COMMENT OF THE GLOBAL ANTITRUST INSTITUTE, GEORGE MASON UNIVERSITY SCHOOL OF LAW, ON THE KOREA FAIR TRADE COMMISSION’S AMENDMENT TO ITS REVIEW GUIDELINES ON UNFAIR EXERCISE OF INTELLECTUAL PROPERTY RIGHTS

January 3, 2016

This comment is submitted in response to the Korea Fair Trade Commission’s (KFTC’s) December 16, 2015 amendments to its Review Guidelines on Unfair Exercise of Intellectual Property Rights (Amended IP Guidelines). We appreciate the opportunity to comment and commend the KFTC for its commitment to transparency. We submit this comment based upon our extensive experience and expertise in antitrust law and economics generally, and specifically with respect to the intersection of intellectual property and antitrust.¹

General Comments

Overall, we are disappointed by the limited scope of the KFTC’s amendments and concerned that the Amended IP Guidelines do not address the majority of recommendations made by the GAI and others. These include recommendations on cross-licensing, grantbacks, discriminatory licensing, excessive pricing, and other conduct involving standard-essential patents (SEPs) and patent-assertion entities. We reiterate our recommendations from our prior comment (submitted on November 5, 2015 and attached hereto as Appendix A) and respectfully request that the KFTC address these issues.

In particular, we remain concerned that Article III.5.B. would create a competition law sanction for seeking injunctive relief, which is likely to reduce incentives to innovate and deter SEP holders from participating in standard setting, thereby depriving consumers of the substantial procompetitive benefits of standardized technologies. At the very least, this provision should be amended to limit liability to situations in which there is proof that an SEP holder who has made an affirmative commitment to license on fair, reasonable, and non-discriminatory (FRAND) terms has engaged in patent holdup, i.e., that the patent holder used the threat of injunctive relief to demand supra-competitive royalties that are not consistent with prior commitments by the SEP holder. This revision is necessary to avoid the presumption that an SEP holder who seeks injunctive relief will necessarily use that relief (or the threat of it) to

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demand supra-competitive royalties.\textsuperscript{2} That presumption would be unwarranted because, as we explained in our prior comment, markets discourage firms from exploiting the opportunity for holdup (e.g., reputational and business costs tend to deter repeat players from engaging in holdup and “patent holders that have broad cross-licensing agreements with the SEP-owner may be protected from hold-up.”).\textsuperscript{3}

The provision should also be amended to adopt a safe harbor from liability under the Monopoly Regulation and Fair Trade Act (MRFA) similar to that adopted by the European Court of Justice (ECJ) in \textit{Huawei v. ZTE}.\textsuperscript{4} Specifically, an SEP holder that (1) prior to initiating an infringement action, alerts the alleged infringer of the claimed infringement and specifies the way in which the patent has been infringed; and (2) after the alleged infringer has expressed its willingness to conclude a license agreement on FRAND terms, presents to the alleged infringer a specific, written offer for a license, specifying the royalty and calculation methodology, should be free of liability. The ECJ quite properly put the burden on the alleged infringer to “diligently respond” to the SEP holder’s offer, “in accordance with recognized commercial practices in the field and in good faith,” by promptly providing a specific written counter-offer that corresponds to FRAND terms, and by providing appropriate security (e.g., a bond or funds in escrow) from the time at which the counter-offer is rejected and prior to using the teachings of the SEP.\textsuperscript{5} This approach is necessary to take into account the conduct of both the patentee and the accused infringer when considering whether to impose a MRFA sanction.

\textbf{Comments on Amended Provisions}

\textbf{Article I.3(6) – Definition of “Standard-Essential Patent”}

Article I.3(6) defines “standard essential patents” as “patents that are essential to produce products or provide services that implement standard technologies, and that the patent holder has been required to make a commitment to license on Fair Reasonable And Non-Discriminatory (FRAND) terms.” There are two problems with this definition.

\textsuperscript{2} See Anne Layne-Farrar & Koren W. Wong-Ervin, \textit{Methodologies For Calculating FRAND Damages}, LAW360 (Oct. 8-10, 2014), \url{https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-ervin_-methodologies_for_calculating_frand_damages.pdf} (explaining that “the actual practice of hold-up requires two elements: opportunity and action,” and listing a number of market mechanisms that militate against the opportunity for holdup).


\textsuperscript{5} \textit{Id.} ¶¶ 66-67.
First, we are unaware of any standard-setting organizations (SSOs) that “require” a patent holder to make a FRAND commitment. Instead, a FRAND commitment is a voluntary commitment made by a patent holder to an SSO under the specific terms of the SSOs’ Intellectual Property Rights Policy (or bylaws), which vary widely.6 Many SSOs ask participants voluntarily to commit in writing to license their SEPs on FRAND terms (commonly via a Letter of Assurance); with other SSOs, the commitment may be implicit from the patentees’ participation in the standard-setting process per the SSO’s bylaws, which typically have an opt-out provision for patent holders that do not wish to make a commitment. In either case, it is ultimately within the patent holder’s discretion whether to make the commitment, just as it is within the discretion of the SSO not to incorporate in its standard a patent as to which the patentee will not make a commitment.

Second, because of the voluntary nature of FRAND commitments, not all patents found to be essential to implement a given standard are FRAND-assured patents. Therefore, the definition of an SEP should not presume the existence of a FRAND commitment.

Specifically, we respectfully recommend that Article I.3(6) be revised as follows:

(6) “Standard-essential patents” are patents that contain claims that are essential to produce products or provide services that implement standard technologies, and that the patent holder has been required to make a commitment to license on Fair, Reasonable, and Non-Discriminatory (FRAND) terms.

(7) “FRAND-assured standard-essential patents” are standard-essential patents upon which a patent holder has made a commitment to license on Fair, Reasonable, and Non-Discriminatory (or FRAND) terms.

Article III.3B(2) – Refusal to License

The Note to Article III.3.B(2) sets forth factors for the KFTC to consider when determining whether a refusal to license is “unfair.” We respectfully urge that this Note be revised to adopt an approach similar to that taken by the U.S. antitrust agencies, which have stated that “[a]ntitrust liability for mere unilateral, unconditional refusals to license will not play a meaningful part” in their enforcement efforts.7 This approach recognizes that antitrust liability for refusals to license would impair an intellectual property right (IPR) holder’s core right to exclude, which limitation is likely to lessen the incentive to innovate. In addition, “liability for refusals to license competitors would compel firms to assist their rivals, a result that is ‘in some tension with the underlying purpose of antitrust law.’”8


8 Id. (quoting Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 407-08 (2004) (setting forth three sources of that tension)).
Lastly, as we explained in our prior comment, although a firm’s competitors may want to use a particular technology in their own products, there are few situations, if any, in which access to a particular IPR is necessary to compete in a market. Indeed, those who advocate forced sharing of an “essential” facility often have underestimated the ability of a determined rival to compete around the facility, with resulting benefits to consumers. This is particularly true with respect to fast moving technologies, where technological and market developments can present multiple opportunities to work around a competitor’s intellectual property, and it is easier to work around an IPR than it is to work around a physical structure.

Conclusion

We appreciate the opportunity to comment and would be happy to respond to any questions the KFTC may have regarding this comment.
Appendix A
COMMENT OF THE GLOBAL ANTITRUST INSTITUTE, GEORGE MASON UNIVERSITY SCHOOL OF LAW, ON THE KOREA FAIR TRADE COMMISSION’S REVISED REVIEW GUIDELINES ON UNFAIR EXERCISE OF INTELLECTUAL PROPERTY RIGHTS

October 5, 2015

This comment is submitted in response to the Korea Fair Trade Commission’s (KFTC’s) December 17, 2014 revisions to its Review Guidelines on Unfair Exercise of Intellectual Property Rights (Revised Guidelines). We appreciate the opportunity to comment upon the Revised Guidelines and commend the KFTC for its commitment to transparency. We submit this comment based upon our extensive experience and expertise in antitrust law and economics generally, and specifically with respect to the intersection of intellectual property and antitrust.¹

This comment provides a brief summary of the general principles applicable to antitrust matters involving intellectual property rights (IPRs), as well as specific comments on Article III.5 (governing matters involving standard-essential patents (SEPs) and de facto essential patents) and Article III.7 (governing conduct by non-practicing entities).

General Principles

In the United States, the antitrust laws as well as the approach to enforcing those laws to business conduct involving IPRs has evolved substantially from an era during which the U.S. antitrust agencies prohibited a host of licensing restraints as per se unlawful to the current approach under which the vast majority of licensing restraints are analyzed under the rule of reason. The modern, effects-based approach to antitrust and intellectual property contemplates imposing antitrust limits on the exercise of IPRs only when the anticompetitive harm associated with their exercise outweighs any procompetitive benefits. Under the old approach, which was developed in the 1970s and offered a categorical prohibition that became known as the “Nine No-Nos,” the U.S. antitrust agencies prohibited as per se unlawful restraints such as:

• requiring the purchase of unpatented materials (tying) as a condition of the license;
• requiring the licensee to assign back subsequent patents;
• minimum resale price provisions for the licensed product;

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• royalty provisions not reasonably related to the licensee’s sales;
• mandatory package licenses (i.e., bundling);
• restricting the resale rights of the purchaser of the product practicing the patent;
• restricting the licensee’s ability to deal in products outside the scope of the patent; and
• a licensor’s agreement not to license others.²

The U.S. antitrust agencies’ modern approach to patent licensing is set forth in the 1995 Joint Department of Justice and Federal Trade Commission Antitrust Guidelines for the Licensing of Intellectual Property (“DOJ-FTC IP Guidelines”).³ These Guidelines are based upon the following principles:

• antitrust and intellectual property law are complementary bodies of law that both seek to promote innovation and enhance consumer welfare;
• IPRs do not necessarily confer market power; that depends upon whether there are substitutes that might prevent the IPRs from exercising market or monopoly power;
• for the purpose of antitrust analysis, we treat IPRs as essentially comparable to any other form of property, tangible or intangible;
• the vast majority of licensing restraints have procompetitive effects and therefore are analyzed under the rule of reason; and
• competitive effects must be analyzed in comparison to what would have happened in the absence of a license.

While the U.S. antitrust agencies apply the same general antitrust analysis to matters involving IPRs as to any form of tangible or intangible property, they do not fail to recognize the important distinguishing characteristics of IPRs. For example, the inventions and works protected by IPRs are non-rivalrous. Thus, one firm using a specific IPR does not preclude another firm using the same IPR. Also, an existing IPR can be distributed to many firms at relatively low cost. From a static welfare perspective, these differences imply that it will often be desirable to disseminate IPRs widely and across many firms. To do so by the force of law, however, would weaken the incentive to engage in the innovative activity leading to the grant of the IPR in the first place. The optimal approach to the intersection of antitrust and IPRs will, therefore, generally require the balance of static welfare and dynamic efficiency, which refers to the gains that result from innovation. While consumers gain from increases in static efficiency in

² Bruce B. Wilson, Deputy Assistant Att’y Gen., Antitrust Division, Remarks Before the Michigan State Bar Antitrust Law Section (Sept. 21, 1972), reprinted in 5 CCH Trade Reg. Rep. ¶ 50,146.
the short run, economics teaches us that dynamic efficiency, including societal gains from innovation, are an even greater driver of consumer welfare.4

After a firm has made the investment and undertaken the competitive effort required to create a new product or service, regulators and courts often are asked to divide the rents associated with those innovative efforts and to distribute them throughout the economy. Doing so, however, would harm competition, innovation, and consumers alike. If the government is too willing to step in and appropriate the gains from innovation and dynamic competition, then potential innovators will have weak incentives. For example, rivals will have greater incentives to devote their resources to lobbying the KFTC to intervene and to litigation than to creating innovations of their own. Instead, firms should be encouraged to innovate on their own because innovation stimulates economic growth and generates significant benefits for consumers. This is important because antitrust law does not protect competition for its own sake; instead, it protects competition as a force that leads to increased efficiency, growth, and consumer welfare.

For these reasons, we strongly recommend that the KFTC adopt an effects-based approach to matters involving IPRs. Similarly, we strongly recommend that the KFTC avoid using any truncated effects-based analyses that rely upon presumptions rather than rigorous economic and empirical analysis to satisfy the burden of proof required to conclude that any particular conduct involving IPRs is likely anticompetitive.

Article III.5. SEPs and Market Dominance

Under U.S. law, it is well-established that patents and other IPRs, including SEPs, are not presumed to convey “market power,”5 that is, the ability profitably to maintain prices above, or output below, competitive levels for a significant period of time. Economists generally understand that IPRs may grant the patent holder the ability to face downward sloping demand curves for their products and services, and to price discriminate, but that that these are features of nearly all competitive markets and do not signal possession of monopoly power.6 In other words, there is no economic basis for a legal presumption that a patent, even an SEP, confers market power. Instead, market power must be established on a case-by-case basis after a fact-

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5 See, e.g., Illinois Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 31 (2006) (“The question presented to us today is whether the presumption of market power in a patented product should survive as a matter of antitrust law despite its demise in patent law. We conclude that the mere fact that a tying product is patented does not support such a presumption.”); Chrimar Sys. v. Cisco Sys., No. 4:13-cv-01300, at 6 (N.D. Cal. Oct. 29, 2014) (rejecting the contention that it is sufficient to allege that if a patent is essential, then the patent holder has market power). See also generally Bruce H. Kobayashi, Spilled Ink or Economic Progress: The Supreme Court’s Decision in Illinois Tool Works v. Independent Ink, 53 ANTITRUST BULL. 5 (2008); Joshua D. Wright, Missed Opportunities in Independent Ink, 5 CATO SUP. CT. REV.333 (2006).

specific inquiry, including an evaluation of whether there are actual or potential close substitutes to prevent the exercise of market power. And, even if a patent or other form of IPR does confer market power, that alone does not offend the antitrust laws. As the U.S. Supreme Court has explained, market power (or even a monopoly) that is solely “a consequence of a superior product, business acumen, or historic accident” does not violate the antitrust laws.  

Furthermore, there has been a movement in the United States away from a focus upon market definition and market power—and in particular, a movement away from inferring market power from high market shares—and toward a greater focus upon the direct assessment of competitive effects, as evidenced by the U.S. antitrust agencies’ 2010 Horizontal Merger Guidelines. This shift in antitrust analysis is consistent with modern economics and is particularly important in matters involving IPRs because an IPR holder may need relatively high margins (prices above marginal cost) merely to recoup its upfront investment and compensate for the substantial risks associated with seeking to create and commercialize its IPR. Prices well above marginal cost, therefore, may result in no more than the competitive rate of return on the investment necessary to create the IPR. Relatedly, the lines between markets may be not be clearly delineated in high-tech markets involving IPRs. To infer a firm has market power based merely upon its high market share or its ability to charge a price well above marginal cost is to invite frequent errors.

**Article III.5.A(1)-(6)**

**Article III.5.A(1)**

Article III.5.A(1) provides: “[U]nfairly agreeing to conditions limiting the price, volume, regions, counterparts, and technology improvement of the trade” are “likely to impede fair trade in the relevant market.” We respectfully urge the KFTC to revise this provision to specify that it will not merely presume certain conduct results in anticompetitive effects, and it will instead analyze such conduct under an effects-based approach wherein licensing restraints will be condemned only when any anticompetitive harm outweighs any procompetitive benefits.

**Article III.5.A(2)**

Article III.5.A(2) provides: “[U]nfairly not disclosing information of patents applied for or registered in order to increase the possibility of being designated as a standard technology or to avoid prior consultations on the conditions of granting a license” are “likely to impede fair trade in the relevant market.” We respectfully urge the KFTC to revise this provision to specify that liability will be imposed only when there is proof of the following six elements: (1) the patent holder or applicant is an active voting participant in a standard-setting organization (SSO)\(^8\); (2) the patent holder knows or should know that its patent or pending patent (patent

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\(^7\) United States v. Grinnell Corp., 384 U.S. 563, 571 (1966); see also United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945) (Sherman Act is not violated by the attainment of market power solely through “superior skill, foresight and industry”).

\(^8\) The first requirement ensures that only active participants in a standards-setting process are obligated to disclose patents pursuant to an SSO policy, and precludes someone other than the IPR holder from
application) may be incorporated into a particular standard; (3) the patent holder or applicant deliberately conceals from the SSO information about that patent, in violation of the SSO’s policies on written disclosures; (4) after adoption of the standard, the patent holder or applicant asserts its standard-essential patent against an implementer of mandatory portions of the standard; (5) but for the patent holder’s or applicant’s failure to disclose, a different technology would have been incorporated into the standard; and (6) the patent holder’s or applicant’s conduct causes or is likely to cause an adverse effect upon competition in a relevant market.  

The fifth requirement is particularly important. If the technology would have been adopted regardless whether the SEP holder had made the disclosure, then the SEP holder did not prevent or lessen competition in a market. As the U.S. Court of Appeals for the D.C. Circuit explained in *Rambus Inc. v. Federal Trade Commission*, if the SSO would have standardized the technology even if the SEP holder had disclosed its intellectual property, then the SSO would have lost

only an opportunity to secure a [F]RAND commitment from [the SEP holder]. But loss of such a commitment is not a harm to competition from alternative technologies in the relevant markets. . . . Indeed, had [the SSO] limited [the SEP holder] to reasonable royalties and required it to provide licenses on a nondiscriminatory basis, we would expect to see less competition from alternative technologies, not more; high prices and constrained output tend to attract competitors, not to repel them.  

Article III.5.A(3)

Article III.5.A(3) provides: “Acts of avoiding or circumventing licensing on FRAND terms to strengthen market dominance or exclude competitors” are “likely to impede fair trade in the relevant market.” For the reasons set forth below, we respectfully recommend against imposing a competition law sanction for the mere breach of a FRAND commitment, and urge that Article III.5.A(3) be deleted in its entirety. In the alternative, at the very least, we recommend that Article III.5.A(3) be revised to specify that liability will be imposed only when there is proof that: (1) the SEP holder engaged in deceptive conduct that resulted in the unlawful acquisition or enhancement of market power; and (2) but for the SEP holder’s deception, a different technology would have been incorporated into the standard.

First, reneging on a FRAND commitment does not necessarily involve deception. Rather, the conduct described in Article III.5.A(3) could amount to no more than pure ex-post contractual opportunism when an SEP holder attempts to renegotiate or deviate from the original FRAND commitment made in good faith to obtain higher royalty rates. That conduct is properly offering the technology for inclusion in a standard and then later seeking to impose a FRAND commitment on the SEP holder.


10 *Rambus Inc.*, 522 F.3d at 466 (emphasis in original) (internal citations omitted).
analyzed under contract law rather than antitrust.\textsuperscript{11} As the United States Supreme Court explained in \textit{NYNEX Corp. v. Discon, Inc.}, while the evasion of a pricing constraint may hurt consumers, it does not harm the competitive process.\textsuperscript{12} The Court distinguished the mere breach of a pricing commitment from the unlawful acquisition or exercise of monopoly power by pointing out that, with the former, the “consumer injury flowed . . . from the exercise of market power that is lawfully in the hands of a monopolist.”\textsuperscript{13}

Second, as explained in the comment on Article III.5.A(2), above, if the technology would have been adopted regardless whether the SEP holder had made the deceptive misrepresentation, then the SEP holder did not prevent or lessen competition in a market.

\textbf{Article III.5.A(4)}

Article III.5.A(4) provides: “Acts of unfairly rejecting the license of a standard essential patent” are “likely to impede fair trade in the relevant market.” Article III.5.A(4) further states that this provision “applies not only to standard technologies set by standards organizations, but also to technologies widely used as de facto standard technologies.” For the reasons set forth below, we strongly urge the KFTC to revise this provision to specify that it will not presume that such conduct results in anticompetitive effects, but will instead analyze such conduct under an effects-based approach.

First, although a firm’s competitors may desire to use a particular technology in their own products, there are few situations, if any, in which access to a particular IPR is necessary to compete in a market. Indeed, those who advocate forced sharing of an “essential” facility often have underestimated the ability of a determined rival to compete around the facility, with resulting benefits to consumers. This is particularly true with respect to fast moving technologies, where technological and market developments can present multiple opportunities to work around a competitor’s intellectual property, and it is easier to work around an IPR than it is to work around a physical structure. Recognizing these concerns, the U.S. Supreme Court has made it clear that it will treat so-called “essential facilities” claims with great skepticism, stating that courts should be very cautious in recognizing exceptions to the general rule that even monopolists may choose with whom they deal.

Second, the U.S. approach recognizes that potential inventors may be less likely to undertake the research and development that lead to an invention if the inventor’s reward for its efforts is reduced by having to share its patent. Conversely, if businesses know they can easily gain access to the patents of other firms, then they have less incentive to innovate and more incentive instead to free-ride on the risky and expensive research of others.\textsuperscript{14} Requiring

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\item \textsuperscript{12} \textit{NYNEX Corp. v. Discon, Inc.}, 525 U.S. 128, 135-37 (1998). See also Kobayashi & Wright, \textit{supra} note 9.
\item \textsuperscript{13} \textit{NYNEX Corp.}, 525 U.S. at 129, 136.
\item \textsuperscript{14} See Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 408 (2004).
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businesses to grant licenses to competitors wishing to use a patented invention is likely to result in less innovation, which will harm consumers in the long run.

Article III.5.A(5)

Article III.5.A(5) provides: “Acts of unfairly imposing discriminatory conditions when licensing standard essential patents or of imposing an unreasonable level of royalty” are “likely to impede fair trade in the relevant market.” This provision “applies not only to standard technologies set by standards organizations, but also to technologies widely used as de facto standard technologies.” For the reasons set forth below, we strongly urge the KFTC to revise this provision to: (1) specify that it will not presume that imposing discriminatory conditions results in anticompetitive effects, but will instead analyze the discrimination under an effects-based approach; and (2) to delete the language “imposing an unreasonable level of royalty.”

First, with respect to discriminatory refusals to license or to licensing different undertakings on different terms, we note that under some circumstances, price discrimination can enhance consumer welfare.15 “For example, it can enable price-sensitive consumers to be served when they otherwise would be priced out of the market if uniform pricing were mandated.”16 Where there are two distinct customer groups, one that is highly price sensitive and another that is not, without price discrimination firms may price relatively high for the latter group to maximize their profits. As a result, the first group will be foreclosed from the market. And, “for certain market structures, price discrimination can also lead to lower overall prices for consumers in comparison with uniform prices.”17

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15 See, e.g., Anne Layne-Farrar, Nondiscriminatory Pricing: Is Standard Setting Different?, 6 J. COMPETITION L. & ECON. 811, 811, 814-17 (2010) (the existing literature on price discrimination in traditional markets for goods and services and on licensing intellectual property establishes that “price discrimination is not necessarily harmful, and in some cases can even increase consumer welfare; most IP licensing is characterized by ‘discrimination’ in that rates and terms tend to differ across licensees; proof of market power must remain the first step in any inquiry on allegations of anticompetitive IP licensing discrimination; and as of yet, no widely applicable benchmarks or rules for distinguishing harmful from beneficial or non-harmful licensing discrimination have emerged, meaning that a careful, quantitative effects-based analysis remains the best approach.”).


Moreover, discriminatory refusals to license or licensing to different parties on different terms may serve legitimate, procompetitive ends. For example, a business may grant licenses to some, but not all, interested potential licensees in order to ensure that licensees have a greater incentive to promote the licensor’s technology. Similarly, a business may require higher royalties from a company that has less sales volume in order to maximize its income from the patent, or offer lower royalties to licensees that can offer valuable consideration in trade, such as cross-licenses of their intellectual property, which may be netted against the price of a license.

Second, with respect to imposing a competition law sanction for “imposing an unreasonable level of royalty,” the U.S. antitrust agencies do not regulate price. Rather, in the United States, firms are free unilaterally to set or privately to negotiate their prices; it follows that a monopolist is free to charge monopoly prices, which induces the risk-taking and entrepreneurial behavior that leads to innovation and economic growth.

Requiring by law that prices be “fair” or “reasonable,” or prohibiting a firm from charging an “unfairly high” or an “unfairly low” price risks punishing vigorous competition. In general, competition policy should not prohibit a monopolist from charging whatever price for its products and its IPRs it believes will maximize its profits. It is axiomatic in economics and in antitrust law that the “charging of monopoly prices . . . is . . . what attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth.” That is especially so in the case of IPRs; the very purpose for which nations create and protect IPRs is to induce investment in risky and costly research and development. To achieve a balance between innovation and the protection of competition, monopoly prices should be unlawful only if they are the result of conduct that is unlawful on other grounds.

Furthermore, economics teaches us that it is especially difficult to identify a “fair” price. Indeed, it is particularly difficult to assess the “fairness” of prices associated with licensing IPRs both because there is no marginal cost to which the price may be compared, and because IPRs themselves are highly differentiated products making price comparisons difficult, if not

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18 See, e.g., Bill Baer, Assistant Att’y Gen., Antitrust Division, Prepared Remarks at the 19th Annual International Bar Association Competition Conference (Sept. 11, 2015), available at http://www.justice.gov/opa/speech/assistant-attorney-general-bill-baer-delivers-remarks-19th-annual-international-bar (“We don’t use antitrust enforcement to regulate royalties. That notion of price controls interferes with free market competition and blunts incentives to innovate. For this reason, U.S. antitrust law does not bar ‘excessive pricing’ in and of itself. Rather, lawful monopolists are perfectly free to charge monopoly prices if they choose to do so. This approach promotes innovation from rivals or new entrants drawn by the lure of large rewards.”); Edith Ramirez, Chairwoman, Fed. Trade Comm’n, Prepared Remarks at the 8th Annual Global Antitrust Enforcement Symposium, Georgetown University Law Center at 8 (Sept. 10, 2014), available at https://www.ftc.gov/system/files/documents/public_statements/582451/140915georgetownlaw.pdf (“In contrast to the FTC’s and EC’s approach, media reports indicate that China’s antitrust authorities may be willing to impose liability solely on the royalty terms that a patent owner demands for a license to its FRAND-encumbered SEPs, as well as royalty demands for licenses for other patents that may not be subject to a voluntary FRAND commitment.”).


20 Id.
impossible. The risk of placing too strict a limitation on IPR prices is that the return to innovative behavior is reduced, and consumers suffer in the form of less innovation. With such limits in place, IPR holders will face significant uncertainty in determining whether their licensing practices violate Korea’s Monopoly Regulation and Fair Trade Act.

In addition, in order to determine whether a particular price is excessive, the KFTC would need to calculate a reasonable royalty as a baseline against which to compare the allegedly excessive price. In our experience, competition agencies are generally ill-equipped to calculate royalty rates, a task that is best left to the market or, as a last resort, to the courts.21

Finally, we strongly urge that the KFTC not use the “smallest salable patent practicing unit” (SSPPU) approach as the basis of an antitrust violation. The U.S. Court of Appeals for the Federal Circuit (which has nationwide jurisdiction over patent disputes) in Éricsson v. D-Link reiterated its prior statements from LaserDynamics that the SSPPU was created as an evidentiary rule “to help our jury system reliably implement the substantive statutory requirement of apportionment of royalty damages to the invention’s value.”22 As the court went on to explain:

Logically, an economist could do this [apportionment] in various ways—by careful selection of the royalty base to reflect the value added by the patented feature, where that differentiation is possible; by adjustment of the royalty rate so as to discount the value of a product's non-patented features; or by a combination thereof. The essential requirement is that the ultimate reasonable royalty award must be based on the incremental value that the patented invention adds to the end product.23

In other words, mathematically, the selection of the royalty base is irrelevant. Instead, it is the relationship between the royalty base and the royalty rate that matters.

Using the smallest component or device as the royalty base may under- or over-value a particular technology. For example, a technology may technically be implemented by a single component part, yet its value to the device and to consumers may exceed the value of the component itself such that using an appropriately apportioned end-user product price as the royalty base may provide a more accurate means to value the technology at issue.

Moreover, the value of a portfolio of SEPs to a particular licensee also may vary depending upon the final product in which the licensee incorporates the technology. For example, a given portfolio of SEPs may deliver very different value to a mobile infrastructure manufacturer as compared to a handset maker or a network operator.


22 773 F.3d 1201, 1226 (Fed. Cir. 2014).

23 Id.
There are a number of considerations that may dictate the parties’ selection of a royalty base in a freely negotiated license agreement. Industry practice and the convenience of the parties are two such considerations; other commercial dealings between the parties may also affect their negotiation. In order to reduce administrative costs, a royalty base is often selected to allow for easy monitoring or verification of the number of units sold; end product prices are often chosen for these reasons. Indeed, as a practical matter, we have found that most licenses in many high-tech markets, including smartphones, are negotiated on a patent portfolio basis using the end-user device as the royalty base.\(^{24}\)

Lastly, we note that the U.S. Department of Justice’s Antitrust Division (DOJ) issued a Business Review Letter on February 2, 2015, in response to a request by the Institute of Electrical and Electronics Engineers, Incorporated (the IEEE), which addressed the recommended use of the SSPPU approach.\(^{25}\) Most important for the question at hand, in its letter, the DOJ correctly recognized that its task in the business review process is to advise the requesting party of the Department’s present antitrust enforcement intentions regarding the proposed conduct. It is not the Department’s role to assess whether IEEE’s policy choices are right for IEEE as a standards-setting organization (SSO). SSOs develop and adjust patent policies to best meet their particular needs. It is unlikely that there is a one-size-fits-all-approach for all SSOs, and, indeed, variation among SSOs’ patent policies could be beneficial to the overall standards-setting process. Other SSOs, therefore, may decide to implement patent policies that differ from [the IEEE’s policy].\(^{26}\)

In other words, the DOJ did not endorse the SSPPU approach as a requirement for all SSOs, and certainly did not suggest that a patent holder’s failure to base a royalty on the SSPPU would constitute an antitrust violation; it concluded only that the IEEE’s adoption of this recommended approach did not violate U.S. antitrust laws. The DOJ further noted that the IEEE’s Policy itself merely recommends the use of the SSPPU approach, but “does not mandate” its use by IEEE members as the only correct royalty base.\(^{27}\)

**Article III.5.A(6)**

Article III.5.A(6) provides: “An act of imposing conditions unfairly restricting the exercise of a patent held by licensees or act of unfairly imposing conditions of cross-licensing of non-standard essential patents held by licensees” are “likely to impede fair trade in the relevant market.” This provision “applies not only to standard technologies set by standards organizations, but also to technologies widely used as de facto standard technologies.” For the


\(^{25}\) Available at http://www.justice.gov/sites/default/files/atr/legacy/2015/02/02/311470.pdf.

\(^{26}\) Id. at 2-3.

\(^{27}\) Id. at 12-13.
reasons set forth below, we strongly urge the KFTC to revise this provision to specify that it will not presume that such conduct results in anticompetitive effects, but will instead analyze such conduct under an effects-based approach.

Grantbacks and cross-licenses, like other licensing restraints, are generally procompetitive because they may facilitate the integration of complementary technologies, promote the dissemination of a technology, reduce transaction costs, clear blocking positions, and avoid costly patent infringement litigation.28 Grantbacks also provide a means for the licensee and the licensor to share risks and to reward the licensor for possible further innovations based upon or informed by the licensed technology. Finally, the prospect of a grantback is an incentive both for innovation in the first place and for the subsequent licensing of the results of that innovation.29

With a royalty-free cross license, each firm is free to compete, both in designing its products without fear of infringement and in pricing its products without the burden of a per unit royalty due to its counterparty. Therefore, cross-licenses can solve the complements problem,30 at least as between two firms, and be highly procompetitive. Similarly, portfolio licenses may encourage long-term investments in both manufacturing capacity and research and development because the parties do not fear unforeseen and unforeseeable patent infringement litigation.

On the other hand, cross-licenses can have anticompetitive effects in certain limited circumstances, such as when they are used as a cover for price-fixing or market division. Grantbacks may also adversely affect competition if they substantially reduce the licensee’s incentives to engage in research and development and thereby limit rivalry in innovation. Like other licensing restraints, therefore, cross-licenses and grantbacks should be analyzed case by case, under an effects-based approach.

Article III.5.B. Injunctive Relief

For the following reasons, we respectfully recommend against imposing a sanction under the competition law for seeking injunctive relief, and urge that any suggestion to that effect be deleted from the Revised Guidelines.

First, as explained below, there is no empirical evidence to support the assertion that patent holdup results in harm to innovation or consumers. Second, imposing a competition law sanction is likely to reduce incentives to innovate and deter SEP holders from participating in standard setting, thereby depriving consumers of the substantial procompetitive benefits of standardized technologies. Furthermore, any liability theory that would require an SEP holder to prove that an accused infringer is an unwilling licensee threatens to deter participation in standard setting, particularly if an accused infringer can prove it is a willing licensee simply by

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28 See, e.g., DOJ-FTC IP GUIDELINES, supra note 3, §§5.5-5.6.
29 Id. § 5.6.
30 The complements problem, or the “tragedy of the anti-commons,” arises when there are multiple gatekeepers, each of which must grant permission before a resource can be used, the result of which can be to prevent the resource from being used and hence stifle innovation.
agreeing to be bound by terms determined by neutral adjudication. If the worst penalty an SEP infringer faces is not an injunction but merely paying, after neutral adjudication, the FRAND royalty that it should have agreed to pay when first asked, then reverse holdup and holdout give implementers a profitable way to defer payment—or if they are judgment proof, to avoid payment altogether—and puts SEP holders at a disadvantage that reduces the rewards to, and can only discourage, innovation and participation in standard setting.\(^\text{31}\)

In the alternative, should the KFTC decide to retain a competition law sanction for seeking injunctive relief—which we strongly urge it not to do—at the very least, Article III.5.B. should be amended to limit liability to situations when there is proof that a FRAND-encumbered SEP holder has engaged in patent holdup, i.e., that the patent holder used the threat of injunctive relief to demand supra-competitive royalties that are not consistent with prior commitments by the SEP holder. This revision is necessary to avoid the presumption that an SEP holder who seeks injunctive relief will necessarily use that relief (or the threat of it) to demand supra-competitive royalties.\(^\text{32}\) That presumption would be unwarranted because markets discourage firms from exploiting the opportunity for holdup. For example, reputational and business costs tend to deter repeat players from engaging in holdup and “patent holders that have broad cross-licensing agreements with the SEP-owner may be protected from hold-up.”\(^\text{34}\) In addition, patent holders often enjoy a first-mover advantage if their technology is adopted as the standard. “As a result, patent holders who manufacture products using the standardized technology ‘may find it more profitable to offer attractive licensing terms in order to promote the adoption of the product using the standard, increasing demand for its product rather than extracting high royalties’”\(^\text{35}\) per unit.

\(^\text{31}\) Holdup requires lock-in, and standard-implementing companies with asset-specific investments can be locked in to the technologies defining the standard. On the other hand, innovators that are contributing to an SSO can also be locked-in if their technologies have a market only within the standard. Thus, incentives to engage in holdup run in both directions. There is also the possibility of holdout. While reverse holdup refers to the situation when licensees use their leverage to obtain rates and terms below FRAND, holdout refers to licensees either refusing to take a FRAND license or delaying doing so.

\(^\text{32}\) Such delay tactics are magnified when the patent owner has a large worldwide portfolio of SEPs requiring it to file lawsuits around the world to adjudicate a FRAND royalty on a patent-by-patent basis. In such cases, international arbitration on a portfolio basis would appear to be the most efficient and realistic means of resolving FRAND disputes.

\(^\text{33}\) See Anne Layne-Farrar & Koren W. Wong-Ervin, Methodologies For Calculating FRAND Damages, LAW360 (Oct. 8-10, 2014), available at https://www.ftc.gov/system/files/attachments/key-speeches-presentations/wong-ervin - methodologies_for_calculating_frand DAMAGES.pdf (explaining that “the actual practice of hold-up requires two elements: opportunity and action,” and listing a number of market mechanisms that militate against the opportunity for holdup).


\(^\text{35}\) Id (citation omitted).
A. Empirical Evidence Suggests No Systemic Problem with Holdup

Although there is serious and important scholarly work exploring the theoretical conditions under which patent holdup might occur, this literature merely demonstrates the possibility that an injunction (or the threat of an injunction) against infringement of a patent can in certain circumstances be profitable for the licensor and potentially harmful to consumers. This same theoretical literature has also recognized, with respect both to intellectual and tangible property, the threat of reverse holdup and holdout.

It is important to distinguish the hypotheses generated in the theoretical literature on patent holdup from such empirical evidence as would substantiate those hypotheses. Our own assessment and that of other close students of the subject is that the existing empirical evidence is not consistent with the view that holdup is a prevalent or systemic problem and is causing harm to consumers. The evidence required to support the KFTC’s proposed approach—which is likely to deter procompetitive conduct including participation in standard setting—requires that there be a probability, not a mere possibility, of higher prices, reduced output, and lower rates of innovation.

In fact, evidence from the smartphone market, which is both patent and standard intensive, is to the contrary. Output has grown exponentially, while market concentration has fallen, and wireless service prices have dropped relative to the overall consumer price index (CPI). A recent study by the Boston Consulting Group found that globally the cost per megabyte of data declined 99% from 2005 to 2013 (reflecting both innovation making data transmission cheaper as well as the healthy state of competition); the cost per megabyte fell 95% in the transition from 2G to 3G, and 67% in the transition from 3G to 4G; and the global average selling prices for smartphones decreased 23% from 2007 through 2014, while prices for the least expensive phones fell 63% over the same period. More generally, prices in “a variety of [SEP-


37 According to data from Gartner, worldwide smartphone sales to end-users have increased over 900% between 2007 to 2014, and 320% between 2010 to 2014. Market concentration in smartphones, as measured by HHIs, went from “highly concentrated” in 2007, as defined by the U.S. antitrust agencies’ Horizontal Merger Guidelines, to “unconcentrated” by the end of 2012. See Keith Mallinson, Theories of Harm with SEP Licensing Do Not Stack Up, IP FIN. BLOG (May 24, 2013), available at http://ipfinance.blogspot.com/2013/05/theories-of-harm-with-sep-licensing-do.html. According to the U.S. Bureau of Labor Statistics, the ratio of the CPI for wireless telephone services to the overall CPI has dropped 34% from 2007 to 2014.

reliant] consumer and producer products” have declined faster than prices in non-SEP intensive industries. In other words, the empirical evidence does not suggest that FRAND licensing is somehow broken and in need of fixing. Instead, the thriving nature of the wireless market suggests caution prior to disrupting the carefully balanced FRAND ecosystem.

Economic analysis provides the basis upon which to understand the apparent disconnect between holdup theory and the available evidence. As economic theory would predict, patent holders and those seeking to license and implement patented technologies write their contracts so as to minimize the probability of holdup. In addition, as explained above, several market mechanisms are available to transactors to mitigate the incidence and likelihood of patent holdup. This is not surprising. The original economic literature upon which the patent holdup theories are based was focused upon the various ways that market actors use reputation, contracts, and other institutions to mitigate the inefficiencies associated with opportunism in transaction involving tangible property.

Recognizing the theoretical nature of holdup concerns, the United States Court of Appeals for the Federal Circuit (which has nationwide jurisdiction over patent disputes) has held that claims of holdup must be substantiated with “actual evidence,” and that the burden is on the accused infringer to show the patent holder used injunctive relief to gain undue leverage and demand supra-FRAND royalties.

https://www.bcgperspectives.com/content/articles/telecommunications_technology_business_transforma
tion_mobile_revolution/#chapter1.


economics-incomplete-contracts/130912cpip.pdf (explaining that “the economics of hold-up began not as an effort to explain contract failure, but as an effort to explain real world contract terms, performance, and the enforcement decisions starting with the fundamental premise that contracts are necessarily incomplete”). There is empirical evidence that SSO contract terms vary both across organizations and over time in response to changes in perceived risk of patent holdup and other factors. See Joanna Tsai & Joshua D. Wright, Standard Setting, Intellectual Property Rights, and the Role of Antitrust in Regulating Incomplete Contracts, forthcoming 80 ANTITRUST L.J. 157 (2015).

41 See, e.g., Ericsson, Inc. v. D-Link Sys., 773 F.3d 1201, 1234 (Fed. Cir. 2014) (“In deciding whether to instruct the jury on patent hold-up and royalty stacking, again, we emphasize that the district court must consider the evidence on the record before it. The district court need not instruct the jury on hold-up or stacking unless the accused infringer presents actual evidence of hold-up or stacking. Certainly something more than a general argument that these phenomena are possibilities is necessary.”); see also Anne Layne-Farrar & Koren W. Wong-Ervin, An Analysis of the Federal Circuit’s Decision in Ericsson
B. A Competition Law Sanction is Likely to Reduce Incentives to Innovate and Deter Participation in Standard Setting

A FRAND commitment is a contractual commitment. Economists have long understood that a contractual relationship involving an asset-specific investment creates the potential for opportunism by one or both of the parties. Similarly, once a patent is adopted by an SSO, the patentee may try to “holdup” potential licensees that have made asset-specific investments by demanding a higher royalty rate than would have prevailed in a competitive setting. The view that contractual opportunism alone gives rise to an antitrust problem, as opposed to a contract problem, is in tension with the substantial economic literature on the subject. Consistent with this view, no United States court has held that seeking injunctive relief on a FRAND-encumbered SEP violates the antitrust laws. Instead, every United States court that has addressed the issue has done so under contract law principles.

Specifically, in analyzing the contractual nature of the FRAND commitment, courts have held that: (1) a commitment to an SSO to license on FRAND terms constitutes a binding contract between the SEP holder, the SSO, and its members; (2) potential users of the standard are third-party beneficiaries of the agreements with standing to sue; (3) seeking injunctive relief on a FRAND-encumbered SEP may violate the universal duty of good faith and fair dealing when an SEP holder has made a contractual commitment to license on FRAND terms; and (4) FRAND

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43 Joshua D. Wright & Douglas H. Ginsburg, Patent Assertion Entities and Antitrust: A Competition Cure for a Litigation Disease, 79 ANTITRUST L.J. 501, 509 (2014); see also Benjamin Klein, Market Power in Antitrust: Economic Analysis After Kodak, 3 SUP. CT. ECON. REV. 43, 62-63 (1993) (“Antitrust law should not be used to prevent transactors from voluntarily making specific investments and writing contracts by which they knowingly put themselves in a position where they may face a ‘hold-up’ in the future . . . . [C]ontract law inherently recognizes the pervasiveness of transactor-specific investments and generally deals with ‘hold-up’ problems in a subtle way, not by attempting to eliminate every perceived ‘hold-up’ that may arise.”).


46 See, e.g., Realtek Semiconductor Corp. v. LSI Corp., No. C–12–03451–RMW, 2013 WL 2181717, at *7 (N.D. Cal. May 20, 2013) (holding that it was a breach of the RAND commitment to seek injunctive relief in another forum, namely, the U.S. International Trade Commission, before offering a license to an
licensing “includes an obligation to negotiate in good faith,” and that obligation is “a two-way street.”

Competition law remedies prohibiting or limiting the ability of a FRAND-encumbered SEP holder to seek injunctive relief are not likely in the public interest for the following three reasons:

First, a competition law remedy is not only unnecessary to protect consumer welfare given that the law of contracts is sufficient to provide optimal deterrence; it is likely to be harmful. Significant monetary sanctions are likely to over-deter procompetitive participation in SSOs. FRAND-encumbered SEP holders need the credible threat of an injunction if they are to recoup the value added by their patents and have no other adequate remedy against an infringing user. Indeed, excessive deterrence is particularly likely because, with liability turning upon whether the infringing user was truly a “willing licensee”—a factual determination that may be far from clear in many cases—the outcome of a competition law case will necessarily be uncertain. The prospect of penalizing a FRAND-encumbered SEP holder for seeking injunctive relief diminishes the value of its patents and hence reduces its incentive to innovate.

Second, the prospect of competition law liability for a patentee seeking injunctive relief would enable an infringing user to negotiate in bad faith, knowing its exposure is capped at the implementer of a standard willing to accept a RAND license); Verdict Form at 3, Microsoft v. Motorola, Case No. C10-1823JLR (Sept. 4, 2013) ( jury found that Motorola’s conduct in seeking injunctive relief violated its duty of good faith and fair dealing with respect to its contractual commitments to the IEEE and the ITU); Apple v. Motorola, Inc., 869 F. Supp. 2d 901, 913-14 (N.D. Ill. 2012); see also Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 884-85 (9th Cir. 2012).


49 See, e.g., Luke Froeb & Mikhael Shor, Innovators, Implementers, and Two-Sided Hold-Up, ANTITRUST SOURCE at 3 (Aug. 2015), available at, http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/aug15_froeb_7_21f.authcheckdam.pdf (explaining that the curtailing of injunctive relief serves “to shift bargaining power and profits from innovators to implementers,” which “weakens the value of patents and can significantly reduce the incentive to innovate”); Bernhard Ganglmair, Luke M. Froeb & Gregory J. Werden, Patent Hold Up and Antitrust: How a Well-Intentioned Rule Could Retard Innovation, 60 J. INDUS. ECON. 249 (2012) (finding that “enforcement of a FRAND commitment, with damages awarded for excessive license fees, solves the holdup problem, but can retard innovation, and it is even possible that this solution is worse than the problem”) [hereinafter Ganglmair et al.].
FRAND royalty rate; an unscrupulous or a judgment-proof infringing user can force the SEP holder to take a below-FRAND.\textsuperscript{50}

Third, the prospect of competition law liability is likely to deter patent holders from contributing their technology to an SSO under FRAND terms if doing so will require them to forfeit their right to protect their intellectual property by seeking an injunction against infringing users. These possibilities, far from protecting the public interest in competition and innovation, actually threaten to reduce the gains from innovation and standardization.

\textbf{Article III.7 – Exercise of Patent Right by Non-Practicing Entities}

We recommend against adopting an approach that would treat non-practicing entities (NPEs) differently than other entities. Instead, we recommend focusing upon the anticompetitive effects of the conduct and not the type of entity at issue.

Furthermore, we note that the rise of the NPE is largely the result of a litigation problem: NPEs are able to exploit the litigation system to extract settlements based not upon the merits of their claims but rather upon the cost of defending against them. That litigation problem—which, in the United States, traces to the Patent and Trademark Office’s issuance of questionable patents, particularly for software and business methods—is neither new nor specific to NPEs and it should be resolved by more accurately targeted reforms.\textsuperscript{51} Indeed, there is no evidence at this point that NPEs create a new or unique antitrust problem; that their business model warrants more or less scrutiny than others as a matter of antitrust analysis; or that competition enforcement agencies would be aiding consumers by devising creative extensions of or departures from the standard antitrust framework in order to address NPE’s conduct and business arrangements. If and when NPEs present legitimate antitrust problems, the standard antitrust framework is fully capable of preventing and providing adequate remedies for any anticompetitive conduct. Therefore, we recommend against adopting any new substantive antitrust standards or enforcement policies to reach NPEs, and instead recommend that the KFTC operate under the reasonable presumption that any inefficiencies associated with NPEs are the result of problems in the litigation system.

We appreciate the opportunity to comment and would be happy to respond to any questions the KFTC may have regarding this comment.

\textsuperscript{50} See generally Ganglmair et al., \textit{supra} note 49 (finding that the innovator’s and the implementer’s holdup problems are not directly comparable as it is possible for negotiations to occur prior to the implementer’s investment in the standard, but negotiations always occur after the innovator had made its investment in research and development).