue in cheek, that since both parties sought an injunction, Posner J could have imposed injunctions on both sides, which might have led to a speedy settlement. The judgment was reversed on appeal, although the Federal Circuit affirms the decision to deny an injunction because “Motorola’s FRAND commitments, which have yielded many license agreements encompassing the ‘898 patent, strongly suggest that money damages are adequate to fully compensate Motorola for any infringement”. Appeal no. 12-1548, \textit{Apple Inc. v. Motorola}, April 25, 2014. http://www.cafc.uscourts.gov/images/stories/opinions-orders/12-1548.Opinion.4-23-2014.1.PDF

(1991) 2049, at: http://faculty.haas.berkeley.edu/SHAPIRO/stacking.pdf. Cf also \textit{Broadcom Corp. v. Qualcomm, Inc.}, No. 06-4292 (3d Cir. Sept. 4, 2007), Slip op. at 24., 501 F.3d 297. (“We hold that (1) in a consensus-oriented private standard-setting environment, (2) a patent holder’s intentionally false promise to license essential proprietary technology on FRAND terms, (3) coupled with an SDO’s reliance on that promise when including the technology in a standard, and (4) the patent holder’s subsequent breach of that promise, is actionable anticompetitive conduct… Deception in a consensus-driven private standard-setting environment harms the competitive process by obscuring the costs of including proprietary technology in a standard and increasing the likelihood that patent rights will confer monopoly power on the patent holder… Deceptive FRAND commitments, no less than deceptive nondisclosure of IPRs, may result in such harm.”) The notion that the promise must be “intentionally false” can be criticized and should perhaps not be read too strictly as requiring evidence of ex ante intent. To the extent this is based on U.S. criteria for attempted monopolization, which do not apply in the EEA, the requirement should not be applied under Articles 101(3) and 102 TFEU. Evidence of intent can be concealed and is extremely difficult to discover, especially in the EEA, where discovery is limited. The European Court has held that abuse is an “objective concept” and that intent is not required for a finding of infringement. It should be enough that the IP owner acts falsely in that it knowingly violates the FRAND promise by refusing to license, demanding injunctive relief, or imposing restrictive or exploitative terms.
• The Washington District Court in Microsoft v Motorola confirmed that a SEP licensee is a third party beneficiary of the SEP holder’s FRAND promise. The Ninth Circuit affirmed, stating:

“Implicit in such a sweeping promise [to license a patent on FRAND terms] is, at least arguably, a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made.”

• A duty to license is not limited to SEPs covered by a FRAND promise, since as the Commission stated in Motorola (para. 278), “The list of exceptional circumstances is not exhaustive”. It may, therefore, apply to non-SEPs covered by a FRAND promise, or even on de facto unavoidable patents not so encumbered, where the user has invested in legitimate reliance on patentee-induced expectations that a license would (continue to) be available or the patent would not be enforced, or where refusal to license would restrict innovation.

  o Based on competition law, The German Supreme Court in Orange Book, imposed a duty to license on patents that were essential for a mere de facto standard, in a situation where no FRAND promise was invoked.

  o The European Commission imposed a compulsory license on Microsoft where a license was necessary to enable interoperability between a product in a market where Microsoft was dominant (Personal Computer operating systems software) and a complementary product (server operating systems software), where a refusal to license interoperability information risked eliminating all effective competition in the market for the complementary product and reduced innovation, and thus reinforced Microsoft’s dominance in the market for PC operating systems.

**Right of access to the Courts.** The question has arisen whether it is appropriate to regard a request for an injunction as an abuse of dominance. The right to access the courts is a fundamental right, protected by Article 47 of the Charter of Fundamental Rights. Thus, in accordance with ITT Promedia and Protégé International, a request by an SEP owner for an injunction can be an abuse only if two conditions are met: (1) the proceedings cannot be regarded as an attempt to enforce legitimate rights but only serve to harass, which could be the case if the request is clearly unmeritorious, and (2) the proceedings are part of a framework of a plan to eliminate the competition. In Motorola, the Commission rejected an appeal to Article 47 on the ground that:

---

32 Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 885 (9th Cir. 2012)
35 ITT/Promedia, [1998] ECR II-2937; Protégé International
There is no indication in either of these cases that the General Court was seeking to establish a different legal standard to the “exceptional circumstances” test developed in *IMS Health*.36

Second, there was no standard-setting context and no FRAND commitment in past cases applying Article 47.

In *Huawei v ZTE*, the Commission argued in addition that even if Article 47 applied, the *Alassini* case permits certain limitations to fundamental rights.37 The Advocate-General opined that it is necessary to strike a balance between the right to intellectual property and the SEP-holder’s right of access to the courts, on the one hand, and the freedom to conduct business that SEP users enjoy under Article 16 of the Charter, on the other hand.

Although it is not stated explicitly, the issue is avoided by defining the abuse as “seeking and enforcing” an injunction, as the Commission does in *Motorola*. Thus, merely applying for an injunction is not an abuse so long as the injunction is not actually enforced (which normally requires a separate procedural act, including the posting of a bond). This approach guarantees the SEP owner’s right to be heard in court, and the chance to argue that in the specific circumstances an injunction is consistent with FRAND obligations, while at the same time protecting the SEP user and consumers against the potentially exclusionary or hold-up effects of actual enforcement.

**Competition law, patent law, or contract?** It has been argued that competition law is not the most appropriate means enforce FRAND promises. The Advocate-General in *Huawei v ZTE* stated (para. 8ff):

*I shall confine my observations in this Opinion to competition law and, in particular, to the question of abuse of a dominant position. That does not mean, however, that the matters at issue in the dispute before the referring court, which, in my view, stem largely from a lack of clarity as to what is meant by ‘FRAND terms’ and as to the requisite content of such terms, could not be adequately — if not better — resolved in the context of other branches of law or by mechanisms other than the rules of competition law.*

11. ...the risk of the parties concerned being unwilling to negotiate or of the negotiations breaking down could, at least in part, be avoided or mitigated if standardization bodies were to establish minimum conditions or a framework of ‘rules of good conduct’ for the negotiation of FRAND licensing terms. Without these, not only actions for a prohibitory injunction but also the rules on abuse of a dominant position, which should be employed only as solutions of last resort, are being used as a negotiating tool or a means of leverage by

---

36 The Court of Justice held that IMS’s refusal to grant a licence to use its copyright-protected brick structure for the presentation of regional sales data could constitute an abuse of a dominant position within the meaning of Article 102 TFEU even though IMS was exercising that right by seeking to obtain an injunction prohibiting all unlawful use of its brick structure in a German court.

37 Cases C-317/08 to C-320/08, para. 63 (“fundamental rights do not constitute unfettered prerogatives and may be restricted, provided that the restrictions in fact correspond to objectives of general interest pursued by the measure in question and that they do not involve, with regard to the objectives pursued, a disproportionate and intolerable interference which infringes upon the very substance of the rights guaranteed.”)
the SEP-holder or the undertaking which implements the standard and uses the teaching protected by that SEP.

- One alternative to using competition law would be to treat a FRAND promise as a license, although the Advocate-General in Huawei v ZTE opined that a “commitment to grant licences on FRAND terms is not the same as a licence on FRAND terms”. It has also been suggested that a FRAND promise is an enforceable promise to license, with a third-party beneficiary clause. Another alternative might be to apply principles of promissory estoppel or “abuse of right” concepts. It may also be possible to apply the principles of the eBay case of the US Supreme Court, which allows the courts to give injunctions where warranted, and award damages where they are not:

“According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate:

- (1) that it has suffered an irreparable injury;
- (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury;
- (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and
- (4) that the public interest would not be disserved by a permanent injunction.”

### 3 Objective justifications for a refusal to license (and seeking injunctions)

#### Inability to pay. The Commission stated in the Motorola decision (para. 427):

*A SEP holder which has given a commitment to license on FRAND terms and conditions is entitled to take reasonable steps to protect its interests by seeking*

---

38 See, for instance, the arguments made in Plaintiffs’ Opening Pre-Trial Brief (redacted public version July 15, 2008), pp. 55-60 and Plaintiffs’ Answering Pre-trial Brief (redacted public version filed July 18, 2008), pp. 16-19, in Case C.A. No 2330 VCS, *Nokia Corporation v. Qualcomm Incorporated*, (Court of Chancery in the State of Delaware, settled in July 2008), referring to an opinion from Prof. Aynes dated 5/21/2008, para. 1.1.2 at 5, citing Bull. civ. Ass. Plen. Nos 7, 8, and 9. Prof Avnes argued that the FRAND promise creates a contract between the promisor and ETSI, governed by French law, which includes a third-party beneficiary clause, which is enforceable even though no specific price is set, since under French law no specific price is needed for leases or licenses if the property being licensed or leased is sufficiently identified.

39 For an example recognizing the possibility of a contractual cause of action against members of ETSI who have issued a FRAND undertaking, see the judgment of the Regional Court of Düsseldorf of Feb. 13, 2007 in Case 4a O 24/05, *Siemens v Amoi (Zeitlagen-multiplexverfahren)*. In ¶ 4(b), the Court holds “If the owner of the IPR — as it is the case here — is in principle willing to license and has committed itself contractually to grant a license, the only issue that remains, once he has made a license offer to the license-seeker, is the question whether unreasonable license fees are demanded (misuse by exploitation) or whether its licensing practice is discriminatory and/or unreasonable.”

40 See *Nokia Corporation v. Qualcomm Incorporated*, above. The civil law equivalent of promissory estoppel is the principle of protection of legitimate expectations, or the rule against “venire contra actum proprium.”

and enforcing an injunction against a potential licensee in, for example, the following scenarios:

(a) the potential licensee is in financial distress and unable to pay its debts;

(b) the potential licensee's assets are located in jurisdictions that do not provide for adequate means of enforcement of damages; or

- **Actual or anticipatory material breach of contract.** Injunctions are presumably also justified if the licensee does not pay (or says it will not pay) royalties that were agreed or set in final and binding judgment by the agreed court or arbitral tribunal, or otherwise engages in actual or anticipatory material breach of the license agreement for the SEPs in question that cannot be easily remedied by an award of damages, including any obligations of regular accounting and payment of royalties into escrow.\(^{42}\)

- **Defensive suspension or reverse hold-up.** Apart from that, a user should not be considered “willing” when it has asserted SEPs against the SEP owner by initiating litigation seeking an injunction against the SEP owner or its products and the SEP owner has confirmed it is a willing licensee (“defensive suspension”),\(^{43}\) or the user refuses to make its own SEPs available on FRAND terms (“reverse hold-up”; see also discussion of “reciprocity” below).\(^{44}\)

\(^{42}\) Cf *In the Matter of Motorola Mobility and Google Inc.*, Decision and Order, clause D. 4 (“A party to the arbitration may condition its participation on the following […] b. the arbitrator may require reasonable security, including an ongoing escrow of funds”).

\(^{43}\) Samsung commitments, Article A.2.c (“Samsung Electronics is relieved from its obligations … if … the Potential Licensee has filed and maintains, or files a claim for Injunctive Relief before any court or tribunal in the EEA against Samsung Electronics or a customer of Samsung Electronics for a Mobile Device or component thereof that is made, marketed, distributed or sold by Samsung Electronics, based on infringement of any of the Potential Licensee’s Mobile SEPs, and Samsung Electronics, subsequent to the Potential Licensee’s claim for Injunctive Relief, offers to be bound by the Licensing Framework applied to it as potential licensee of certain of the Potential Licensee’s Mobile SEPs, by signing and delivering to the Potential Licensee an Annex A Invitation to Negotiate for, as relevant, a Unilateral or a Cross-Licence and/or, as the case may be, to the extent the Potential Licensee’s claim for Injunctive Relief is based on any Mobile SEPs which are not covered by the Annex A Invitation to Negotiate, an Annex B Invitation to Negotiate, which, if accepted, will lead to a separate Third-Party Determination of FRAND Terms, unless the Parties otherwise agree.”) and article A.3.f (“3. Nothing herein shall […] preclude Samsung Electronics from terminating a Unilateral License or a Cross-License concluded in the context of the Licensing Framework in the event the Potential Licensee files a claim for Injunctive Relief before any court or tribunal in the EEA against Samsung Electronics based on alleged infringement of any of the Potential Licensee’s Mobile SEPs, where Samsung Electronics has offered or offers to be bound by the same process as set out in the Licensing Framework applied to it as licensee of such Mobile SEPs by signing and delivering the Annex B Invitation to Negotiate”). See also Docket No. C-4410, *In the Matter of Motorola Mobility and Google Inc.*, Decision and Order, IV.F (“Notwithstanding any other provision of the Order, Respondents shall be permitted to file a claim seeking, or otherwise obtain and enforce, Covered Injunctive Relief against a Potential Licensee, if the Potential Licensee is seeking or has sought on or after the date of this Order, Covered Injunctive Relief against a product (including software), device or service that is made, marketed, distributed or sold by Respondents based on Infringement of the Potential Licensee’s FRAND Patent unless prior to seeking the Covered Injunctive Relief, the Potential Licensee does one of the following: 1. makes Qualified Offers to the party whose infringement forms the basis for the claim of Covered Injunctive Relief (“the alleged infringer”) and the alleged infringer has refused both offers; OR 2. obtains a Final Ruling on a Request for a FRAND Determination to which the alleged infringer was a party that sets at least the
4 Terms and conditions that are not FRAND (and do not justify injunction if a user refuses to accept them)

Apart from pricing, a FRAND promise may also affect other terms and conditions, in particular grant-back clauses and reciprocity. Competition law provides a framework for the assessment of such non-price provisions in technology licensing agreements. Thus, the concept of FRAND encompasses the prohibitions of Articles 101 and 102 TFEU including:

- Article 102(a) TFEU provides that there is an abuse where a dominant company “directly or indirectly [imposes] unfair purchase or selling prices or other unfair trading conditions”. Apart from excessive prices, this prohibits the dominant company from imposing any contractual condition and cost (including opportunity cost) “which is excessive because it has no reasonable relation to the economic value of the product supplied”.

- Article 102(b) TFEU prohibits dominant undertakings from “limiting production, markets or technical development to the prejudice of consumers;”

- Article 102(c) TFEU prohibits dominant undertakings from “applying dissimilar conditions in equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage”.

- Article 102(d) TFEU prohibits dominant companies from conditioning contracts on the other party’s acceptance of supplementary obligations which – by their nature or commercial usage – have no connection with the subject of such contracts.

- Other types of conduct by dominant companies relevant to technology licensing, such as misuse of regulatory procedures, vexatious litigation, or the imposition of unfair contract terms may also amount to abuse of a dominant position.

royalty terms for a license to the Standard for which the allegedly infringed FRAND Patents are Essential’.

44 SSOS IPR Rules, Clause 6.1. Samsung Commitments, Article A.1. Docket No. C-4410, In the Matter of Motorola Mobility and Google Inc., Decision and Order, clause L (“FRAND Terms Letter” means the letter attached as Exhibit B to this Order, in which Respondents make a binding irrevocable commitment to license the Potential Licensee’s relevant FRAND Patents on terms that are fair, reasonable and non-discriminatory on the condition that the Potential Licensee also make a binding commitment to license Respondents’ relevant FRAND Patents on terms that are fair, reasonable and non-discriminatory”). See DVD, Notification of a licensing system, Case No IV/C-3/37.506 — DVD Patent Licensing Programme, (1999/C 242/04) (“if the licensee takes court action against one of the members of the arrangement for breach of an essential patent that the licensee holds, and if it refuses to grant the member a licence on fair and reasonable terms for that patent, the member can terminate the licensee’s rights to the patents that the member has given to the pool.”).

45 See, e.g., Case C-457/10 P AstraZeneca v Commission. This conduct may also be abusive under US abuse of dominance rules. See, e.g., Abbot Laboratories v Teva Pharmaceuticals USA, 432 F. Supp.2d 408 (D. Del. 2006).


These rules provide a framework for analyzing the lawfulness of non-price terms such as grant-back clauses and reciprocity. Restrictions on the scope of grant-back provisions and reciprocity requirements derive directly from the Treaty’s competition law provisions. Specifically:

- A SEP holder cannot tie SEPs to non-SEPs or SEPs reading on a different standard or product.
- An SEP owner cannot withhold its SEPs in order to force the licensee to grant-back a portfolio of rights including non-SEPs, or SEPs reading on a different standard or product.
- A SEP owner cannot prohibit a user from challenging validity, infringement or ownership of the SEPs on which the SEP owner relies.

A prospective licensee, faced with (non-FRAND) terms that would amount to abusive tying or discrimination within the meaning of Article 102 TFEU need not wait for an expert and/or court to determine a FRAND rate but arguably can reject the offer and insist that the licensor reformulate its offer to exclude the unlawful grant-back or reciprocity provisions. An injunction should probably be denied in such a case.

**Validity or infringement challenge is not a justification (except in a settlement).** The Commission confirmed in Motorola that a potential licensee should not be deemed to be unwilling solely by virtue of reserving their right to challenge the validity, essentiality, infringement and/or ownership of the SEPs. Articles 101 and 102 TFEU prohibit no-challenge clauses in licenses that maintain barriers to entry in the form of SEPs that appear valid, but are in fact invalid, to the extent this appearance (and the ban on challenging it) discourages entry in the downstream market for products implementing the standard, or raise the costs of entry.50 The only situation where a no-challenge clause is *prima facie* valid, is in a *bona fide* settlement agreement of a real dispute between actual or potential litigants about validity or infringement.

Competition law treats any provisions that have equivalent effect as no-challenge clauses the same as such clauses are treated. Thus, Articles 101 and 102 TFEU prohibit a provision that requires challenges to be brought before a court or tribunal that does not have the requisite expertise, or prevents a licensee from negotiating a reduction in FRAND royalties after a finding of invalidity or non-infringement (and from applying to a court or arbitral tribunal to adjust or lower the royalties if no agreement is reached about royalty adjustment within a reasonable period of time following a finding of invalidity), if this provision could discourage entry or raise the cost of entry.51

**Portfolio cross-licensing vs tying.** The Commission considers SEPs and non-SEPS, and SEPs for one standard as compared with SEPs relating to a different standard, to be distinct

---

50 The provisions of the block exemption regulation do not apply since the market share ceiling is exceeded. The Guidelines on Technology Transfer allow termination of a license in case of a validity challenge, but the Guidelines assume that the licensee has alternatives in case the challenge fails, which is not the case for SEPs. The European Commission therefore rejected such a termination clause in the Motorola case.

51 An SEP owner may show that a SEP portfolio license fee already reflects the chance of invalidity of one or more patents, in which case a challenge followed by a finding of validity may increase the royalty rate.
products. A SEP holder that withholds its SEPs in order to force a licensee to accept and pay also for other technologies, engages in unlawful tying (absent objective justification). The European Commission has explained the anti-competitive effects that may result from the tying of non-SEPs, including the foreclosure of competing technology suppliers, raising barriers to entry for rivals, and enabling the licensor to increase royalties by making the licensee pay for technology it does not need or does not want, or for which there are better or less costly alternatives. It follows that an SEP holder cannot refuse to license SEPs reading on a product in order to force the licensee to accept and pay for (a) non-SEPs, or (b) SEPs reading on a different product for which the licensee thinks no license is needed.

The Treaty rules on abuse of dominance do not prevent willing parties to a licensing agreement from entering into voluntary portfolio licenses including non-SEPs. Indeed, in such circumstances, the bundling of distinct technologies would lack coercion (a requirement for a tying infringement under Article 102(d)). Article 102(d) therefore does not preclude the SEP holder from offering the potential licensee a portfolio that includes distinct technologies (such as non-SEPs, or SEPs reading on different products). However, consistent with Article 102(d) TFEU, if no agreement is reached within a reasonable time, an SEP holder must offer the prospective licensee alternative terms for a stand-alone SEP license for a specific standards or products, that do not include non-SEPs or SEPs that read on different products. This offer should be made on a cash-only basis (subject to limited reciprocity as discussed below), consistent with a growing body of practice and academic opinion.

52 In Case No COMP/M.6381 - Google/ Motorola Mobility, para. 61, “The Commission considers that each SEP can be considered as a separate market in itself as it is necessary to comply with a standard and thus cannot be designed around, i.e. there is by definition no alternative or substitute for each such patent”. The Commission based this conclusion on various demand-side and supply-side factors, which alone or in combination are pertinent to the Commission’s assessment of whether two products are distinct for the purposing of an Article 102(d) tying analysis. The Commission analyses the separateness of two products by reference to factors including functionality, supplier and customer conduct, and commercial usage. See paras. 58-61 (“As regards non-SEPs, the commercial importance of these patents varies. Such patents are not part of a formal technical standard, the nature of many such patents may be incremental, and it is often easier to design around a patent falling in this category. Non-SEPs may relate to features used to differentiate competitors’ products on the market […] The majority of replies to the market investigation support the assessment that while both SEPs and non-SEPs are used in smart mobile devices, SEPs are always necessary and cannot be avoided if access is to be obtained to the standard at issue. In contrast, non-SEPs, although they may bring additional value to the mobile OS, are not by definition technically essential for access to a standard and can be worked around”).

53 Commission Technology Transfer Guidelines, para. 193. These concerns do not apply, or to a lesser extent, in case of tying of SEPs reading on different standards implemented in the same product, and such “per product” SEP licensing may be justified by objective efficiencies (reduced transaction costs, etc) so long as the licensee is not prevented from challenging validity or non-infringement of any of the licensed SEPs.

54 See M. Lemley, C. Shapiro (2013), “A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents,” Berkeley Technology Law Journal (28) 1135, 1141 (“it will often make sense for private parties to enter into a deal that reflects their specific circumstances”), “the FRAND commitment in no way prevents or discourages private licensing agreements, and indeed we think they will be the norm”.

55 Google letter to SSOs, February 8, 2012, (“Google will continue MMI’s practice of making an all-cash license option available, again subject to the licensee’s grant of a RAND license to its own Essential Patent Claims for the same standards for Google’s products. Such a cash license option will be independent of any broader cross-license that Google and the prospective licensee may voluntarily choose to discuss”). See also para. 157 (“Google will be aware that if it breaches FRAND commitments, by either refusing to offer a cash-only option or by making that offer on non-FRAND
Forced countertrade and reciprocity. Similarly, an SEP owner can request broader cross-license terms but cannot withhold its SEPs (and seek an injunction) in order to force the licensee to (a) cross-license or grant a non-assert promise for licensee-owned non-SEPs or SEPs reading on different products, or (b) cross-license or grant a non-assert promise with respect to SEPs for free or on below-FRAND terms. Reciprocity is allowed under Clause 6 of the SSOs IPR Rules, but this provision cannot excuse an SEP owner from compliance with Articles 101 and 102 TFEU. Moreover, there is nothing in Clause 6 suggesting that reciprocity may be imposed that is broader than the scope of the license for the products in question, and there is nothing in Clause 6 suggesting that the SEP owner is allowed to extract reciprocity for free or on below-FRAND terms.

56 See M. Lemley, C. Shapiro, A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents, 28 Berkeley Technology Law Journal 1135, 1141 (2013), (“a ‘FRAND offer’ means a purely monetary offer to license the SSO participant’s entire portfolio of standard-essential patents on reasonable and non-discriminatory terms for the purpose of making, using, or selling products that comply with the standard”). There are arguments that reciprocity must even be further narrowed to per-standard reciprocity. See Docket No. C-4410, In the Matter of Motorola Mobility and Google Inc., Decision and Order, clause Y (“Reciprocity shall mean conditioning an offer to license FRAND Patents Essential to a Standard on receiving a cross license to the licensee’s FRAND Patents Essential to the same Standard under terms and conditions consistent with the licensee’s FRAND Commitments covering such patents; provided that, if the relevant FRAND Commitment of either Respondents or a Potential Licensee commits to providing a royalty-free license based on reciprocity, such term shall be interpreted as conditioning the offer of a royalty-free license on receiving a royalty-free cross-license to FRAND Patents Essential to the same Standard”). This is supported by Lemley-Shapiro’s economic analysis: “we think that an offer made conditional on the would-be licensee licensing any patents other than standard essential patents reading on the standard at issue is not a FRAND offer”. See M. Lemley, C. Shapiro, A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents, 28 Berkeley Technology Law Journal 1135 (2013). See also dissenting views of Commissioner Pinkerton to the ITC’s issuance of an exclusion order and a cease-and-desist order in Inv. No. 337-TA-794 (i.e., ITC ruling in Samsung / Apple exclusion order proceedings). The majority ruling was subsequently overturned by the US government. Commissioner Pinkerton’s dissenting opinion therefore carries weight. That said, a per-product reciprocity may be justified in cases where there is an asymmetry of SEP ownership where the licensor needs to compete with the licensee but as to which the licensor owns no SEPs. In such a case, the licensee should not be allowed to “reverse hold up” the licensor while at the same time claiming a right to use the licensor’s patents.

57 There are arguments that reciprocity must even be further narrowed to per-standard reciprocity. See Docket No. C-4410, In the Matter of Motorola Mobility and Google Inc., Decision and Order, clause Y (“Reciprocity shall mean conditioning an offer to license FRAND Patents Essential to a Standard on receiving a cross license to the licensee’s FRAND Patents Essential to the same Standard under terms and conditions consistent with the licensee’s FRAND Commitments covering such patents; provided that, if the relevant FRAND Commitment of either Respondents or a Potential Licensee commits to providing a royalty-free license based on reciprocity, such term shall be interpreted as conditioning the offer of a royalty-free license on receiving a royalty-free cross-license to FRAND Patents Essential to the same Standard”). This is supported by Lemley-Shapiro’s economic analysis: “we think that an offer made conditional on the would-be licensee licensing any patents other than standard essential patents reading on the standard at issue is not a FRAND offer”. See M. Lemley, C. Shapiro, A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents, 28 Berkeley Technology Law Journal 1135 (2013). See also dissenting views of Commissioner Pinkerton to the ITC’s issuance of an exclusion order and a cease-and-desist order in Inv. No. 337-TA-794 (i.e., ITC ruling in Samsung / Apple exclusion order proceedings). The majority ruling was subsequently overturned by the US government. Commissioner Pinkerton’s dissenting opinion therefore carries weight. That said, a per-product reciprocity may be justified in cases where there is an asymmetry of SEP ownership where the
Any attempt to force a licensee to grant reciprocity beyond the boundaries set out above raises both unlawful tying and abusive discrimination concerns, potentially leading to the foreclosure of competing technologies:

- The owner of a large portfolio including SEPs might attempt to extract cross-licenses to its licensees’ patents without granting adequate remuneration or without lowering the royalty it charges. This may impose unfair terms and unreasonable opportunity costs on the licensee, who would thus be prevented from charging a royalty for its IPR (and a FRAND royalty for its SEPs). This also discriminates between patent-rich and patent-poor licensees (contrary to Article 102(c) and in breach of the FRAND promise), to the extent patent-rich licensees are required to give up more for the same licence than the latter. It also prevents the licensee from differentiating its products because it is required to make its innovations available to its competitor. This was the theory of harm developed by the Japanese FTC in its investigation of Qualcomm’s licensing practices.

- Article 102(a) TFEU also requires that a license and cross-license be at terms that are symmetrical, unless the licensee voluntarily agrees otherwise. The owner of a large portfolio including SEPs should not refuse to license its SEPs unless the licensee grants back a licence (with full pass-through rights) to its full portfolio, without granting equivalent rights. If the terms applicable to the SEP holder’s SEPs are FRAND, the SEP holder cannot argue that the terms applicable to the potential licensee’s cross-licensed’ SEPs are not FRAND. Asymmetry would provide the licensor with an insuperable advantage because customers are left with the choice of either buying the licensor’s product – in which case they obtain pass-through rights to a vast portfolio of SEPs and non-SEPS – or buying a rival’s product and having to pay royalties to third-party SEP holders against which the dominant undertaking’s pass-

---

58 US and European courts and administrative authorities have recognized the risk that broader cross-licence arrangements can lead to under-valuation of a subset of the licensed technology. In In re Innovatio IP Ventures (see p.62) and Microsoft (at 66-68), the courts held that where a subject of patents is “merely a small part of a larger licensing agreement that the parties entered into to settle significant litigation […] the license rate is likely the product of the settlement negotiation between the parties, and not an accurate market-determined rate for [the subset of] patents”. By analogy, where one party to a license agreements holds a much more valuable portfolio, it should not be able to exploit this position to force the other party to license its own technology at an undervalue. The same principles extend to the licensing of non-SEPs.

59 See M. Lemley, C. Shapiro (2013), “A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents,” 28 Berkeley Technology Law Journal (28) 1135, 1149. The authors recognise the risks of discrimination, stating: “The hypothetical negotiation over the FRAND commitment is a bilateral negotiation between the patent holder and one implementer. That doesn’t mean other implementers are irrelevant. Deals with those parties may be evidence of a reasonable price […]. Plus, deals with other parties may be binding due to the non-discrimination commitment”.

60 In that case, the JFTC held that Qualcomm had coerced Japanese mobile phone manufacturers to enter into a license agreement that included a cross-licence provision and NAP provisions. These broad requirements reduced manufacturers’ incentives to engage in R&D, reinforcing Qualcomm’s position in the relevant technology market. See JFTC cease-and-desist order, 28 September, 2009.
through rights would have protected them. This is liable to exclude an equally efficient downstream competitor, and may thus infringe Article 102(b) TFEU.

As discussed above, this would not prevent the SEP holder from requesting terms and conditions for its SEPs that envisage the grant-back of a broad set of rights including non-SEPs or SEPs reading on a different standard. But if no agreement is reached within a reasonable time, an SEP holder must make an alternative offer that does not entail a broad cross-licence covering both SEPs and non-SEPs.

5 Conclusion, and an introduction of the next problem

Courts and antitrust authorities appear to have found a reasonable balance between the interests of open standard-setting and SEP users (especially the need to ensure that standard specifications are available for implementation by all interested parties), and SEP owners (who need a return on investment and continued incentives to innovate). They have provided a procedure and criteria to determine whether a licensee is “willing” to take a license on FRAND terms, in which case injunctions are not appropriate. SSOs should be encouraged to implement these principles in their IPR Policies.

The next problem is already looming on the horizon: the rise of patent assertion entities (“PAEs”), and growing patent proliferation and fragmentation of patent ownership. The result of these trends is (a) a greater risk of patent hold-up (seeking royalties based on a locked-in user’s switching costs rather than on the innovative value of the patent), (b) intended or unintended royalty stacking (multiple marginalization resulting from patentees setting an individually-profit-maximizing price for their patents regardless of what others charge for Cournot complements), and (c) the ability to set patent traps. These problems are not limited to SEPs, but concern also de facto (or commercially) essential patents or patent portfolios that are large enough to be unavoidable in practice.

Patent aggregation in the hands of responsible patent pool operators or defensive aggregators (like RPX and OIN) is a possible solution to these problems (so long as the conditions for legality of patents pools are met), as is the enforcement of FRAND promises. But defensive patent acquisitions do not help practicing entities defend themselves against PAEs, who are invulnerable to counterclaims and insensitive to “mutual assured destruction” concerns that normally lead to cross-licensing between manufacturers.

So far, PAEs and privateers have been active mainly in the US, but some notable aggressive PAEs have started litigation or are poised for action in the EU and other jurisdictions as well. The planned Unified Patent Court (“UPC”) could become an attraction to them, especially because (a) the current rules would allow them to obtain EU-wide automatic temporary and permanent injunctions, even on the basis of patents that are subject to validity challenge before the Central Division (in bifurcated proceedings); and (b) the rules allow for judicial

---

61 The US antitrust authorities share this view (“cross licensing and patent pooling can offer substantial efficiencies, but also that they sometimes present certain competitive risks. [...] broadly written grantbacks in a patentpooling agreement can promote competition by giving licensors access to downstream improvements, or they can erode incentives for future innovation.”).

62 The conduct would not be objectively justified because there are less restrictive alternatives available to the dominant SEP holder (such as creating a multilateral patent pool, a mutual non-assertion patent clause, or adjusting downwards the royalty rate of its rivals’ customers) that would be rational for a non-vertically integrated SEP holder licensor.
discretion to be exercised, which, if inconsistently applied may enhance the potential for forum shopping by PAEs.

When considering injunction requests by PAEs, the courts could (and, it is submitted, should) apply principles of equity (along the lines of the U.S. Supreme Court judgment in eBay v MercExchange) and require at least preliminary assessment of validity in preliminary injunction proceedings, to ensure that injunctions are issued only in situations where they really deserve to be imposed. Other ways to reduce the risks of royalty stacks, hold-up, and patent traps is to (a) use patent pools and defensive aggregators like RPX and OIN; (b) improve patent quality; (c) have courts curb excessive patent claims (as in the Macrossan, Alice, and Lantana cases); (d) ensure courts apply “loser pays” principles; (e) require FRAND promises for standard setting and patent pools, and enforce these promises under contract and estoppel rules; (f) apply merger review rules if thresholds are met, to prevent patent transfers leading to significant impediments of effective competition; (g) apply Article 101 TFEU to privateering agreements designed to raise rivals’ costs, and to repress restrictive licensing clauses (like bundling SEPs to non-SEPs, demanding royalty-free cross-licenses as a conduction for access to necessary patents, or other FRAND violations); (h) apply 102 TFEU to curb injunctions for FRAND-encumbered patents (both SEPs and non-SEPs), exclusionary abuse, patent traps, and excessive royalties that lead to Cournot stacking; and (i) encourage a trend of dedication of patents to the public domain (as Tesla, IBM, Google and others have done) subject to defensive suspension in case of patent attack.