

Submission to the Seoul High Court from ACT | The App Association Regarding Irreparable Harm to Public Interest

August 11, 2017

ACT | The App Association¹ (the App Association) respectfully submits its view that a stay of the Korea Fair Trade Commission's (KFTC's) Corrective Order concerning Qualcomm's licensing practices would cause irreparable public harm by weakening confidence in enforcement of the principles that underpin international standardization and that are relied upon by many stakeholders in multiple ecosystems to effectively implement critical technology standards. Moreover, and more specifically, allowing Qualcomm's licensing practices found by the KFTC to be abusive and coercive to continue for the period of appeal will cause (i) harm to competition by continuing to impose increased costs on Qualcomm's few remaining rivals that negatively impact their profitability and incentives to innovate, and (ii) harm to consumers in the form of higher prices and less choices. These are serious harms that cannot be recouped or mitigated. At this juncture, it is also critical that the mobile and digital ecosystems, including the next generation of telecommunications standards (5G), the internet of things (IoT), and related industries, are allowed to develop and deploy without the threat of abusive licensing practices as they pertain to standard essential patents (SEPs).²

The App Association believes that it is imperative that patent owners who voluntarily contribute their patented technologies for standardization, and who voluntarily commit to license their patents on fair, reasonable, and non-discriminatory (FRAND) terms, fully abide by their obligations. These FRAND obligations are designed to address competitive concerns arising from industry collaboration during the standardization process. However, the breach of FRAND obligations and the resulting abuse of the technology market power acquired from SEPs create significant, competitive concerns. The App Association commends the KFTC's leadership in applying competition law to ensure that Qualcomm begins to honor its FRAND obligations and stops harming competition and consumers caused by its complex and coercive licensing scheme. A stay of the KFTC's corrective measures by the court would allow Qualcomm to perpetuate its market dominance and expand it to next-generation 5G technology in a way that could not be reversed later when the KFTC's corrective orders eventually would be implemented.

¹ ACT| *The App Association*, ACTONLINE.ORG, <http://actonline.org/about/> (last visited June 8, 2017).

² This submission reflects the positions of The App Association and may not reflect the individual corporate position of each individual member.

I. Statement of Interest

The App Association is an industry organization comprising more than 5,000 application, or app, companies and information technology firms operating globally in and around the mobile and digital economies, representing a \$143 billion economy.³ Members rely on and leverage global standards, including technology standards for wireless communication, to innovate, commercialize new web applications, enhance consumer choice, and stimulate economic growth. The App Association is deeply interested in ensuring a fair, efficient ecosystem for all with respect to technical standards.

In line with our members' core interests in this area, the App Association has established an initiative known as "All Things FRAND"⁴ which has adopted and advocates for the following consensus principles to prevent patent "hold up" and anti-competitive conduct:⁵

- Fair and Reasonable to All — A holder of a SEP subject to a FRAND commitment must license such SEP on FRAND terms to all companies, organizations, and individuals who implement or wish to implement the standard.
- Injunctions Available Only in Limited Circumstances — Injunctions and other exclusionary remedies should not be sought by SEP holders or allowed except in limited circumstances. The implementer or licensee is always entitled to assert claims and defenses.
- FRAND Promise Extends if Transferred — If a FRAND-encumbered SEP is transferred, the FRAND commitments follow the SEP in that and all subsequent transfers.
- No Forced Licensing — While some licensees may wish to get broader licenses, the patent holder should not require implementers to take or grant licenses to a FRAND-encumbered SEP that is invalid, unenforceable, or not infringed, or a patent that is not essential to the standard.
- FRAND Royalties — A reasonable rate for a valid, infringed, and enforceable FRAND-encumbered SEP should be based on several factors, including the value of the actual patented invention apart from its inclusion in the standard, and cannot be assessed in a vacuum that ignores the portion in which the SEP is substantially practiced or royalty rates from other SEPs required to implement the standard.

³ Brian Scarpelli, Nick Miller, & Roya Stephens, *State of the App Economy*, ACT | THE APP ASSOCIATION (5th ed., Apr. 21, 2017), at <http://actonline.org/2017/04/20/state-of-the-app-economy-report-outlines-growth-dynamism-of-the-app-ecosystem/>.

⁴ See <http://allthingsfrand.com> (international resource and repository for information and developments involving SEPs, including completion law issues and actions).

⁵ See *Principles for Standard Essential Patents*, ABOUT ALLTHINGSFRAND.COM (last accessed June 8, 2017), at <https://allthingsfrand.com/about/>.

As a global industry association with significant experience in standards,⁶ FRAND, SEPs, and related competition law matters, the App Association respectfully offers our perspective to the Court in evaluating the important issues raised in this case. Specifically, we address how the Court's resolution of Qualcomm's motion to stay the KFTC's corrective orders may impact small business innovators during this critical time of development and deployment for new "Fifth Generation" (5G) and IoT technologies.

II. 5G and Internet of Things Technologies are Poised to Provide Immense Public Benefit

While there is no universal definition for a 5G mobile network, the term encompasses the future wave of interoperable mobile networks being driven through various technical standards bodies today. 5G networks are expected to utilize a wide range of spectrum bands, both licensed and unlicensed, through new and innovative spectrum efficiencies and spectrum sharing arrangements. Standard bodies such as the 3rd Generation Partnership Project (3GPP) and the Institute of Electrical and Electronics Engineers (IEEE), among many others, continue to develop the requirements.⁷

Utilizing 5G deployments, IoT will involve everyday products that use the internet to communicate data collected through sensors.⁸ Forecasts estimate that 8.4 billion IoT devices will be in use worldwide this year (up 31 percent from 2016), and that this number will climb to 20.4 billion by 2020.⁹ With machine-to-machine products projected to account for more than half of connected products by 2021,¹⁰ IoT is expected to enable improved efficiencies in processes, products, and services across every sector. In key segments of the global economy, from agriculture to retail to healthcare, the rise of IoT is demonstrating efficiencies unheard of even a few years ago.

⁶ For an explanation of how standards "simplify product development" and "reduce transaction costs," see Brief of Amicus Curiae The Institute Of Electrical and Electronics Engineers, Inc., in support of No Party, *Apple, Inc. v. Motorola, Inc.*, No. 2012-1548, at 4 (Fed. Cir. 19 Dec. 2012) ("IEEE Amicus Brief") and EU Submission to OECD Competition Committee, Standard Setting DAF/COMP (2010) 33, 8 March 2011, at 197.

⁷ See 3GPP, *The Mobile Broadband Standard, Tentative 3GPP Timeline for 5G* (Mar. 17, 2015), at http://www.3gpp.org/news-events/3gpp-news/1674-timeline_5g; see also IEEE Standards Association, Internet of Things, at <http://standards.ieee.org/innovate/iot/>.

⁸ See, e.g., Department of Commerce Internet Policy Task Force and Digital Leadership Team, *Fostering the Advancement of the Internet of Things* (Jan. 2017), available at https://www.ntia.doc.gov/files/ntia/publications/iot_green_paper_01122017.pdf.

⁹ Press Release, *Gartner Says 8.4 Billion Connected "Things" Will Be in Use in 2017, Up 31 Percent From 2016* (Feb. 7, 2017), available at <http://www.gartner.com/newsroom/id/3598917>.

¹⁰ Stephanie Condon, *Report: IoT to Dominate Connected Device Landscape by 2021*, (June 8, 2017, 12:00 am) found here: [http://www.zdnet.com/article/report-iot-devices-to-dominate-connected-device-landscape-by-](http://www.zdnet.com/article/report-iot-devices-to-dominate-connected-device-landscape-by-2021/?mkt_tok=eyJpIjoiWkRBek5USmhNV1ZpTXpreilsInQiOiJpOFV0Y214VHdGdmU5K2UrSmdhSXA0dUJCXC9laEFsMUpYUmx0ZkxHUEZkM2RURzdFOTFRmYxbDRTR1REaVpldWtvMTFLeGFDTDJJaYUx0TnlRWjV6Y3JBc09kQ25vejczazBaRzVOd01JS1dndjB6dnYzY1pjMDBuNVdiUDVPQVEifQ%3D%3D)

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If their potential is realized, future 5G networks will revolutionize society across regions and industries. In our *State of the App Economy* report, we explore how companies, even those unaffiliated with the information and communication technology sector, are affected by this ever-evolving, interconnected IoT ecosystem. Almost without exception, IoT innovations depend upon wireless network use. For instance, Swisslog – a company specializing in integrated automation solutions – developed “SmartLift” technology, which creates an indoor, localized GPS network to aggregate data from sensors on forklifts and directional barcodes placed around a warehouse.¹¹ This technology allows warehouse managers to access analytics through their tablets or mobile phones to optimize productivity and receive real-time, near-perfect inventory reports. Bobcat, an equipment company, has deployed Swisslog’s technology in its warehouse and experienced a 30 percent increase in pallets loaded per hour “with no inventory errors.”¹² This innovation, and countless others, would not be possible without the ability for highly-integrated and interoperable technologies to access wireless networks.

All of these innovations rely on standards, and the Court’s decision whether to allow the KFTC’s decision to stand unencumbered by a judicial stay is critical to the wireless technological standard ecosystem. If the Court permits a stay of the KFTC’s Corrective Order, it will cause significant harm not only to the current LTE/CDMA ecosystems, but also likely impair the overall ability for the emerging 5G ecosystem to grow, robbing the public of many of the benefits of IoT. It is, therefore, essential for the Court to deny Qualcomm’s motion to stay the KFTC’s corrective orders so as to ensure the development of next generation communication technologies.

III. Competition is Stifled, Innovation is Impaired, and Consumers are Harmed When FRAND Commitments Are Not Honored

A patent holder normally can refuse to license its patents. However, this ability to exclude others is impacted once the patented technology has been committed to a standard and the patent-holder voluntarily promises to make licenses available to anyone who wishes to implement the standard on FRAND terms. The FRAND commitment is the price the patent holder pays in exchange for access to the much greater licensing opportunities that are created by standardizing its technology.

¹¹ Swisslog, *Big Data Meets Forklifts: Smart Inventory, Labor, and Forklift Tracking*, Found here: file:///Users/joelthayer/Downloads/SmartLIFT_Brohure.pdf.

¹² See *id.*

The KFTC found that Qualcomm “refused to execute license agreements with competing modem chipset manufacturers even if they requested the licensing of cellular SEPs that are essential for the manufacture, sale, and use of modem chipsets and offered ‘restricted agreements’ only” (KFTC at par. 88).¹³ Such refusals to license to competitors violate the basic FRAND commitment to license on a non-discriminatory basis. A stay allowing such conduct to continue threatens to undermine the most basic foundation of standardization and would create perverse incentives for others to manipulate the standards process in order to establish and exert market power.

The App Association and the KFTC are not alone in recognizing these principles as several regulators in other notable jurisdictions have offered similar guidance in recent years, including:

- Europe
 - The European Commission’s guidelines regarding horizontal cooperation agreements, published in 2011, stress that standard setting organizations should adopt policies on intellectual property rights (IPR) that require participants to commit “to provide an *irrevocable* commitment in writing to offer to license their essential IPR to all third parties on fair reasonable and non-discriminatory terms.” Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreement, Par. 285 (Jan. 14, 2011)(; emphasis added)[hereinafter “101 Guidelines”].
 - In 2014, the European Commission explained that FRAND commitments are “designed to ensure effective access to a standard for all market players to and prevent ‘hold-up’ by a single SEP holder.” *Antitrust: Commission finds that Motorola Mobility infringed EU competition rules by misusing standard essential patents*, European Commission Press Release (Brussels, 29 April 2014); available at http://europa.eu/rapid/press-release_IP-14-489_en.htm (emphasis added)
- China
 - In 2015, China’s State Administration for Industry and Commerce issued a regulation identifying a refusal to license FRAND-encumbered SEPs to implementers as an abuse of intellectual property rights if it eliminates or restricts competition without justification. Regulations on Prohibiting Abuse of Intellectual Property Rights to Eliminate or Restrict Competition, Art. 13(b) (Promulgated by Order No. 74 of the State Administration for Industry and Commerce on April 7, 2015).

¹³ The full cite is Decision *In the Matter of Qualcomm*, Korea Fair Trade Commission (2017) [hereinafter “KFTC”].

- Japan
 - Last year, the Japan Fair Trade Commission updated its intellectual property guidelines to state that a refusal to license can be considered exclusionary conduct under its antimonopoly law. See Guidelines for the Use of Intellectual Property under the Antimonopoly Act, Part 3, Section 1(i)(e) (January 21, 2016); available at http://www.jftc.go.jp/en/pressreleases/yearly-2016/January/160121.files/IPGL_Frand_attachment.pdf.

Thus, a number of jurisdictions understand that competition law is needed to remedy refusals to license FRAND-encumbered SEPs because of the resulting harm to the competitive process and consumer welfare. As to the likely effects of Qualcomm's refusal to license its competitors, the KFTC found: "(i) it directly causes a risk of business interruption due to discontinuation of the sale of modem chipsets to competing modem chipset manufacturers; (ii) it results in an increase of costs for the competing modem chipset manufacturers; (iii) it operates as an entry barrier to a potential competitor; (iv) it disturbs business activities of other competitors which provides [Qualcomm] with a more advantageous position than other competitors through their refusal to enter into license agreements as well as their application of unfair contractual terms; (v) as a result, a number of competitors will exit from the market or discontinue their business, whereas [Qualcomm's] market share in the whole modem chipset market will increase and their position in the market will solidify; and (vi) it will become more difficult to control [Qualcomm's] abuse of dominance as a monopolistic and vertically integrated enterprise that violates the FRAND commitments." (KFTC at par. 272).

The accumulation of these significant effects resulting from the synergistic impact of Qualcomm's licensing practices likely will further impede innovation and consumer benefits that healthy competition in implementing the standard would otherwise create. Across the globe, competition laws allow standard-setting to occur among competitors under certain circumstances in order to gain value and efficiencies that serve the public interest. Allowing Qualcomm's conduct, once recognized as anti-competitive, to continue even temporarily would undercut the very public interest that is inherent in the standardization process.

IV. Innovation Will Be Stymied If SEP Holders Are Allowed to Charge Licensing Rates Based on Downstream Use

Although the App Association believes that a holder of FRAND-encumbered SEPs is entitled to a licensing fee for use of its patented technology, such SEP holders should not be entitled to any additional compensation attributable to the value of standardization or to the innovation and creativity of others.¹⁴

The KFTC found that Qualcomm “bypassed licensing (their SEPs) at the stage of modem chipsets and provided licenses at the cell phone stage, thereby charging cell phone manufacturers royalties based on the entire revenue of cell phone sales” (KFTC at par. 69). The App Association is significantly concerned that such downstream “use-based” licensing practices for FRAND-encumbered SEPs are unfair, anti-competitive and in violation of the FRAND commitment because the patent owner seeks compensation in excess of the value of his respective patent and appropriates the value created through the investment, inventions, and technologies that our member companies and others create.

As a result, such practices impede competition and discourage the generation and development of new applications that use standardized technology. It is this ability to benefit from the interoperability and cost effectiveness of standardization that allows the Association’s members to succeed. If such unfair practices are allowed to continue, the immediate impact will be on innovation and competition; in the end, the ultimate impact will be borne by consumers in terms of limited choice and higher prices.

The case at issue here comes at a particularly sensitive time as we sit at the cusp of realizing new 5G deployments that will drive IoT developments. Communications standards have moved, and are continuing to move, far beyond traditional telephony. New uses and new industries are developing around these standards through the creativity and ingenuity of organizations, businesses and people like the App Association’s members. Just as SEP holders are entitled to recognition and compensation for their inventions, our members deserve the same for their vision and ingenuity in innovating. Compensation for using certain patented technology in standards should not depend on whether the entity accessing it is a person or a machine, or whether the product used to access it is a sensor, cell phone, or self-driving car.

¹⁴ According to the European Commission, “*the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether the fees bear a reasonable relationship to the economic value of the IPR.*” Article 101 Guidelines, § 289. If feasible, this entails comparing “*the licensing fees charged by the company in question for the relevant patents in a competitive environment before the industry has been locked into the standard (ex ante) with those charged after the industry has been locked in (ex post).*” *Id.*

V. If Qualcomm's Behavior is Allowed to Persist, It Will Have a Pernicious and Irreparable Effect on Competition, Consumers and Innovation

A stay, even if temporary, will convey a tolerance for, and even a rewarding of, abusive licensing practices. Should the Court allow this, such a message has an effect far greater and wider than the issues in the current case. If abuse of the standardization process is not discouraged, then other holders of FRAND-encumbered SEPs will be encouraged to engage in the same behavior, secure in their knowledge that, even if addressed by the KFTC or other antitrust regulators, the behavior can continue for years. As the Court is aware, stays can last for years in cases such as these. Thus, if the Court were to grant Qualcomm's motion for a stay, it would single-handedly preserve the status quo for bad actors and the types of harms clearly demonstrated by the KFTC in justifying its Corrective Order.

The status quo in this instance, as determined by the KFTC, concerns serious market abuses from Qualcomm in procuring and engaging in anticompetitive conduct. The prudent course of action for the Court to ensure the stability of this innovative market space is to give effect to the orders of the national competition authority and deny Qualcomm's request for a stay. Such a decision would promote the integrity of FRAND obligations, and engender sustainability for the small-innovator tech community reliant on these standards and corresponding obligations. Most importantly, however, unless the stay motion is denied, the public interest will be significantly harmed through the ripple effect of Qualcomm's continued behavior. Therefore, it is essential for the Court to deny a stay of the KFTC's orders proceeding and restore balance to SEP license negotiations.

VI. Conclusion

The App Association has stressed how critical it is to the general public interest that FRAND commitments are enforced to ensure the right balance between patent licensor and licensee. And while FRAND promises are very important, they are meaningless - and undermine innovation, particularly for small businesses - when ignored during subsequent licensing negotiations. The App Association thus urges the Court to carefully and deliberately consider the views of and impact on all relevant stakeholders as it weighs the effects of a potential stay of the KFTC's Corrective Orders.

We thank the Court in advance for its consideration of our concerns.

Sincerely,

A handwritten signature in black ink that reads "Morgan Reed". The signature is written in a cursive style and is centered within a light gray rectangular box.

Morgan Reed
President

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