

License to All or Access to All? A Law and Economics Assessment of Standard Development Organizations' Licensing Rules

Dr. Anne Layne-Farrar

Vice President in Competition Economics at Charles River Associates and an Adjunct Professor at the Northwestern University Pritzker School of Law.

Richard J. Stark

Partner in the Litigation Department of Cravath, Swaine & Moore LLP.



4iP Council is a European research council dedicated to developing high quality academic insight and empirical evidence on topics related to intellectual property and innovation. Our research is multi-industry, cross sector and technology focused. We work with academia, policy makers and regulators to facilitate a deeper understanding of the invention process and of technology investment decision-making.

www.4ipcouncil.com

This summary is drawn from the following paper: License to All or Access to All? A Law and Economics Assessment of Standard Development Organizations' Licensing Rules. Available at SSRN: https://ssrn.com/abstract=3612954

Suggested citation

Layne-Farrar, Anne and Stark, Richard, License to All or Access to All? A Law and Economics Assessment of Standard Development Organizations' Licensing Rules (May 18, 2020). George Washington Law Review, Forthcoming, Available at SSRN:

https://ssrn.com/abstract=3612954

License to All or Access to All? A Law and Economics Assessment of Standard Development Organizations' Licensing Rules¹

Anne Layne-Farrar² and Richard J. Stark³

Summary by 4iP Council

Neither the law nor economic welfare justifies a "license to all" interpretation of FRAND commitments. Such a regime is not supported by patent, contract or antitrust law, and likely would be harmful to social welfare. License-to-all is a strategy to try to force SEP holders to license their patents to component makers, in an effort to drive royalty negotiations (and litigations) toward lower numbers. Essentially, it is a tactic to game FRAND obligations and exhaustion law to the detriment of SEP holders.

Proponents of "license-to-all" argue:

- All entities in the chain of production of standardized products need licenses to SEPs to be able to participate in the relevant industries.
- Because of the need for licenses, the FRAND commitments entered into by SEP holders should be interpreted to require the holders to grant licenses to all comers to carry out their part of the production chain.

Proponents of "access-to-all" argue:

- Not all entities need SEP licenses
- FRAND commitments do not necessarily require that SEP holders grant licenses to all comers, only that they make their patented technologies *available* by granting licenses on FRAND terms and conditions.

At its root, the license-to-all argument concerns the amount of royalties to be paid.

The license-to-all argument is a strategy to try to force SEP holders to license their patents, to component makers, in an effort to focus discussions about royalties on the prices of components rather than end-user devices. This would be desirable for implementers.

² Dr. Anne Layne-Farrar is a Vice President in Competition Economics at Charles River Associates and an Adjunct Professor at the Northwestern University Pritzker School of Law.

³ Richard J. Stark is a partner in the Litigation Department of Cravath, Swaine & Moore LLP.

This debate is also over how the fruits of technology standardization will be shared across industries and across players within any given industry.

Also, will have significant implications for end consumers and for the wider economy.

Applicable principles of patent law and patent licenses

A. Patents and Patent Infringement

A patent confers only a negative right: the right to exclude others from practicing the covered invention.

Whether to enforce exclusivity through an injunction at discretion of the court and the amount of damages must be proved.

The scope of the exclusive right granted in a patent is defined by the claims of the patent. The patent holder must show that all of the elements of one of his patent claims are present in the accused product.

Whenever there are multiple levels of players in an industry, each of which uses a patented technology, a patent owner may, make a strategic choice as to the level at which it will asserts its patent.

Defendants can contest the claim of infringement. The claims of a patent may be found to be invalid. An alleged infringer may choose to enter into a license agreement, avoiding claims of infringement by contractual means.

Potential remedies:

- Monetary damages quantification is done by the finder of fact. Process can involve apportionment via these means:
 - o smallest salable patent practicing unit approach. Seldom used as a royalty base.
 - Royalty rate adjustment
- Injunction

B. Patent Licensing

License is a contracted-for defense to claims of patent infringement. It is not the ability to make and sell some product. That is actually a technology transfer, which often accompanies a patent license.

Taking a license is a good way to mitigate patent infringement risk, but it may make no sense to take a license to every patent that might be asserted. For many businesses, administrative burden too great. Out of the hundreds of thousands of patents granted by the U.S. Patent Office each year, only a tiny fraction of them will be asserted in litigation. The same holds true for standard essential patents.

Patent licensing is an important means for innovators to monetize their inventions and earn a return on their investments. In designing a licensing program, a patent owner, has the option to determine at what level of the supply chain the license is granted.

Not all licensing should be at the end device level. Component licenses may make business sense in many circumstances.

C. Patent Exhaustion

Patent exhaustion, or the "first sale" doctrine, is a defense to a claim of patent infringement.

A patent owner likely can collect royalties from only one level of a supply chain. If a patent owner has chosen to license at the device level it has already signaled that it does not seek to license at the component level.

D. SEPs and FRAND

SDOs commonly incorporate technologies developed by private sector participants. To protect their investments, companies typically apply for patents on their innovations. Logically they will then seek to earn a return on their investment through licensing (in addition to or instead of selling standards-compliant products).

When the claims of a patent read on an aspect of a standard, such that it is not possible to practice the standard without infringing, the patent is "essential" and is referred to as an SEP.

IPR policies usually ask that the SDO's members identify their patents that may be essential to the SDO's standards. When a member identifies a potential SEP, it is also asked to declare whether it will agree to license the patent on FRAND terms and conditions.

Under U.S. caselaw, FRAND declarations are *contractual* in nature. Each FRAND declaration is a contract between SEP holder and the SDO. Implementers of the relevant industry standard are third party beneficiaries of the contract.

The relevant contract will list a party's FRAND obligations in a particular case. This language resides in the relevant FRAND declaration, along with the IPR policy under which the declaration was made.

IPR policies at the SDOs such as ETSI and IEEE

One needs an understanding of the IPR policies in place at key SDOs, as these comprise the contracts relevant for any claim that FRAND imposes a license-to-all obligation on SEP holders. These policies, while sharing some common elements, differ across organizations.

ETSI:

1. Policy Objectives

ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.

ETSI participants evidently foresaw that the use of patents to block the use of a standard would be counterproductive and indeed counter to the entire idea of an industry standard. Thus, the IPR Policy focuses on the "availability" of ETSI standards. Furthermore, ETSI highlights that any access that IPR holders provide should be "adequately and fairly rewarded," meaning that IPR holders are free to charge adequate and fair royalties (however one defines those terms).

2. Availability of Licenses

Owner of an essential IPR must state in writing that it is prepared to grant irrevocable licences on fair, reasonable and non-discriminatory ("FRAND") terms and conditions

3. Discussion

The ETSI IPR Policy does not state any obligation to license *each and every* entity along the entire production chain. Instead, the Policy merely asks that the patent owner not simply keep its technology to itself and refuse to license anyone at all (as is the right of any patent holder absent a contrary commitment to an SDO).

The ETSI IPR Policy does not state how many licenses the patent owner should grant, or to whom it should grant them. Rather, the ETSI IPR Policy defines the scope of the license rights to be granted in terms of the subject matter (field of use) that is to be licensed. Essentially, licensees should be granted at least the right to "MANUFACTURE EQUIPMENT." SEP holders are asked to commit that they will grant licenses for the manufacture of only "fully conforming" devices and systems.

No specific commercial terms for licenses are set forth. Commercial terms are to be negotiated bilaterally between each SEP holder and each potential licensee.

The ETSI IPR Policy leaves FRAND terms and conditions undefined.

The Institute of Electrical and Electronics Engineers (IEEE)

Its Patent Policy differs significantly from ETSI's.

Licensing Policy: IEEE defines "Compliant Implementation" as "any product (e.g., component, sub-assembly, or end product) or service that conforms to any mandatory or optional portion of a normative clause of an IEEE Standard." This contrasts with ETSI's requirement that equipment be "fully conforming to a STANDARD."

IEEE's "Reasonable Rates" term also takes a more stringent approach:

"Reasonable rate" appropriate compensation to the patent holder for the practice of an Essential Patent Claim excluding the value resulting from the inclusion of that Essential Patent Claim's technology in the IEEE Standard.

Should include consideration of:

- The value that the functionality of the claimed invention or inventive feature within the Essential Patent Claim contributes to the value of the relevant functionality of the smallest saleable Compliant Implementation that practices the Essential Patent Claim.
- The value that the Essential Patent Claim contributes to the smallest saleable Compliant Implementation that practices that claim, in light of the value contributed by all Essential Patent Claims for the same IEEE Standard practiced in that Compliant Implementation.
- Existing licenses covering use of the Essential Patent Claim, where such licenses were not obtained under the explicit or implicit threat of a Prohibitive Order, and where the circumstances and resulting licenses are otherwise sufficiently comparable to the circumstances of the contemplated license.

IEEE states in its Policy that "Nothing in this policy shall preclude a licensor and licensee from voluntarily negotiating any license under terms mutually agreeable to both parties."

Discussion:

The IEEE Patent Policy does not expressly state any obligation to license each and every entity along the entire production chain. However, the Policy differs from the ETSI IPR Policy in these ways:

- It states that the patent holder must make licenses available to an unrestricted number of applicants.
- It defines the scope of the license rights to be granted as covering any "Compliant Implementation"—a term that is defined to include components, sub-assemblies and end-products.
- The IEEE Patent Policy attempts to add some specificity to the idea of FRAND terms and conditions, by identifying factors to be considered in determining reasonable rates.
- While the ETSI IPR Policy expressly avoids any discussion of commercial terms, the IEEE Patent Policy invokes the SSPPU approach for determining patent infringement damages directly within its IPR rules.

IEEE's adoption of the above rules in 2015 was controversial. Some members have submitted so-called "negative LOAs" in which they select an option on the Letter of Assurance form stating that they decline to provide a licensing assurance pursuant to IEEE's Reasonable Rate guidelines, and instead agree to make licenses available pursuant to a less rigid definition of FRAND.

Legal basis for license-to-all proposal and analysis of expected economic impact

Proponents of the "license-to-all" position contend all entities in the chain of production of standardized products need licenses to SEPs to be able to participate in the relevant industries.

There simply is no law that requires anyone to take a license under any patent.

Licenses are not required as a practical, technical matter to make standard compliant products. It is possible for a company with sufficient resources and expertise to design and manufacture products without any patent licenses. The standards' specifications give detailed descriptions of each element of the standard.

An implementer does not need to seek out SEP licenses to show good faith. Rather, in typical negotiations, implementers respond to SEP owner FRAND offers. So long as implementers respond in a timely and good faith manner, they should have little or no concern about being deemed an "unwilling licensee." This is the process that is envisioned by the European Court of Justice's decision in Huawei v. ZTE.

The level of risk in not having a license depends on who owns the SEPs and what their licensing practices are. Most likely scenario for component-level implementers, the relevant SEPs are owned by a number of entities with differing policies and practices. Patent holders seeking to monetize their patents have to identify themselves to make their claims.

There is no legal or practical basis for the blanket claim that all entities in the chain of production need patent licenses or face meaningful risks by not proactively seeking them.

Thus, to the extent that the license-to-all argument depends on an assumption that all entities in a production chain absolutely require licenses to SEPs, that predicate is false.

Do SDO policies require licenses for all entities (and all purposes)?

Proponents of license-to-all may reply, they should not have to rely on the non-assertion of SEP holders and that SDOs' IPR policies require SEP holders to grant a license to anyone who requests one and for any scope desired by the requester.

What exactly a particular SDO policy requires of SEP holders is a question of contract interpretation, which depends on the language of the particular policy at issue. An across-the-board interpretation of "FRAND" obligations that applies in all cases is not possible.

An entity that declares a patent to be potentially essential to an ETSI standard is asked to commit that "it is prepared to grant irrevocable licences." This language indicates that the patent holder is asked to state that it will not keep its patented invention exclusively to itself and is prepared to grant "licences," meaning that it will not restrict its licensing to a single exclusive licensee. Nothing says that the patent holder will grant licenses to anyone and everyone who asks.

Even if that were the case, the patent holder is asked to state that it is prepared to grant licenses "at least" to manufacture fully standard-compliant devices. The patent holder may, but need not, offer broader licenses. There is no requirement in the ETSI IPR Policy that a patent holder grant licenses for the manufacture of components.

The Policy states the goal of reducing the risk that the investment in developing a standard "could be wasted as a result of" essential patents "being unavailable." The Policy also states as one of its objectives that patent holders "should be: adequately and fairly rewarded for the use of their patents.

It is clear that the intent of the ETSI IPR Policy is only to require licensing the manufacture of standard-compliant devices, not upstream components. The Policy does not impose a blanket obligation to license anyone who asks, for whatever scope they may request.

IFFF is different.

Whether an SEP holder's FRAND commitments require it to grant licenses to all comers and for all purposes is a question that depends on the language of the relevant FRAND policy and the of the specific individual commitments made to an SDO.

The IEEE Patent Policy can be read as supporting a broad obligation. The ETSI IPR Policy cannot.

Arguments Based on Antitrust Law

Some parties have argued that antitrust law may impose a duty to license all comers to FRAND-committed SEPs, or that a refusal to grant licenses to such SEPs could lead to an antitrust violation.

It has been argued that when an SEP holder promises to grant licenses to its SEPs, but then refuses to do so, there may be a claim for monopolization based on a "intentionally false promise" as in Broadcom v.

Qualcomm. But in Rambus v. FTC, based on Supreme Court precedent, deceitful conduct of the type alleged in Broadcom is not actionable as an antitrust violation absent exclusion of rivals

Another angle that has been considered is a claim of "refusal to deal." Under Aspen Skiing Co. v. Aspen Highlands Skiing Corp, firms do not generally have any duty to help their competitors, and Aspen Skiing is "at or near the outer boundary of [Sherman Act] § 2 liability." For these reasons, "refusal to deal" claims based on Aspen Skiing succeed rarely, if ever.

The Federal Trade Commission argued that Sherman Act Section 2 liability applies where "a monopolist SEP holder commits to license its rivals on FRAND terms, and then implements a blanket policy of refusing to license those rivals on any terms, with the effect of substantially contributing to the acquisition or maintenance of monopoly power in the relevant market." This argument a hybrid of the "intentionally false promise" theory (without requiring evidence of any intentionally false statement) and the "refusal to deal" theory (without satisfying the requirements of Aspen Skiing).

Under any Section 2 theory, a plaintiff would have to demonstrate that a refusal to license an SEP actually had the effect of excluding it from the industry. For the reasons mentioned above, the mere lack of a patent license is not exclusionary.

So long as the SEP holder has afforded others the freedom to participate in the manufacture of devices compliant with the relevant standard there would be no exclusion.

Important Economic Issues:

Ultimate goal of the patent system is "[t]o promote the Progress of Science and useful Arts."

The arguments in support of a license-to all FRAND interpretation assume that SEP holders will be overcompensated if FRAND rates are set at the end product level. This depends on different factors such as how the technology is deployed. Neither the prices nor the profit margins at the component level will be an appropriate royalty base for determining FRAND payments when historically licensing has not occurred at the component level.

The Patent Act provides that damages for infringement shall be no less than "a reasonable royalty for the use made of the invention by the infringer made of the invention by the infringer." Royalties set on a base that does not reflect the value to end users of the patented technology are likely to undercompensate the SEP holder.

The potential to undercompensate SEP holders would affect the economy.

- If inventors and investors expect royalty rates for their new patented technology to be undervalued, that affects their ROI calculations.
- If SEP holders expect to be undercompensated, they will reduce investments in innovations targeting standards, which will reduce SEPs. This means fewer new technologies for interoperability standards and slower standards evolution over time.
- More entities might choose not to participate in cooperative standard development.
 Participating in cooperative standards development entails substantial investments of R&D resources. The expected benefits of participation must equal or exceed the expected costs before a firm will choose to participate.

• The more pivotal the technology, the more attractive abstention can be and the more harmful it would be to the SDO, its members, and all consumers of products compliant with the standard. Innovative firms can continue to participate in an SDO but refuse to contribute certain technologies to its standards; or firms may shift their research and development programs away from essential technology areas.

Any of the above responses would be likely to harm technology standard development. When standards do not attract the best technologies, the users of those standards will suffer as well.

Less Harmful Alternatives

- An SEP holder may adopt a licensing practice of only asserting its SEPs and seeking to license them at one level of the production chain.
- SDOs could request SEP holders commit to making a FRAND offer before seeking an injunction.
- SDOs could encourage SEP holders to charge royalties in terms of fixed dollar amounts per enduser unit e.g. \$1 per device. As long as the SEP holder gets its price, it should be indifferent to who pays that price.