CPI Columns
Intellectual Property

May 2021

Standards, Patents and Transparency

By Dr. Kirti Gupta & Fabian Gonell

Qualcomm

Standards, Patents and Transparency

*By Dr. Kirti Gupta & Fabian Gonell**

In recent years, the widespread success enjoyed by some technology standards, especially wireless cellular standards, have led policy makers to pay closer attention to the interface of standards and Intellectual Property Rights ("IPRs"). One of the issues is a call for greater transparency related to patents that are declared as potentially essential to standards, commonly referred to as Standards Essential Patents ("SEPs"), i.e. clarity regarding the patents that are, in fact, essential to the implementation of a standards, such as 3G, 4G, and 5G technologies. With the widespread use of 5G technologies across industry sectors beyond mobile, including automotive and IoT industries, the stated desire for enhanced transparency has received renewed attention from policy makers on both sides of the Atlantic.

Patent Transparency as a Goal

Perfect knowledge of which patents are actually essential to a standard and infringed by a product would be beneficial for both licensors and licensees of SEPs. It would be beneficial for licensors because in such a world a licensee's refusal to take a license on FRAND terms to patents known to be infringed would result in an injunction against further infringement that would stop that behavior, or enable damages. And it would be beneficial for licensees because in such a world the licensee would have perfect knowledge of all of the SEPs it was using in its products. As explained below, however, perfect knowledge is a practical impossibility, and does not exist in any other commercial scenario.

It may be possible to increase transparency, and such additional transparency may in some cases be beneficial to, for example, SMEs that do not have the resources to evaluate patents themselves. Such increased transparency will not, however, address the increasing use of hold-out tactics by infringers, including by coordinated group boycotts,[1] nor will it reduce SEP-related litigation between large companies. Such companies already have the resources to evaluate patents and therefore the issues leading to litigation have nothing to do with transparency.

Natural Constraints on Transparency

There are, however, two significant constraints towards the goal of achieving transparency that must be considered.

- *First,* the **cost, effort, and knowledge intensity** for determining essentiality of large patent portfolios is enormous. To put the scope of a single technology standard in perspective, the latest release of 4G LTE comprises of over 1500 technical specifications, covering thousands of technical features and hundreds of thousands of patents declared against these specifications. The specialized technical subject matter of the standards and the related patents span a broad range from: security, to radio-interface, to infrastructure level protocols, etc. The number of human-hours of engineers and lawyers with specialized knowledge in mapping whether the declared patents recite on specific standards are significant.
- *Second,* there is inherent **uncertainty** in the process of determining essentiality of patents. Specifically, the standards

* Dr, Kirti Gupta is the Vice President and Chief Economist at Qualcomm Inc., Fabian Gonell is the Senior Vice President and Licensing Strategy Legal Counsel at Qualcomm Inc. The views in this article represent the views of the authors and not of any professional affiliations

[1] The Managing Director of ESMIG, the smart meter trade association, recently listed an initiative described as a "mutual approach for licensing [SEPs]" in which members "avoid individual settlements with patent holders." ESMIG, *Annual Review, Activities and Members 2020* (downloaded January 2021) (on file with the authors). Shortly afterwards, ESMIG replaced the original version of the document with a version removing this statement.

declaration process is managing two moving targets – first, the evolving standards are in the process of being developed iteratively; second, the patent prosecution process is simultaneously being managed in multiple patent offices worldwide. Determining essentiality of patents for a set of standards is therefore a moving target requiring informed-guesses at any given point of time.

Although determining essentiality of patents declared to standards accurately and comprehensively is a desirable outcome, it has inherent limitations in: (i) scope – due the cost/effort constraints and (ii) accuracy – due to the inherent uncertainty in the way standards and patent applications evolve.

In light of these inherent limitations, there is no fool-proof and non-cost-intensive way to achieve full transparency. Some analytics companies have suggested that AI-based solutions might provide a reliable alternative, for services based on payment. However, the European Commission's JRC report written by subject matter experts predicts, for a variety of reasons, "it is unlikely they [that automated approaches to essentiality assessment] will be able to replace human efforts in the short or medium term for a number of reasons."[2]

Institutional/Policy Constraints on Transparency

The recognition of these limitations does not conclude that transparency cannot be improved. Although full accuracy is unattainable and significant cost/effort need to be exercised, the most efficient mechanism to enhance transparency is by designing a system that creates an incentive for declaring companies themselves to aim for more accurate disclosures *ex ante*. At the moment, this is difficult to achieve. Although the European Commission has recognized the importance of increased transparency, courts have not. Various antitrust agency positions and court decisions in cases such as *FTC v. Rambus* and *Core Wireless v. Apple* have created a strong incentive for firms to err on the side of over disclosing SEPs, because a failure to do so could render their patent unenforceable or even trigger antitrust liability.[3] Furthermore, some courts have relied on a "top-down-approach" to evaluate reasonable royalties, proportionally granting higher royalties simply for a higher number of declared patents.[4] As the UK Supreme Court noted in the *Unwired Planet v. Huawei* case, this creates a "perverse incentive to over-declare."[5]

A Constructive Path Forward

Given the current constraints on methodologies and incentives towards the goal of full transparency, an effective outcome from any viable transparency project may be to incentivize industry participants to increase transparency.

There are certain steps key industry players can take and are taking towards increasing transparency, both in terms of identifying essential patents, and in terms of reducing the uncertainty around licensing royalties:

1. Licensors can continue to model best licensing practices by presenting their patent portfolios to prospective licensees, along with a select list of patents and claim charts.
2. Licensors can continue to announce the licensing rates of their SEP portfolios for

[2] *Id.* at 58.
[3] *Rambus Inc. v. FTC*, 522 F.3d 456 (D.C. Cir. 2008); *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, 899 F.3d 1356 (Fed. Cir. 2018).
[4] See, e.g. *In re. Innovatio IP Ventures*, Case No. 11 C 9308, 2013 U.S. Dist. LEXIS 144061 at *164 (N.D. Ill. Sept. 27, 2013), *TCL Commc'n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson*, Nos. SACV 14-341 JVS, CV 15-2370 JVS, 2017 U.S. Dist. LEXIS 214003 at *48-49 (C.D. Cal. Dec. 21, 2017).
[5] *Unwired Planet v. Huawei* [2020] UKSC 37, August 26, 2020, at 44.

varying industry verticals and use cases.[6] *Ex ante* declarations of licensing terms and conditions, whenever possible, have increased certainty and predictability.

3. Transparency is a two-way concept. Licensees should make available technical and financial information relevant to the negotiation. Such information may help identify infringement, and the economic value of the patented technology usage.
4. Licensors and licensees from new industry verticals leveraging their technology (e.g. the auto industry leveraging 5G communications technology) can work on industry-wide Memorandum of Understanding ("MoU") for best practices to be followed by licensors and licensees.

Conclusion

The ultimate goal of greater transparency is facilitating licensing negotiations and reducing uncertainty – this benefits licensors and licensees. However, the process of identifying which patents are potentially essential to a standard is a guessing game chasing moving targets of evolving standards and patent applications. Given the current legal environment, where under-declaring patents to standards carries severe consequences, and over-declaring patents has certain rewards for positioning technology leadership based on pure patent counts, the incentive structure for increasing transparency based on checking essentiality of every declared patent breaks down quicky due to onerous cost, skill, and uncertainty inherent in any methodology. The goal of transparency should still be pursued, and the industry players should be incentivized to follow best practices to symmetrically increase transparency. Notably, transparency is a two-way concept, and therefore pursuit of mechanisms that increase transparency of the economic value of infringing use is equally key.

[6] Major SEP licensors have announced their licensing rate for 5G SEP patent portfolios recently, including, Qualcomm, Ericsson, Nokia, Interdigital, as well as patent pools Sisvel, Via Licensing, and Avanci.