



FRAND does not mean license-to-all in the US

Neither the law nor economic welfare justifies a license-to-all interpretation of FRAND commitments, write Anne Layne-Farrar and Richard J Stark. Such a regime is not supported by patent, contract or antitrust law, and would probably be harmful to economic welfare

An important question in the ongoing debate over patents relating to industry standards is whether a commitment to license patents essential for the practice of a standard (referred to as standard essential patents, or SEPs) on fair, reasonable, and non-discriminatory (FRAND) terms and conditions necessitates that the SEP holder provide licences to any and all parties requesting them.

Proponents of the license-to-all position make two related arguments:

- All entities in the chain of production of standardised products need licences to SEPs to participate in the relevant industries.
- Because of that need, the FRAND commitments entered into by SEP holders should be interpreted to require licences to all comers.

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

The contrary, access-to-all, view holds that:

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

Neither the law nor economics justifies an across-the-board license-to-all interpretation of FRAND commitments. Such a regime would not be supported by patent, contract or antitrust law and is likely to be harmful to economic welfare.

Applicable principles of patent law

A patent confers only a negative right: the right to exclude others from practising the covered invention. The scope of this exclusive right is defined by the claims of the patent. To enforce a patent, the patent holder must show that all of the elements of one of its patent claims are present in the accused product. A patent holder who succeeds in establishing infringement is entitled to damages sufficient to compensate for the use of the invention. Courts have discretion to enforce exclusivity through injunctions.

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

Defendants can contest claims of infringement by raising various defences. One way for a potential infringer to avoid claims of patent infringement is to enter into a licence agreement with the patent owner.

A licence is not the same thing as the *ability* to make and sell a product. Rather, it is a contracted-for defence to claims of patent infringement. Taking a licence can be a good way to mitigate patent infringement risk, but it may not make business sense to take a licence to every patent that might be asserted. Only a tiny number of patents (compared to the total number issued annually) are ever asserted in litigation.

Patent licensing is an important means for innovators to earn a return on their investments. A patent owner has the right to choose the level of the chain of production at which it will grant licences.

SEPs and FRAND

Standards development organisations (SDOs) commonly incorporate technologies developed by private sector participants into industry standards. To protect their investments, companies typically apply for patents on their innovations. Frequently, they will then seek to earn a return on their investment through patent 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 practise the standard without infringing, the patent is essential and is referred to as an SEP.

SDOs' policies usually ask that SDO members identify their patents that may be essential to the SDO's standards. Members are also asked to declare whether they will agree to license their patents on FRAND terms and conditions.

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

IPR policies of ETSI and IEEE

To understand what a FRAND commitment requires, one must consider the written policies of the relevant SDO. Policies differ across organisations.

For example, the European Telecommunications Standards Institute (ETSI) has an Intellectual Property Rights (IPR) Policy that seeks to balance the interests of implementers and the rights of the owners of SEPs. ETSI's IPR Policy focuses on the "availability" of ETSI standards. The owner of a potential SEP is requested to commit that "it is prepared to grant irrevocable licences on" FRAND terms and conditions. The ETSI Guide on IPRs further provides that SEP holders should be "adequately and fairly rewarded" for licensing their patents.

The ETSI IPR Policy does not state any obligation to license *every* entity along the production chain. Instead, it asks that the patent owner not simply keep its technology to itself and refuse to license anyone at all (as would otherwise be the right of any patent holder). The ETSI IPR Policy defines the scope of the rights to be granted in terms of the subject matter (field of use) that is to be licensed—specifically, licences only for the manufacture of "fully conforming" devices and systems.

No commercial terms for licences are specified. They are to be negotiated bilaterally between each SEP holder and each potential licensee.

To take another example, the Patent Policy of the Institute of Electrical and Electronic Engineering (IEEE) differs significantly from ETSI's. The IEEE requests assurances from SEP holders that they will make licences available under "Reasonable Rates" (defined by reference to a number of factors) for "any Compliant Implementation that practices the Essential Patent Claims". The Patent Policy defines "Compliant Implementation" as: "Any product (eg, 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 is a broader obligation than an ETSI commitment to license only "fully conforming" devices.

Legal analysis of the license-to-all argument

As noted above, proponents of the license-to-all position generally make two related contentions. First, they assert that *all* entities in the chain of production of standardised products need licences to SEPs. Second, they argue that, because of the supposed need for licences, SDO policies require SEP holders to grant licences to all comers.

As to the first contention, it is not the case that all entities in the chain of production *need* SEP licences. As a legal matter, there simply is no law that requires anyone to take a licence under any patent. And licences 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 licences. The standards' specifications give detailed descriptions of each element of the standard.

As to the second contention, 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". Nothing says that the patent holder will grant licences to anyone and everyone who asks. And, in any event, the patent holder is asked to state that it is prepared to grant licences "at least" to manufacture fully standard-compliant devices. The patent holder may, but need not, offer broader licences. The policy does not impose a blanket obligation to license anyone who asks, for whatever scope they may request. In particular, there is no requirement in the ETSI IPR Policy that a patent holder grant licences for the manufacture of components.

As discussed above, the IEEE Patent Policy is different. The IEEE Patent Policy can be read as supporting a broad obligation.

The conclusion to be drawn from these two examples is that there is no across-the-board rule of interpretation that applies to all SDO policies or all FRAND commitments.

Arguments based on anti-trust 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 licences to such SEPs could lead to an antitrust violation. A number of arguments have been advanced in support of this position.

Under any anti-trust theory, a plaintiff would have to demonstrate that a refusal to license an SEP actually had the anti-competitive effect of excluding the plaintiff from the industry. But the mere lack of a patent licence does not exclude an implementer from practicing an industry standard. The US Federal Trade Commission pursued a theory of duty to license based on anti-trust law against Qualcomm. As the Court of Appeals for the Ninth Circuit recently held, the FTC failed to explain how Qualcomm's refusal to grant licences to its modem chip rivals impaired the rivals' opportunities. With no harm to competition established, the court ruled against the FTC.

Economic Issues

The US Constitution states that the goal of the patent system is "[t]o promote the Progress of Science and useful Arts". Thus, an assessment of how a license-to-all regime would affect economic incentives to create and invest in new inventions needs to be part of the calculus.

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. Whether the overcompensation assumption is warranted depends on multiple factors such as how the technology is deployed. Often the value of the technology to the device maker is commensurate with the value to the end user, because this dictates how much the device maker can increase the price customers pay for the end-user device.

Components, on the other hand, particularly semiconductor chips, are often sold as commodities, with prices set just above the aggregate cost of the bill of materials. When this is the case, the price for the component will not reflect the value of using the SEPs, for either the end user or the component supplier. Neither the prices nor the profit margins at the component level will be an appropriate royalty base for determining FRAND rates when licensing historically has not occurred at the component level.

Royalties set on a base that does not reflect the value to end users of the patented technology are likely to under-compensate the SEP holder. Under-compensation of SEP holders would adversely affect economic welfare:

- If inventors and investors expect royalty rates for their new patented technology to be undervalued, that will affect their return-on-investment (ROI) calculations.
- Lower ROI expectations will disincentivise socially desirable investments in research and development of new technologies and standards.

- Innovative firms may choose not to participate in cooperative standard development as a result.
- The more pivotal the technology, the more attractive abstention can be and the more harmful it would be to the SDO, its members, and consumers.

An absolute license-to-all rule could lead to a regime of component-only licensing. That kind of regime would be at odds with patent law, which guarantees a reasonable royalty based on the use of the technology. And it would be at odds with economics, which relies on the expectation of reasonable royalties to maintain incentives for risky R&D investments.

Impairing the SEP holder's freedom to choose the most sensible level in the production chain for its licensing efforts can be expected to have detrimental economic effects.

The authors will be taking part in a webinar on 15th October looking in greater detail at the issues raised in this article. For more information, [please click here](#).

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