



November 30, 2015

Intellectual Property Arrangements Inquiry
Productivity Commission
GPO Box 1428
CANBERRA CITY 2601

Re: Intel Corporation Comments on the Productivity Commission's Inquiry into Australia's Intellectual Property Arrangements

Intel Corporation commends the Productivity Commission (Commission) on its rigorous and thorough inquiry into Australia's intellectual property arrangements. As a company who depends on intellectual property and innovation, Intel supports the Commission's efforts to ensure that Australia's IP arrangements strike the right balance in incentivizing innovation and investment and the ability of the public to access new products and ideas.

Intel is the world's largest semiconductor company. Innovation is central to everything we do; a quote from Robert Noyce, Intel's co-founder and the co-inventor of the integrated circuit, marks the entrance to Intel's headquarters: "Innovation is everything." Intel invests more than 10 billion dollars annually on research and development. A significant number of Intel's more than 100,000 employees in over 58 countries are directly involved in designing new semiconductor products, creating software, and advancing Intel's leading-edge manufacturing processes. As a result of this long-standing dedication to innovation, Intel holds about 50,000 patents worldwide. Simply put, patents are extremely important to Intel. But Intel also knows that when patent systems become unbalanced and when patents are used for things other than promoting innovation, they can become an impediment to the very innovation they were designed to promote and harm the ability of companies to bring new products to market.

It is with this perspective that Intel offers the following comments for the Commission's consideration in its examination of Australia's intellectual property arrangements.

Patents

As a company that owns and commercializes thousands of patents, Intel supports the Commission’s goal of ensuring Australia’s patent system promotes innovation and community welfare. Intel also agrees that the balance between the benefits and costs of patent protection may be different in some technological fields than in others. As the Commission has already noted, the level of innovation driven by certain patent remedies in some industries, such as pharmaceuticals and biotechnology, may be different than it is in other industries, such as software and high technology.

The availability of injunctions after a finding of infringement is an excellent example of the way that patent arrangements can have differing effects across dissimilar sectors of the economy. In fields like the pharmaceutical industry where products incorporate relatively few patents, injunctions may often be a necessary and proper means of protecting intellectual property. This may not be true, however, in every technological field. In some high-tech cases, where products typically incorporate hundreds or thousands of products and a particular patented technology may contribute only incrementally to a product, the availability of automatic or near-automatic injunctions can create an opportunity for patent owners to exploit the patent enforcement system to their own benefit at the expense of innovation and the public good. This problem, commonly known as patent “hold-up,” empowers patent holders to extract licensing fees from product manufacturers that far exceed the value of the patented technology—by threatening to enjoin entire products that are predominantly non-infringing and in which a defendant has already made significant and non-recoverable investments.

One solution to this problem is to grant judges the discretion to decide when an injunction is the appropriate remedy for patent infringement, and then to ensure that courts feel empowered to use that discretion. Judges are intimately familiar with the parties and facts of the cases before them, and thus are uniquely situated to evaluate the specific and well-defined factors that establish whether an injunction should issue. In the simplest terms, a judge is in the best position to weigh the benefits and costs of an injunction and determine when enforcing a patent holder’s right to exclusivity will best promote innovation.

The ability of judges to impose optimal remedies is one example how structural intellectual property arrangements can drive innovation. In the United States, the ability for

judges to determine when an injunction is an appropriate remedy for patent infringement has allowed the courts to better adapt to the recent and dramatic rise in patent litigation initiated by non-practicing entities in the United States.¹ The United Kingdom also has recognized that injunctions should be “a discretionary remedy” that is granted “proportionate” to the facts of an individual case.² Section 122 of Australia’s Patents Act 1990 (as amended by Act No. 103 of 2010) likewise gives courts the discretion to decide when injunctions should issue, but in practice it appears that Australian courts tend to grant permanent injunctions as a near automatic practice once infringement is found. As the Commission conducts its inquiry, Intel encourages it to embrace solutions from other jurisdictions that emphasize the need for courts to appropriately use their discretion in making injunction decisions; this will ensure that the Australian patent system continues to facilitate innovation amid the changing nature of technology.

Innovation Patents

Intel also supports for the Advisory Council on Intellectual Property’s (ACIP’s) recommendation that Australia’s innovation patent system be dissolved, or at least be updated and amended substantially. Intel agrees with ACIP’s conclusion that innovation patents create considerable uncertainty for both consumers and manufacturers without providing any significant incentive for small and medium enterprises to innovate. These findings are consistent with Intel’s experiences with “second tier” patents in other countries. Despite the laudatory goals of “utility method” and “petty” patents, these lesser forms of intellectual property seldom succeed in creating an effective incentive for small and medium enterprises to improve, adapt, or refine existing technologies.

Even if the Commission does not accept ACIP’s recommendation to dissolve the Australia’s innovation patent system entirely, the Commission should recommend actions to minimize the negative costs that such a system imposes on product manufacturers. Innovation patents—which are based on a lower inventiveness standard than traditional patents and often granted without substantive examination—encourage the proliferation of weak and trifling patents, and create uncertainty and distortion in markets. When innovation patents are accorded the same remedies as traditional patents, those remedies

¹ See *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388 (2006).

² *Virgin Atlantic Airways Ltd v Premium Aircraft Interiors UK Ltd*, EWCA Civ 1062, 22 October 2009.

often are disproportional to the innovation patents' minimal benefits to society and indeed undermine incentives to develop more substantial innovations. If the Commission chooses not to dissolve the innovation patent system, Intel urges Australia to modify the scope and remedies of innovation patent rights to avoid this imbalance.

First, Intel recommends that Australia increase the required level of inventiveness for innovation patents to match that of traditional patents. The current low threshold for inventiveness of innovation patents, combined with the lack of substantive examination prior to registration, encourages proliferation of obvious patents and creates legal uncertainties. A market that is covered in a "thicket" of patents has higher barriers to entry for new market participants and reduced investment in new innovations in that field. When patents are evaluated prior to issuance and subject to high inventiveness standards, this "thicket" is less likely and the patents that provide these barriers are largely those that are not obvious and that meaningfully advance the field.

The current level of inventiveness required for innovation patents is akin to a mere novelty requirement. ACIP proposed increasing the inventiveness requirement so that only those inventions that are non-obvious compared to general common knowledge qualify for innovation patent rights. While Intel agrees this would be an improvement over the current standard, Intel urges Australia to go further and match the standard to that for traditional patents for the reasons noted.

Second, innovation patents should not receive the same remedies as traditional patents. Innovation patents are designed to protect incremental or minor advances. Their remedies should be limited accordingly to avoid undermining traditional patents' more substantial contributions and to appropriately balance their inventiveness with their remedy.

Injunctions, for example, generally should not be given for an innovation patent. Many modern, sophisticated products combine numerous different types of technologies and may rely upon many hundreds of patented components. The threat of an injunction creates a significant "hold-up" risk for these products that often is disproportional to the inventive contribution associated with innovation patents. At minimum, if injunctions are given, the rights holder should be required to show that the inventive contribution is significant enough to warrant such a powerful remedy. One way to accomplish this goal could be to require that, before a rights holder can obtain an injunction, the innovation

patent would need to be converted to a full traditional patent, with the same requirements for traditional patents. While Australia does require examination of an innovation patent before litigation can commence, because this examination does not use the same inventiveness standards as a traditional patent, it is insufficient to justify an injunction remedy in most cases.

There also should be limits on the damage awards available for innovation patents. Limiting damages will discourage speculative litigation and better confine the potential rewards to match the smaller scope of innovation patents.³ Indeed, some commenters attribute the “success” of utility models in Europe to the relatively small damage awards and lack of punitive damages available in most European countries.⁴ Similarly, in Australia, the negative aspects of an innovation patent system might be lessened by statutory limits on damage awards and the elimination of, or imposition of additional requirements to merit, punitive damages and injunctions.

Finally, if innovation patents are not dissolved entirely, Intel strongly agrees with ACIP’s proposal to exclude method and process patents and software patents from the innovation patent system. As ACIP noted, methods and processes are typically difficult to reverse engineer and are less suitable to the lower inventive work typical of innovation patents. Further, because prior art in the software and method areas are less likely to be formally published, innovation patents in these areas can be too easy to obtain despite prior uses, especially given the lower standard of inventiveness for innovation patents. Thus, methods, processes, and software inventions should be excluded from the innovation patent system. Alternatively, rather than specify exclusions, the Commission could limit innovation patents to only enumerated technical arts; for example, some countries that still have an innovation patent, or petty patent, system, have limited such patents to the mechanical arts.

³ See Thomas T. Moga, China’s Utility Model Patent System: Innovation Driver or Deterrent, 16 (November 2012) (urging lower damages for “lesser technical achievements”).

⁴ See, e.g., Brack, Hans-Peter, Utility Model Patents and their Comparison with Patents and Implications for the US Intellectual Property Law System, Boston College Intellectual Property & Technology Forum (2009).

Standard Essential Patents

The Australian Government's objective to ensure an appropriate balance between incentives for innovation and investment, and the ability of the public to access ideas and products, should be carefully pursued with regard to patented technologies that are standardized. Unlike various other advanced economies, Australia has just begun experiencing disputes over the licensing terms of patents that are essential in implementing standards.⁵ In proposing changes to Australia's IP system, the Productivity Commission has been asked to take into account the experiences and reform efforts of Australia's top IP trading partners and other advanced economies (p. iv). This section summarizes some of the experiences and reform efforts in the U.S, Europe, Korea, Canada and Japan pertaining to the licensing of standard essential patents (SEPs).

Standards are becoming ever more important in today's information economy. Standards enable products from different manufacturers to work together. For example, the Wi-Fi standard enables computers and other digital devices around the world to connect with the Internet and communicate with each other without regard to the identity of the device or Wi-Fi chipset manufacturer. Thus, standards simplify product development, reduce transaction costs, and encourage the development of new markets.

Interoperability standards are usually developed by standard setting organizations (SSOs), with the participation of various industry stakeholders. Companies that hold patents covering alternative solutions compete vigorously for inclusion of their preferred technologies into each standard. Although the standard-setting system as a whole greatly benefits competition and innovation, it is vulnerable to abuse because of the unique power that it gives patent holders whose patents are incorporated into standards. That power is created when, in the words of the European Commission, "*the standard is set, and in the absence of a competing standard, technology competition is largely eliminated.*"⁶ In these cases, SEP holders could "*behave in anti-competitive ways, for example by 'holding-up' users after the adoption of the standard either by refusing to license the necessary IPR or by extracting ... excessive royalty fees....*"⁷

⁵ The only case in which FRAND related issues have been addressed by an Australian court, *Samsung Electronics Co. Ltd. v. Apple Inc.*, case number O/N H-263532 (Federal Court of Australia), settled in August of 2014.

⁶ Case No. COMP/M.6381 - *Google/Motorola Mobility*, 13 February 2012, § 53 ("Google/Motorola Mobility"); *ibid.* § 54 ("The very purpose of choosing a standard is that the industry coordinates on a specific technological solution at the expense of alternative technologies.").

⁷ Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to

Likewise, a U.S. appellate court recently stated in July 2015 that “*once a standard becomes widely adopted, SEP holders obtain substantial leverage over new product developers, who have little choice but to incorporate SEP technologies into their products. Using that standard-development leverage, the SEP holders are in a position to demand more for a license than the patented technology, had it not been adopted by the SSO, would be worth. The tactic of withholding a license unless and until a manufacturer agrees to pay an unduly high royalty rate for an SEP is referred to as ‘hold up.’*”⁸

Because of competition that exists before a standard is adopted, a patented technology vying for inclusion in a standard should command a royalty that reflects only the incremental value of the patent over the next best available technology.⁹ Unfortunately, some SEP holders have devised various ways to exploit the locked-in position of standard implementers to obtain supra-competitive royalties that are significantly higher than they could have obtained before their patent were incorporated into the standard. The Productivity Commission should have an interest in curbing such behaviour, given its concern that exclusive IP rights enable their owners in some circumstances “to exercise market power or engage in other anticompetitive behaviour ... such as allowing rights holders to extract excessive licensing royalties....” (pp. 5-6).

1. FRAND Commitments Help Curb Potential Abuses of Standard-Setting Activities

To prevent hold-ups by SEP holders, most SSOs require participants in standard-setting activities to commit to license their SEPs on fair, reasonable and non-discriminatory (FRAND) terms to every company that makes, uses, or sells standard-compliant products before a patent may be incorporated into a standard. According to the European Commission, “*FRAND commitments can prevent IPR holders from making the implementation of a standard difficult by refusing to license or by requesting unfair or unreasonable fees (in other words excessive fees) after the industry has been locked-in to the standard....*”¹⁰ Similarly, U.S. Court of Appeals Judge Richard Posner has explained, “[t]he purpose of the FRAND requirements is to confine the

horizontal co-operation agreements (2011/C 11/01) § 269 (“Article 101 Guidelines”); MEMO/10/676, at 2 (“[P]atent ambush” occurs when “*companies hid[e] patents until industry is locked in and thereafter refus[e] to license or request exorbitant fees.*”).

⁸ *Microsoft Corp. v. Motorola, Inc.*, Case No. 14-35393 (9th Cir. July 30 2015), at 9.

⁹ See, e.g., Joseph Farrell, John Hayes, Carl Shapiro & Theresa Sullivan, *Standard Setting, Patents, and Hold-Up*, 74 ANTITRUST L.J. 603, 612 (2007).

¹⁰ Article 101 Guidelines, § 287.

patentee's royalty demand to the value conferred by the patent itself as distinct from the additional value—the hold-up value—conferred by the patent's being designated as standard-essential.”¹¹

The essence of the FRAND commitment is a voluntary agreement by the SEP holder to forgo the right to (i) exclude others from practicing the patented technology, and (ii) charge a royalty that reflects the absence of competitive alternatives to the SEP after a standard is adopted.¹² Standard-setting participants voluntarily agree to these limitations on their patents rights because they gain the ability to obtain reasonable royalties from a large number of standard implementers.

2. Multi-Jurisdictional Efforts to Enforce FRAND Commitments and Clarify FRAND

As patents and standards have proliferated, alleged breaches of FRAND commitments and efforts to enforce them have increased significantly. Litigated cases involving FRAND-encumbered Wi-Fi SEPs reveal how excessive royalty demands from some SEP holders can become. For example,

- In one widely reported case in the United States, Motorola Mobility demanded a royalty of 2.25% of the price of Microsoft Xbox games consoles, which amounted to US\$6 to US\$8 per console or unit, based on its ownership of only 11 Wi-Fi SEPs out of the estimated universe of 3,000 such patents.¹³ After first prohibiting Motorola from seeking an injunction against Microsoft in any court and later holding a trial on the FRAND rate, the court awarded Motorola US\$0.03471 per unit,¹⁴ a tiny fraction of the \$6 to \$8 per unit that Motorola had demanded while threatening Microsoft with an injunction. The district court case was affirmed by the US. Court of Appeals for the Ninth Circuit.

¹¹ *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 913 (N.D. Ill. 22 June 2012), *rev'd in part*, No. 2012-1548, (Fed. Cir. 25 Apr. 2014). Although an appellate court reversed parts of Judge Posner's opinion, it affirmed Judge Posner's denial of an injunction with respect to a FRAND-encumbered SEP. The appellate court did not rule on the appropriate level of a FRAND royalty.

¹² Google/Motorola Mobility § 57 (“SSO's IPR policy should ensure that each entity which contributes technology to a standard must limit their freedom to exercise their 'ownership' of a piece of that standard by committing to license the relevant technology to anyone wishing to use the standard on FRAND terms.”).

¹³ See *Microsoft Corp. v. Motorola, Inc.*, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. 25 Apr. 2013); affirmed, No. 14-35393 (9th Cir. Jul. 30, 2015).

¹⁴ *Id.* at *303.

- In another U.S. case, a patent assertion entity known as Innovatio, which holds 19 Wi-Fi SEPs, demanded a royalty of as much as 6% of the price of various systems that incorporate Wi-Fi chips.¹⁵ This resulted in a proposed royalty of \$16 per unit for tablet computers and nearly \$5 per laptop computer.¹⁶ Innovatio thus was seeking royalties amounting to several times the \$1-2 price of many Wi-Fi chips in return for a license to less than 1% of the approximately 3,000 Wi-Fi SEPs. The court ultimately awarded the plaintiff the reasonable royalty of \$0.0956 per unit, a tiny fraction of the royalty demanded by Innovatio.¹⁷
- In yet another case, LSI Logic, the holder of only two FRAND-encumbered Wi-Fi SEPs demanded that a Wi-Fi chipmaker pay “*a royalty that exceeds the selling price of [the chipmaker’s] products.*”¹⁸ After the court enjoined the SEP holder from seeking to enjoin the shipment of the chipmaker’s Wi-Fi chips, the plaintiff made a royalty demand based on the price of the Wi-Fi chips, and ultimately won a royalty of 0.19% of the Wi-Fi chips’ selling price, which was estimated to be equal US\$0.0019 to US\$0.0033 per chip.¹⁹ The amount awarded was a small fraction of the royalty initially sought by LSI, which exceeded the estimated US\$1.00-1.75 price of the chips at issue.

Courts in many jurisdictions have yet to publish opinions addressing the determination of FRAND royalties. Although the U.S. courts in the *Motorola*, *Innovatio* and *LSI* cases set the royalties at a fraction of the demands by the SEP holders, the cumulative royalty in those three cases for their 32 patents, or roughly 1.1% of all Wi-Fi SEPs, is US\$0.13.²⁰ If that cumulative royalty was used to calculate the royalty for *all* 3,000 Wi-Fi SEPs, the cumulative royalty on those SEPs would total more than US\$13, or about 13 times the price of the lowest-priced Wi-Fi chip in the LSI case.

This cumulative royalty is even more concerning in light of the court’s finding in one of these decisions that the majority of the technologies incorporated into the Wi-Fi standard “*were*

¹⁵ *In re Innovatio IP Ventures, LLC Patent Litig.*, 2013 WL 5593609 9 (N.D. Ill. Oct. 3, 2013).

¹⁶ *Id.* at *12.

¹⁷ *Id.* at *44.

¹⁸ *Realtek Semiconductor Corp. v. LSI Corp.*, 2012 WL 4845628 at *2 (N.D. Cal. 20 May 2013).

¹⁹ Jury Verdict Form, *Realtek Semiconductor Corp. v. LSI Corp.*, Case No. C-12-3451-RMW, Docket No. 324 (Feb. 26, 2014).

²⁰ See Joseph Kattan and Chris Wood, *Standard-Essential Patents and the Problem of Hold-Up* (forthcoming Concurrences Journal), available at papers.ssrn.com/sol3/papers.cfm?abstract_id=2370113.

in the public domain and not covered by patents.”²¹ With at least 250 standards in a notebook computer,²² the implications of a US\$13 aggregate royalty for a single standard’s SEPs are enormous. If other SEP holders are able to obtain similar royalties, it is not far-fetched to see royalties that exceed the selling prices of many high-technology products. By way of comparison, in the wireless telephony business, the aggregate royalty already has reached the level of 25-30% of the price of a mobile phone, or well over US\$100 for many smartphones.²³

The cases of attempted hold-up discussed above are publicly known because they became the subject of litigation. But many hold-ups occur before litigation begins where the standard implementer cannot afford the risk of the fight. Because standard implementers are locked into a standard, SEP holders have the ability to threaten an injunction against a standard implementer that would effectively extract all of the profits from selling a standard-compliant product. The result often is a confidential settlement at an inflated royalty level that reflects not the value of the SEP(s) at issue but, rather, the implementer’s risk that it would be barred from selling its standard-compliant products. Such instances of successful hold-up—where a standard implementer caves to demands for extortionate royalties because of that risk—go unreported. The financial terms of license agreements are seldom publicly disclosed. It is clear that the reported cases represent only the tip of a growing iceberg.²⁴

Keenly aware of the potential for hold up and its associated consequences, officials from the U.S. Department of Justice (DOJ) have provided guidance on how SSOs might revise their patent policies to “benefit competition by decreasing opportunities to exploit the ambiguities of a F/RAND licensing commitment.”²⁵ At least one leading SSO, IEEE, has successfully revised its patent policy to offers factors that courts and (if mutually agreed) arbitrators might use in

²¹ Microsoft, 2013 U.S. Dist. LEXIS 60233, at *144.

²² Brad Biddle, et al., *How Many Standards in a Laptop? (And Other Empirical Questions)*, at 1 (2010), available at http://www.standardslaw.org/How_Many_Standards.pdf.

²³ Eric Stasik, *Royalty Rates And Licensing Strategies For Essential Patents On LTE (4G) Telecommunication Standards*, les Nouvelles at 119 (Sept. 2010), available at <http://www.investorvillage.com/uploads/82827/files/LESI-Royalty-Rates.pdf>. It has been estimated that as many as 250,000 patents may be used in a smartphone. See RPX Corporation, Amendment No. 3 to Form S-1, 11 Apr. 2011, at 59, available at <http://www.sec.gov/Archives/edgar/data/1509432/000119312511101007/ds1a.htm>; Steve Lohr, Apple-Samsung Case Shows Smartphone as Legal Magnet, N.Y. Times, 25 Aug. 2012, available at <http://www.nytimes.com/2012/08/26/technology/apple-samsung-case-shows-smartphone-as-lawsuit-magnet.html>.

²⁴ At least 20 cases involving Wi-Fi SEPs have been filed in the US alone, with the majority producing confidential settlements. One of these settlements alone was expected to generate “hundreds of millions of dollars” in royalties, according to the SEP holder. WiLAN Annual report for 2011 at 4, available at http://www.wilan.com/files/documents_financial/WiLAN_2011_Annual_Report_Final.pdf.

²⁵ Renata Hess, Deputy Assistant Attorney General, *Six ‘Small’ Proposals for SSOs Before Lunch*, Prepared for the ITU-T Patent Roundtable (October 10, 2012), p. 9.

assessing FRAND issues and rates. Specifically, IEEE's revised patent policy, which the U.S. DOJ has approved as being consistent with U.S. law,²⁶ recommends that a FRAND rate not include the value of the standard itself; take into account the contributions made by other SEPs for the same standard; be set with reference to the smallest saleable patent practicing unit; and be calculated with reference to licenses not obtained under threat of an injunction.

Many other SSOs, however, have struggled to clarify their patent policies because their participants often include some SEP holders that want to maximize licensing revenue as part of their business model. Thus, as explained below, regulatory authorities have used various ways to limit abuses of FRAND commitments.

For example, today an international consensus has emerged that seeking or enforcing injunctive relief with respect to FRAND encumbered SEPs is likely to be anticompetitive because it enables the imposition of excessive royalties or other anticompetitive licensing terms. As the European Commission has stated, "*the threat of injunction, the seeking of an injunction or indeed the actual enforcement of an injunction granted against a good faith potential licensee, may ... forc[e] the potential licensee into agreeing to potentially onerous licensing terms which it would otherwise not have agreed to*" including, "*for example, a higher royalty.*"²⁷ Similarly, the U.S. Federal Trade Commission has concluded that the invocation of injunctive relief has "*the potential to harm consumers by excluding products from the market as a result of an injunction or by leading to higher prices because manufacturers are forced, by the threat of an injunction, to pay higher royalty rates.*"²⁸

For these reasons, both the European Commission and U.S. authorities have severely limited the use of injunctive relief by SEP holders. The European Commission has determined that seeking or enforcing injunctive relief with respect to FRAND-encumbered SEPs is permissible only where "*(1) a potential licensee is in financial distress and unable to pay its debts; (2) a potential licensee's assets are located in jurisdictions that do not provide for adequate means of enforcement of damages; or (3) a potential licensee is unwilling to enter into a licence agreement on FRAND terms and conditions, with the result that the SEP holder will*

²⁶ U.S. Department of Justice, *Business Review Letter 15-1, Institute of Electrical and Electronics Engineers* (2 February 2015).

²⁷ Case COMP/M.6381 - Google/Motorola Mobility, 13 February 2012, ¶ 107.

²⁸ See *Motorola Mobility LLC, Analysis of Proposed Consent Order to Aid Public Comment* at p. 5, available at <http://ftc.gov/os/caselist/1210120/130103googlemotorolaanalysis.pdf>.

*not receive FRAND compensation for the use of its SEPs.*²⁹ A licensee is considered willing if it agrees to be bound by a judicial determination of the FRAND license terms.³⁰ The U.S. Federal Trade Commission has adopted a similar approach.³¹

As far as identifying an appropriate FRAND royalty, in the U.S. so far this has been done by courts establishing two fundamental principles in cases addressing patent damages. First, the patented feature must be apportioned from all of the unpatented features reflected in the standard. Second, the patentee's royalty must be premised on the value of the patented feature, not any value added by the standard's adoption of the patented technology. These steps are necessary to ensure that the royalty award is based on the incremental value that the patented *invention* adds to the product, not any value added by the *standardization* of that technology.³² This position also is endorsed by the US Federal Trade Commission (FTC).³³

The European Commission's *Rambus* decision provides support for the first principle enunciated above. In that case, certain companies expressed their concern that Rambus would seek to "extract royalties based not on the price of the individual chips or controllers [including the relevant technology], but on the value of the end-product (such as PCs, mobile phones and other devices integrating DRAMs), even if the licensed technologies only represent a small percentage of such end-products."³⁴ In response, the EC's decision clarified that the "royalty shall be determined on the basis of the price of the individually sold chip and not of the end-product. If they are incorporated into other products, the individual chip price remains determinative."³⁵ Any wider royalty base would automatically lead to royalties that are excessive by compensating the patent owner for non-infringing components of the product.

More generally, 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*

²⁹ Case AT.39985 *Motorola* (29 Apr. 2014), ¶ 427; Case AT.39939 *Samsung* (29 Apr. 2014), ¶ 67.

³⁰ See *Motorola* ¶ 420; *Samsung* ¶¶ 75-118.

³¹ See *Motorola Mobility LLC*, Analysis of Proposed Consent Order to Aid Public Comment at p. 5, available at <http://ftc.gov/os/caselist/1210120/130103googlemotorolaanalysis.pdf>.

³² E.g., *Ericsson Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201 (Fed. Cir. 2014); *VirnetX, Inc. v. Cisco Systems, Inc.*, 767 F.3d 1308 (Fed. Cir. 2014).

³³ Fed. Trade Comm'n, *The Evolving IP Marketplace: Aligning Patent Notice And Remedies With Competition*, at 212 (Mar. 7, 2011) ("Evolving Marketplace Report"), available at <http://www.ftc.gov/os/2011/03/110307patentreport.pdf>.

³⁴ *Rambus* § 60.

³⁵ *Id.* § 66.

*based on whether the fees bear a reasonable relationship to the economic value of the IPR.”³⁶ 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*).”³⁷*

Governmental authorities in other jurisdictions have addressed various types of breaches of FRAND commitments as a matter of competition law. For example, the State Administration for Industry and Commerce (SAIC) issued a regulation in April 2015 which states that, unless SEP holders are otherwise justified, it is an abuse of IPR under China’s Anti-Monopoly Law for them to (i) refuse to license their patent(s); (ii) tie the licensing of their SEPs to non-SEPs; or (iii) impose other unreasonable licensing terms, in violation of the fair, reasonable, and non-discriminatory principle.³⁸

In December of 2014, the Korean Fair Trade Commission (KFTC) revised its Guidelines for Review of Unreasonable Exercises of Intellectual Property Rights to address certain breaches of FRAND commitments. Section III.5.A of the KFTC Guidelines now makes it an abuse of patent rights to (i) unreasonably avoid or circumvent the granting of a license on FRAND terms; (ii) unreasonably refuse to license a SEP; (iii) unreasonably impose discriminatory conditions when licensing SEPs; or (iv) impose an unreasonable royalty.

Several other jurisdictions are moving in the same direction as SAIC and the KFTC. In June 2015, Canada’s Competition Bureau issued revised draft Intellectual Property Enforcement Guidelines that address, in Section 7.3, certain abuses of SEPs such as charging supra-competitive royalty rates and seeking injunctive relief after having made a licensing commitment. And in July 2015, Japan’s Fair Trade Commission (JFTC) issued for comment A Partial Amendment of its Guidelines for the Use of Intellectual Property under the Antimonopoly Act, which addresses in Section 3(1)(i)(e) potentially abusive conduct such as a refusal to license FRAND-encumbered SEPs and a claim for an injunction against a party willing to take a FRAND license.

³⁶ Article 101 Guidelines, § 289.

³⁷ *Id.; see also Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d at 913 (“The proper method of computing a FRAND royalty starts with what the cost to the licensee would have been of obtaining [a license], just before the patented invention was declared essential to compliance with the industry standard.”).

³⁸ Rules of the Administration for Industry and Commerce on Prohibition of Abusing Intellectual Property Rights to Eliminate or Restrict Competition (August 2015), Art. 13.

In brief, other jurisdictions have addressed breaches of FRAND commitments as a matter of patent, contract and/or competition law. We understand the Productivity Commission basically has a blank slate when it comes to dealing with abuses of FRAND commitments, as its patent law does not address such issues and there is no judicial precedent from its case law. Intel would be pleased to provide additional input on the subject if deemed helpful to the Commission.

Conclusion

Intel appreciates the Commission's commitment to structuring Australia's intellectual property system to provide appropriate incentives for innovation and investment while ensuring it does not inappropriately impede other innovation, competition, or investment. We look forward to continuing to work with the Commission to advance these objectives. Please do not hesitate to contact us directly if we may be of any assistance.

Sincerely,

Tina M. Chappell
Associate General Counsel
Director of Intellectual Property Policy
Intel Corporation

Jennifer Mulveny
Director, Cloud Policy and Government Relations
Australia/New Zealand
Intel Corporation