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SEPs In The Wake Of Qualcomm: 4 Patenting Issues

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This article is the first in a series of articles that are designed to examine key standard-essential patent issues that are shaping the usage and treatment of SEPs now and for years to come. This article will cover the top four considerations when patenting standardized technologies; the second in the series will cover the top four considerations when seeking to enforce SEPs; and the third will cover the top four considerations when defending against SEP attacks.

Introduction

As emerging standards, such as 5G, become increasingly adopted, the impact of SEPs will become even more significant. For example, obtaining a patent that is essential to a standard, or that may become essential to a future standard, may yield a large number of potential infringers and potentially infringing products. SEP holders may choose to monetize their SEPs by aggressively licensing them.

As the proliferation and relative importance of SEPs continues to increase, it will become increasingly imperative for SEP holders and SEP applicants to carefully consider the choices that they make during the SEP procurement and declaration processes as those choices will have an enormous impact on their ability to enforce and license their patents in the future.

SEPs are more relevant now than ever. The value of SEPs continues to grow in view of emerging Alice case law as well as new U.S. Patent and Trademark Office guidelines providing guidance for patent eligibility.[1] Under this emerging landscape, the development of strong SEPs and diverse SEP portfolios has become even more valuable.

Qualcomm Inc. displayed this type of diverse SEP portfolio strategy in the widely discussed Federal Trade Commission v. Qualcomm case.[2] As massive judgments and settlements continue to occur in common SEP fields such as wireless communications, the question of whether to declare a patent as essential to a standard is as important as ever.[3] But the potential benefits of pursuing an SEP must be balanced with an understanding of the potential consequences that may result.

In fact, several of these consequences were also highlighted in the recent Qualcomm case where the district court enjoined Qualcomm from continuing various licensing practices relating to its SEPs — finding that its tactics were anti-competitive — and requiring Qualcomm to make exhaustive SEP licenses available to rival chip manufacturers on fair, reasonable and nondiscriminatory terms. In view of these considerations, this article will address the top four things to know when seeking to obtain a patent directed toward a standardized technology.

Obtaining a Strong Patent Comes First

While a primary focus of drafting an SEP application may be to cover elements essential to a standardized technology, the application itself should also consider how the technology might evolve in the future and what industries are likely to adopt the technology. Doing so will help ensure the resulting SEP has the broadest reach and longest usefulness possible.

When taking these considerations into account, drafters should seek to vary the scope of the claims to target different potential infringers. For example, drafting claims to target different infringers along a supply chain, and different levels of implementation of the technology, will aid in variability as well as help guard against unexpected changes in the adoption of the underlying technology. For example, if the standardized technology is a communication protocol, drafters could draft claims directed to a method of performing the communication protocol, a specific integrated circuit that uses the protocol, or even an end-user electronic device that uses the protocol.

As seen from the recent Qualcomm case, Qualcomm also uses this portfolio diversity approach. In particular, "[Qualcomm] holds and licenses three broad categories of patents: (1) cellular standard essential patents ("SEPs"); (2) non-cellular SEPs; and (3) non-SEPs, which also are known as implementation patents. ... Cellular SEPs are patents necessary to practice a particular cellular standard. ... By contrast, non-cellular SEPs are necessary to the practice of a non-cellular standard."[4]

While Qualcomm primarily licenses its patents on a "portfolio bases" where licensees receive rights to all three categories of Qualcomm patents, Qualcomm also occasionally offers separate licenses to its SEPs.[5] Qualcomm explained that licensing the entire diverse portfolio is preferable, however, because licensing the portfolio yields a higher royalty rate than SEP-only licenses.[6]

To illustrate an application of this strategy to a future standardized technology such as the emerging 5G standard, implementers may use 5G communications in many different industries, such as automobiles, home appliances, smart sensors or robotics. Varying claim scope to cover such industries would aid in generating a broad SEP portfolio covering different applications. A best practice would be to generate a portfolio having SEPs directed to the standard itself while also having different patents, or different claims within each patent, directed to different applications of the standardized technology. The broad coverage from this type of SEP portfolio may also provide avenues for survivability against potential invalidity challenges.

While varying claim scope will aid in SEP survivability as well as broad infringement coverage, the variation of claim scope may impact royalty rate calculations when enforcing SEPs. During litigation, judges and juries will attempt to quantify the value of an SEP as it relates to the standardized technology and to the infringing product, each of which will vary depending on whether the SEP covers an entire end product or a subcomponent of the end product. By having a portfolio with varying scope, the claims can address each of these issues and aid in maximizing a received royalty.

In addition to varying claim scope, drafters should also take caution to avoid certain pitfalls that would reduce the strength of an SEP application, such as claims being subject to divided infringement and easy design around alternatives. Other considerations may be specific to the particular standardized technology. For example, drafters should consider whether an invention is a required part or an optional part of the standardized technology. Essentiality and infringement may be more difficult to prove when claims are drafted only toward optional features.

Other considerations include whether the claims allow for infringement to be easily detected, and whether the standardized technology is emerging (and subject to change) — i.e., standards directed toward artificial intelligence, blockchain and 5G — or a legacy technology such as 4G. Each of these considerations must be carefully weighed when seeking to obtain a patent directed toward a standardized technology.

Different Standards-Setting Organizations Have Different SEP Disclosure Rules

While pursuing an SEP, a company may also be participating in the development of the standard they are seeking to obtain a patent on. Different standards-setting organizations have different rules for participating in the development of a standard and may require the disclosure of patents and applications relevant to the standard. If a company wishes to obtain an SEP directed toward a technology governed by such an SSO, the company must understand and adhere to these rules.

These rules are generally codified in a series of contracts between companies and SSOs — e.g., SSO membership application, intellectual property rights policies, assertion forms and different SSOs may have different contract terms and may be subject to different jurisdictions governing the enforcement of those contracts.

The IP rights policies for the Institute of Electrical and Electronics Engineers and Internet Engineering Task Force provide good examples to illustrate these points. The IEEE is a professional association for electrical and electronic engineering, telecommunications and computer engineering.[7] The IEEE Standards Association is an organization within the IEEE responsible for developing global standards, such as the Wi-Fi standard (IEEE 802.11).[8] The IEEE-SA utilizes bylaws that describe the process of adopting a standard.[9]

First, an IEEE-approved organization must sponsor a standard and provide public notice of the intent to develop a standard.[10] At this point, the IEEE-SA expects interested members with IP rights relevant to the proposed standard to come forward and provide a letter of assurance.[11] The bylaws indicate that the letter of assurance should be provided prior to the approval of the standard.[12] While the IEEE encourages the disclosure of IP rights that are potentially relevant to a standardized technology, the IEEE does not explicitly provide consequences for lack of disclosure.[13]

In contrast to the IEEE, the IETF explicitly requires disclosure of potential IP rights if a party wishes to participate in the development of a standard.[14] The IETF maintains standards related to internet architecture and internet communications. Contributors to standards and participants in the IETF are required to disclose IP rights that may be relevant to a standard.[15]

Contributing to or participating in IETF activities related to a standardized technology without making required IP rights disclosures is a violation of IETF policy.[16] A failure to disclose relevant IP rights may result in sanctions from the IETF that may prevent the company from further contributing to or

participating in IETF activities.[17] While the IETF requires contributors to disclose patents, the IETF does not maintain any positions on applicability to a standard or validity of patents.[18]

While these types of SSO disclosure requirements have not been challenged legally, the European Commission (the executive branch of the European Union) has recently criticized SSOs for their handling of disclosures.[19] The European Commission has acknowledged that SSOs typically maintain databases that collect "large amounts of declaration data" but has criticized SSOs for not providing "user-friendly accessibility to interested parties" and "lack[ing] essential quality features."[20]

In response to these issues, the European Commission has called on SSOs to update their declaration systems to provide up-to-date information on SEPs.[21] The European Commission has suggested disclosing up-to-date ownership or licensor status for an SEP, reporting the main outcomes of "final decisions, positive or negative, on declared SEPs (including on essentiality and patent validity)" and requiring that SEP owners "at least make reference to the section of the standard that is relevant to the SEP and to the link with the patent family."[22]

In view of these guidelines, SEP owners may face updated disclosure requirements in the near future. The difference in these disclosure requirements highlights the importance of gaining a full and complete understanding of the disclosure requirements put in place by each SSO.

The Pros and Cons of Declaring Your Patent Essential to a Standard

However, understanding the disclosure requirements put in place by a particular SSO is only half the battle. Next, SEP holders and applicants must then decide whether it is in their best interests to make an affirmative declaration that their patent or application is essential to a standard. Here, we address the considerations on both sides and explain several factors to consider when deciding whether to declare a patent or patent application as essential to a standardized technology.

The Pros

One of the major benefits of declaring a patent or patent application as essential to a standard is the stronger negotiating position provided during enforcement. Owning an asset alleged to be essential to a standardized technology inherently means that any implementers utilizing the standard will be infringing your patent. Infringement is easier to prove and designing around the standardized technology will be difficult — assuming the patent is truly essential to the standard. Implementers will likely face difficulties using nonstandard technology. Similarly, widely adopted standards will implicate a large number of companies and products. In this case, the large number of potential infringers may lead to larger royalties.

These benefits for SEP holders, and corresponding challenges for SEP implementers, are the driving force behind the recent proliferation of patent pools directed toward SEPs. For example, Avanci LLC uses these understood realities of SEPs to bring SEP holders/licensors and SEP implementers/licensees together. To date, Avanci has signed up about 30 licensors and about a dozen licensees and procured licensee agreements with several auto manufacturers at a royalty rate of about $15 per vehicle.[23]

Additionally, if a company participates in the early stages of a standard-setting process, there is a higher likelihood that the specific technology being advocated for by that company eventually becomes adopted as the standard. Therefore, the underlying patents and applications owned by that company have a higher likelihood of reading on the ultimately adopted standard. And since many SSOs require, or

encourage, participating companies to disclose their IP rights (effectively a standard-essential declaration), a company may find that disclosing their patent or application to the SSO and being able to exert its influence on what technology is adopted as the standard is advantageous to not disclosing its patent or application and having no influence on whether the technology that it developed is adopted as the standard.

The Cons

On the other hand, a drawback of declaring a patent or patent application as essential to a standard is the loss of some enforcement or licensing rights. For example, an explicit condition for declaring a patent as essential is an agreement to license the SEP on fair, reasonable and nondiscriminatory terms. Standard-essential declarations may then force companies into licensing their SEPs on acceptable FRAND terms and may further prevent the companies from charging potentially higher royalty rates.

Similarly, in many cases, injunctive relief becomes more difficult to obtain. For example, the IEEE's IP rights disclosure requirements include a prohibition against seeking injunctions or exclusion orders against implementers so long as the implementers are not acting or negotiating in bad faith.[24] Moreover, the potential consequences can become even more complicated as these FRAND obligations may subject companies to unfavorable contract laws, antitrust issues and unpredictable FRAND decisions.[25]

As an example of how these drawbacks can play themselves out, we again look to the recent Qualcomm case. In that case, the court ruled that Qualcomm's licensing practices in the markets for code-division multiple access and premium long-term evolution modem chips violated Sections 1 and 2 of the Sherman Act and Section 5 of the Federal Trade Commission Act, were anti-competitive and harmed consumers.[26]

The court subsequently enjoined Qualcomm from continuing these practices, stating specifically that: (1) it could no longer condition the supply of modem chips on a customer's patent license status; (2) it cannot enter into express or de facto exclusive dealing agreements for the supply of modem chips; (3) it must make exhaustive SEP licenses available to rival chip manufacturers on fair, reasonable and nondiscriminatory terms; (4) it cannot interfere with a customer's ability to communicate with a government agency about potential law enforcement or regulatory matter; and (5) it must submit to compliance and monitoring procedures for seven years.[27]

Additionally, on the issue of validity, declaring a patent as essential to a standard may provide a guided path to implementers to invalidate the SEP. For example, if the SEP is merely directed to an incremental improvement to an existing standard, a challenger may be able to prove that the improvement was obvious. Specifically, the challenger may be able to use a combination of a prior standardized technology with SSO working group documents to show the obviousness of the SEP.

As a result, a company considering whether to declare its patents or patent applications as essential to a standardized technology should carefully consider how closely their claims track the standard, each SSO's disclosure requirements, and its own short and long term goals for its IP rights.

Declaring Your Patent as Being Essential to a Standard Is Not a Guarantee

If a company ultimately decides to declare its intellectual property as essential to a standard, an important detail to keep in mind is that SSOs rarely vet or comment on the applicability of a declared

patent to a standard or the validity of the patent in general. Further, even if an SSO identifies a patent as potentially being part of a standard, a court could completely disagree. Thus, an SSO's acknowledgment of a patent as being essential to a standard is not a guarantee of enforceability.

Consider the following example, the IEEE-SA bylaws indicate that patent owners should provide letters of assurance prior to the approval of the standard[28] and expressly state that the IEEE is not responsible for "identifying Essential Patent Claims for which a license may be required," nor is it responsible for "determining whether any licensing terms or conditions … are reasonable or non-discriminatory."[29] Upon receiving a letter of assurance, a statement indicating that the patent may be applicable to the standard is simply listed on the IEEE-SA website.[30]

The IETF operates in a similar manner taking "no position regarding the validity or scope of any intellectual property rights or other rights that might be claimed to pertain to the implementation or use of the technology described in any IETF documents … nor does it represent that it has made any independent effort to identify any such rights."[31] Patent owners simply complete a form indicating the type of license they are willing to provide.[32]

In this manner, declaring to an SSO that a patent is essential to a standard provides no guarantees when trying to enforce the SEP. Courts have further explained that the determination of whether a particular patent is essential to a standard is a factual question requiring examination beyond a mere declaration.[33] Further, jurisdictions around the world are experimenting with ways to verify whether claims are essential to a standardized technology.

For example, the previously described European Commission has proposed several approaches including having SSOs confirm essentiality, coordinating with patent offices to perform independent essentiality checks, and establishing an independent European body tasked with essentiality assessments.[34]

Similar approaches have been recently advocated for by industry players such as Raymond Millien, vice president and global chief intellectual property counsel for Volvo Car Corporation, and Jan Schnitzer, general counsel and head of IP at u-blox AG[35], and commentators such as former USPTO Director David Kappos, and may be adopted in the United States in the near future. In this manner, patent owners may be required to prove essentiality under a moving target of laws and procedures. Merely relying on the implementation of a standard as being evidence of infringement may be insufficient to enforce a declared, but unproven, SEP.

Conclusion

While SEPs are enticing assets to pursue as standardized technologies continue to emerge, patent owners should understand several aspects of the process for obtaining SEPs. In particular, patent owners should employ best practices for patent drafting to obtain a patent or patent portfolio resilient against invalidity challenges, essentiality challenges, future changes to the underlying standard, and potential design around alternatives.

Further, patent owners should understand their obligations to SSOs as well as SSO policies regarding patent disclosure and FRAND obligations beyond just a royalty rate. Finally, patent owners should also understand that a mere declaration that a patent is essential to a standard may not be sufficient when attempting to enforce an SEP during litigation. Each of these considerations should be taken into account when drafting an SEP application — including the level of detail to include in the specification

and the appropriate scope to pursue in the claims — when participating in a standard setting process and when determining whether to declare a patent as essential to a standard.

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[1] USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance (January 7, 2019), https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf

[2] Fed. Trade Comm'n v. Qualcomm Inc., Findings of Fact and Conclusions of Law, Case No. 17-CV-00220-LHK (N.D. Cal. May 21, 2019), https://www.ftc.gov/system/files/documents/cases/qualcomm_findings_of_fact_and_conclusions_of_law.pdf. This decision is currently on appeal to the 9th U.S. Circuit Court of Appeals.

[3] See Dani Kass, Intellectual Ventures Striking Deals In Wireless IP Fights (June 19, 2019), https://www.law360.com/articles/1170451/intellectual-ventures-striking-deals-in-wireless-ip-fights; Dave Simpson, T-Mobile Owes IV $34M, Ericsson Owes $9M: Patent Trial Jury (February 8, 2019), https://www.law360.com/articles/1127627/t-mobile-owes-iv-34m-ericsson-owes-9m-patent-trial-jury.

[4] Fed. Trade Comm'n v. Qualcomm Inc., Findings of Fact and Conclusions of Law at 6 (internal citations omitted).

[5] Id.

[6] Id.

[7] IEEE, About IEEE, https://www.ieee.org/about/index.html.

[8] IEEE Standards Association, IEEE 802.11-2016 IEEE Standard for Information Technology, https://standards.ieee.org/standard/802_11-2016.html.

[9] See generally, IEEE, IEEE-SA Standards Board Bylaws (March 2019), http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf.

[10] IEEE-SA Patent Policy, 10 (April 24, 2019), https://development.standards.ieee.org/myproject/Public/mytools/mob/patut.pdf.

[11] Id.

[12] IEEE-SA Standards Board Bylaws, 6.2, paragraph 2.

[13] If a Letter of Assurance cannot be obtained, the matter will be referred to the Patent Committee who will consider the conduct and make a recommendation to the IEEE-SA Standards Board. IEEE-SA

Standards Board Bylaws at 6.2; IEEE-SA Patent Policy, 11.

[14] Internet Engineering Task Force (IETF), RFC 8179 – Intellectual Property Rights in IETF Technology (May 2017), https://tools.ietf.org/html/rfc8179.

[15] See RFC 8179 ("Any Contributor who reasonably and personally knows of IPR meeting the conditions of Section 5.6 which the Contributor believes Covers or may ultimately Cover his or her written Contribution that is intended to be used as an input into the IETF Standards Process, or which the Contributor reasonably and personally knows his or her employer or sponsor may assert against Implementing Technologies based on such written Contribution, must make a disclosure in accordance with Section 5.")

[16] See RFC 8179, section 6 (Failure to Disclose – "Contributing to or Participating in IETF activities about a technology without making required IPR disclosures is a violation of IETF policy.")

[17] Id.

[18] Id. at section 4 (The IETF "disclaim[s] any responsibility for identifying the existence of or for evaluating the applicability of any IPR, disclosed or otherwise, to any IETF technology, specification, or standard, and will take no position on the validity or scope of any such IPR."); see also IETF, Intellectual property rights, https://www.ietf.org/standards/ipr/

[19] See European Commission, Communication From the Commission to the European Parliament, the Council and the European Economic and Social Committee – Setting Out the EU Approach to Standard Essential Patents (November 29, 2017), 3, https://ec.europa.eu/docsroom/documents/26583/attachments/1/translations/en/renditions/native .

[20] Id.

[21] Id. at 3-4.

[22] Id.

[23] See Business Wire, The Avanci Licensing Platform Adds SK Telecom, ASUSTeK and Datang Mobile as New Patent Owners (July 10, 2019), https://www.businesswire.com/news/home/20190710005020/en/Avanci-Licensing-Platform-Adds-SK-Telecom-ASUSTeK; see also Avanci, PRICING, http://avanci.com/pricing/

[24] See IEEE-SA Patent Policy, 32; IEEE-SA Bylaws at 6.2.

[25] Matthew Bultman, International Patent Roundup: European FRAND Edition (August 2, 2019), https://www.law360.com/ip/articles/1184562/international-patent-roundup-european-frand-edition?nl_pk=a8cf340c-5be5-4920-903c-80ba96df438d&utm_source=newsletter&utm_medium=email&utm_campaign=ip

[26] See Fed. Trade Comm'n v. Qualcomm Inc., Findings of Fact and Conclusions of Law, 18-22, 208-16

[27] Id. at 227-33.

[28] See IEEE-SA Bylaws at 6.2; IEEE-SA Patent Policy, 10.

[29] IEEE-SA Bylaws at 6.2.

[30] IEEE-SA Patent Policy, 35.

[31] IETF, Intellectual property rights, https://www.ietf.org/standards/ipr/

[32] See IETF, The Patent Disclosure and Licensing Declaration Template for Specific IPR Disclosures, https://datatracker.ietf.org/ipr/new-specific/

[33] See Cellular Communications Equipment LLC v. HTC Corp., 6:16-CV-363-KNM, Order Denying Motion for Summary Judgment (August 9, 2018); see also In re Certain Magnetic Data Storage Tapes and Cartridges Containing the Same (Fujifilm v. Sony), 337-TA-1012, Notice of Commission Final Determination of Violation of Section 337 (March 8, 2018).

[34] European Commission, Communication From the Commission to the European Parliament, the Council and the European Economic and Social Committee – Setting Out the EU Approach to Standard Essential Patents at 5

[35] Raymond Millien and Jan Schnitzer, The EPO should rule on SEPs, say top European auto patent players (September 7, 2018), https://www.iam-media.com/frandseps/millien-epo-seps