APPLE INC.'S WRITTEN SUBMISSION TO THE TRADE POLICY STAFF COMMITTEE

ITC Inv. No. 337-TA-794

June 19, 2013

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I. Introduction

Policy considerations compel the United States Trade Representative (USTR) to exercise the power delegated to it pursuant to 19 U.S.C.§ 1337(j)(2) to disapprove the exclusion order issued by the International Trade Commission (ITC) on June 4, 2013. This investigation marks the first time that the Commission has approved an exclusion order for the infringement of a standard-essential patent (SEP). As Commissioner Pinkert's dissent recognized, this decision will have grave consequences if left unchanged. Commissioner Aranoff explicitly invited the President to "decid[e] whether to disapprove the remedy the Commission is issuing today," and Apple respectfully requests that the USTR, as the President's delegate, accept that invitation and disapprove the remedy.

When a patent holder declares a patent essential to a standard, the patent holder makes an irrevocable commitment to license that patent on "fair, reasonable, and non-discriminatory" (FRAND) terms as a *quid pro quo* for participating in setting industry standards. The patent holder receives the benefit of reasonable assured royalty payments—if the patent is valid and truly infringed by those who use the standard—but forgoes the ability to pursue certain legal remedies. The ITC decision threatens to render meaningless a FRAND commitment made to a standard-setting organization.

To be sure, the ITC plays an important role in the United States trade regime, as a critical defense against the importation of goods that will result in unfair competition in the domestic market. But that role is circumscribed by the terms of Section 337—which explicitly requires the ITC to consider the public interest implications of any exclusion order—and the commitments the U.S. has made to its international trading partners. When Congress amended Section 337 in 1974 to give the ITC responsibility for issuing exclusion orders, it made clear that the "public health and welfare and the assurance of competitive conditions in the United States economy must be the ***overriding considerations*** in the administration of this statute."[1] In defending Section 337 as consistent with its international trade obligations, the United States justified the Section 337 exclusion order remedy as the "functional equivalent" of a district court injunction against a domestic manufacturer, made necessary where the supplier of the accused infringing products is outside the jurisdiction or otherwise difficult to reach or identify.[2] Yet here, the ITC issued a remedy that sharply diverged from any that a district court could properly order for a FRAND patent.

Given the special considerations that attend FRAND patents, the public interest dictates that the ITC could properly issue an exclusion order on a FRAND patent only in limited circumstances—such as where the accused infringer is a foreign entity not subject to jurisdiction in a United States court, or where the alleged infringer had refused to pay FRAND royalties previously set by a court or arbiter. This case presented no such circumstances, and the ITC exceeded its statutory mandate by issuing an exclusion order here. The USTR should disapprove the decision because:

- **The decision is plainly inconsistent with Administration policy.** On the very same day the ITC issued the exclusion order, the White House issued a set of legislative proposals related to patent litigation, including one to make it more difficult for a patent holder to obtain an exclusion order at the ITC. The ITC decision would do the opposite. The National Economic Council and the Council of Economic Advisors issued a report that same day acknowledging the potential policy concerns raised by an exclusion order issued on a SEP. The ITC decision is the realization of those same concerns.

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[1] S. Rep. 93-1298, at 197 (1974) (emphasis in original) (quoted with approval in U.S. Dep't of Justice & U.S. Patent & Trademark Office, Policy Statement on Remedies for Standard-Essential Patents Subject to Voluntary F/RAND Commitments at 10 (Jan. 8, 2013), *available at* http://www.justice.gov/atr/public/guidelines/290994.pdf ("DOJ/PTO Statement")).

[2] GATT Panel Report, *United States Section 337 of the Tariff Act of 1930*, L/6439, adopted Nov. 7, 1989, BISD 36S/345, paras. 5.31-5.33.

- **The decision creates substantial competition policy risks.** The nation's competition policy regulators have warned of the dangers of issuing an exclusion order based on a SEP. The Department of Justice and the Patent and Trademark Office issued a joint statement explaining how an ITC exclusion order based on a SEP distorts the negotiating process and undermines the public interest. Similarly, the Federal Trade Commission has found that seeking an injunction or exclusion order for the alleged infringement of a SEP violates federal competition law.

- **The decision will harm consumers and slow the pace of technological innovation.** Not only will the decision eliminate popular products from the market, depriving consumers of the opportunity to purchase them, but the decision will also have a chilling effect on incentives to innovate. If a SEP holder can exploit the market value conveyed by standardization and "hold-up" unsuspecting implementers of the patent, then incentives to innovate are removed. The Administration's policy statements echo this point.

- **The decision makes the ITC an outlier internationally and domestically.** The decision upsets the international consensus against FRAND abuse, making the ITC an outlier among agencies and tribunals around the world. For example, the European Commission issued a preliminary determination that Samsung had violated European competition law by pursuing injunctions on FRAND patents against Apple, and Samsung has withdrawn all such injunction requests in Europe. Yet here in the United States, Samsung has continued to pursue injunctions and exclusion orders, and the ITC has now rewarded that conduct. The decision likewise goes against the jurisprudence of U.S. courts, allowing SEP holders to evade U.S. court decisions. As such, the decision will create a unique venue for SEP-holding plaintiffs to obtain special relief that has been rejected by the many other authorities that have considered the issue, attracting to the ITC other parties that wish to use their SEPs for hold-up.

- **The decision runs counter to the mission of the ITC.** Section 337 exists to protect American companies from unfair methods of competition. Here, Samsung is engaging in activity that the United States Federal Trade Commission has characterized as an unfair method of competition. Section 337 should not be used as a vehicle that ***enables*** unfair competition against an American company.

- **The decision creates international trade concerns.** By providing a remedy that would decidedly not be available in similar circumstances against infringing domestic products in a United States district court, the ITC's action raises the same types of international trade concerns that led to the 1989 GATT action.

For all of these reasons, the ITC's decision establishes a dangerous policy precedent. The USTR has the responsibility "for policy reasons, [to] disapprove[] such determination" pursuant to Section 337(j)(2), and Apple respectfully submits that the far-reaching policy consequences of the ITC's decision compel that the USTR exercise this authority. Disapproval would help restore the statutory public interest factors to their proper role in ITC decision-making, and bring the ITC into alignment with the policies of other domestic and international authorities regarding standard setting and FRAND commitments.

II. Background

For context, we briefly review: (A) standards; (B) the problem of patent "hold-up"; (C) FRAND as the safeguard against hold-up; and (D) the history of this case.

A. Standards

A standard is a set of rules, agreed to by a group of industry participants, to govern certain functionality in devices in that industry. The purpose of standards is to ensure that products made by different companies will work together, or interoperate, seamlessly. A simple example is an electric plug, the design of which is covered by a standard (e.g., those promulgated by the International Electrotechnical Commission). Because the plug design is standardized, electronic equipment made by many different manufacturers can "plug in" to electrical outlets made by many other manufacturers.

This common interoperability serves as a platform on which companies can compete—by developing their own unique innovations on the foundation of the shared, standardized functionality. The plug may be the same, but what is connected to the plug will vary endlessly, to the benefit of competition and consumers. Standardization can increase product quality, spur innovation and lower prices to consumers, and reduce barriers to entry by creating a stable, widely-implemented platform for suppliers to offer products that interoperate efficiently yet vary in important and consumer-pleasing ways.

Through consensus-based standard-setting organizations (SSOs) such as the European Telecommunications Standards Institute (ETSI), the mobile-device industry has set a series of cellular standards in progressively more advanced "generations." The most popular "third generation" (or 3G) cellular standard is the Universal Mobile Telecommunications Standard (UMTS), which the members of ETSI and other SSOs developed together in the 1990s and 2000s.[3] The SEP at issue in this case relates to UMTS.

B. Patent "Hold-Up"

For all their benefits, standards pose a problem: if a party holds a patent on an aspect of a standard, that patent becomes artificially valuable simply because it is a part of the standard. Before standardization, the patented invention competes with other technologies performing the same or similar function; after standardization, manufacturers may have only a single choice: the standardized version. For example, travelers abroad will encounter a variety of electrical plug designs, many of which will function equally well as a purely technical matter; however, in any one country, the plug design is limited to the standard used in that country. If a party holds a patent on the standardized version—or even some small aspect of it—that patent becomes artificially valuable by virtue of standardization.

In the course of developing a standard, the SSO can choose among alternative technologies competing to perform a function, and can also decide not to standardize that function at all. These alternatives constrain the price of any one option, and the value of each is determined solely by its technical merit. But if the SSO chooses to select one option and discard others (even if equally good on the technical merits), the dynamic changes, and the "winner" suddenly gains market power that is a function of standardization rather than technical merit. As the Federal Trade Commission has recognized: "By its very nature, standard setting displaces the competitive process through which the purchasing decisions of customers determine which interoperable combinations of technologies and products will survive."[4] A patent covering a technically trivial feature can nonetheless become a "standard essential patent" or SEP.

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[3] Most of these standards were set long before Apple entered this market. Apple did not participate in the standard-setting process for UMTS, but relied upon assurances patent holders made to SSOs when Apple entered the smartphone market in mid-2007.

[4] Opinion of the Commission at 3, *In the Matter of Rambus, Inc.*, Dkt. No. 9302 (F.T.C. Aug. 2, 2006), *available at* http://www.ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf.

As the industry becomes locked-in to the chosen functions, those that claim to hold SEPs gain the power to "hold-up" companies making products that practice the standards, by demanding exorbitant royalties or other licensing terms as the price for access to the SEPs. A White House intellectual property task force recognized in a report issued on June 4, 2013—the same day as the ITC decision—that "a product that complies with such a standard will necessarily read on these patents, creating a potential incentive for patent owners to raise the price of a license after the standard is set."[5]

This potential for hold-up is especially pervasive in industries like telecommunications, where companies claim to hold ***thousands*** of SEPs on standards such as UMTS. Modern mobile devices contain features subject to dozens of standards, multiplying the potential for hold-up.

Against that backdrop, SSOs, economists, industry participants, agencies, and courts have long recognized that "standards, without proper safeguards, are inherently anticompetitive."[6] Of the safeguards that SSOs have developed, the most critical is the FRAND licensing requirement.

C. FRAND

As the United States Court of Appeals for the Third Circuit has stated: "To guard against anticompetitive patent hold-up, most [SSOs] require firms supplying essential technologies . . . to commit to licensing their technologies on FRAND terms."[7] The European Commission has likewise observed: "[T]he concept of FRAND has been developed in an attempt to limit the ability of SEP [standard-essential patent] holders to abuse their market power and to provide effective access to the standard for all interested third parties."[8]

The Intellectual Property Rights Policy (IPR Policy)[9] of ETSI, under which Samsung promised to license the alleged SEP at issue here, is a case in point. It provides, in Clause 6.1 (emphasis added):

> When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to ***grant irrevocable licenses on fair, reasonable and non-discriminatory terms*** . . . .

This commitment implements ETSI's Policy Objectives of "seek[ing] to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS . . . , that investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD . . . being unavailable" by striking a "balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs."[10]

Two aspects of FRAND commitments are particularly critical, as recognized by federal appellate judge—and law and economics scholar—Judge Richard Posner, in his decision rejecting a request for a SEP injunction. First, the FRAND declarant disavows hold-up power and agrees to "confine [its] royalty demand to the value conferred by the patent itself, as distinct from the additional value—the hold-up

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5 President's Council of Economic Advisors, Nat. Econ. Council, & Office of Sci. & Tech. Pol., "Patent Assertion and U.S. Innovation" at 12 (June 2013), *available at* http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf.
6 *Research in Motion Ltd. v. Motorola, Inc.*, 644 F. Supp. 2d 788, 796 (N.D. Tex. 2008).
7 *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 313 (3d Cir. 2007).
8 Commission Decision Pursuant to Art. 6(1)(b) of Council Regulation No. 139/2004 at ¶ 113, *Google/Motorola Mobility*, Case No. COMP/M.6381 (Feb. 13, 2012).
9 ETSI IPR Policy (Nov. 2011), *available at* http://www.etsi.org/images/etsi_ipr-policy.pdf.
10 *Id.* at Clause 3.1.

value—conferred by the patent's being designated as standard essential."[11] Second, the FRAND declarant commits to license its patent "to ***anyone*** willing to pay a FRAND royalty and thus implicitly acknowledge[s] that a ***royalty is adequate compensation*** for a license to use that patent."[12] Having agreed that anyone can practice the patent (which necessarily means the patent holder will not be injured by others practicing the patent) and that money is adequate compensation, a FRAND patent holder cannot claim a need or right to an injunction—as Judge Posner and many others have recognized. (*See* Section III, *infra*.)

D. Overview Of The ITC Case And The Patent At Issue

The ITC Case. In June 2011, Samsung brought this case against Apple at the ITC alleging Apple was infringing five Samsung patents, including two SEPs Samsung committed to license on FRAND terms. Since that time, Samsung has [redacted]

- [redacted]
- during the investigation, made an exorbitant demand of 2.4% of Apple's iPhone and iPad revenues in return for a license to Samsung's portfolio of alleged SEPs—a demand that would have translated to approximately [redacted] in royalties for Samsung for sales of the iPhone ***in 2011 alone***;[13] and
- after the Administrative Law Judge's decision (discussed further below), continued to demand exorbitant fees—[redacted]

This is precisely the hold-up that FRAND is intended to prevent.

The '348 Patent. The accused iPhones and iPads contain a broad array of standards-based and non-standardized, product-differentiating technologies, including tens of thousands of hardware, software, and firmware components. Samsung contended (and the ITC found) that Apple infringes the '348 patent based on just two provisions of a single standard, sections 4.3.3 and 4.3.5 of Technical Specification 25.212 in the UMTS standard (UMTS stands for Universal Mobile Telecommunications Standard), relating to "TFCI encoding."

As a threshold matter, the ALJ's finding of noninfringement was correct. ETSI does not have any gatekeeper to test whether declared SEPs are actually essential—the patent owner self-declares essentiality. Here, the professed essentiality of the '348 patent was tested by the ALJ and properly found lacking.

But even if the ITC reversal of the ALJ's noninfringement finding were correct, the entirety of any UMTS standardized functionality in mobile devices is implemented in computer processing circuitry found in the "baseband processor," a component that every mobile device—whether a simple $50 phone or a $600 cellular tablet—contains. The baseband processor is located in the cellular modem region of a mobile device, and is connected to other components, such as an RF transceiver. Baseband processors are

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[11] *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901, 913 (N.D. Ill. 2012).

[12] *Id.* at 914 (emphasis added).

[13] Apple sells the iPhone for between $650 to $850, which translates to between $15.60 and $20.40 per iPhone based on Samsung's 2.4% demand. Apple sold [redacted] iPhones worldwide in 2011 and if it paid Samsung $18 per iPhone, that would amount to approximately [redacted], and does not include cellular-compliant iPads on which Samsung would also seek 2.4% of the sales price.

often sold in a "chipset" along with an RF transceiver and power control chip. [redacted]. Moreover, the '348 patent is a relatively trivial patent when measured against the whole UMTS standard.

As Commissioner Pinkert found, it constitutes at a most a "tweak" of the TFCI encoding in the standard. [redacted]

Moreover, UMTS is just one of many interoperability standards that are implemented in the accused iPhone and iPads (as well as nearly all modern smart phones and tablet computers), including Wi-Fi, Bluetooth, USB, and over a hundred others.

Finally, as a standard, by definition UMTS does not set Apple's products apart from other mobile devices or drive consumers toward Apple's products rather than the alternatives. An inexpensive, disposable cell phone purchased at a convenience store will be equally capable of practicing the UMTS standard. What sets the Apple products apart is the host of innovations that are not covered by any standard. These product-differentiating innovations include the products' design (the look and feel of the hardware), user interface (such as touchscreen technology), operating system (Apple's proprietary iOS system), available software (e.g., the hundreds of thousands of applications or "apps" available in the Apple App Store), and the power of the central processing unit. The '348 patent has no relevance to any of these.

The ITC's Decision. On September 14, 2012, the Administrative Law Judge issued his Initial Determination in this case, finding that Apple did not infringe any of the four patents Samsung asserted at the evidentiary hearing. (Samsung dropped one patent before the hearing.)

Following the ALJ's Initial Determination, the parties submitted multiple rounds of briefing and evidentiary submissions on the patent merits, FRAND, and the public interest. A number of third parties also submitted statements on the FRAND and public interest issues in response to an ITC request.[14]

On June 4, 2013, the ITC reversed the ALJ's finding of noninfringement of the '348 patent and barred from the United States market Apple's iPhone 4 (GSM models); iPhone 3GS (GSM models); iPhone 3G (GSM models); iPad 2 3G (GSM models); and iPad 3G (GSM models).[15]

[14] Third parties such as Hewlett-Packard, Intel, Sprint, and the Business Software Alliance submitted filings explaining the significant harms that would be created by issuing an exclusion order on a FRAND-encumbered SEP. As an example, Intel provided a submission in which it outlined the significant threat to standard setting and the public interest: "Given the crucial role of FRAND commitments in preserving competition, straightforward application of § 337's public-interest factors shows that an Exclusion Order would be inappropriate here. Most obviously, enforcement of FRAND commitments improves the 'competitive conditions in the United States economy' and enhances the welfare of 'United States consumers' by mitigating the hold-up problem. 19 U.S.C. § 1337(d)(1). Because of the commercial infeasibility of designing around standards, allowing an SEP holder to obtain an injunction against a party willing to pay FRAND royalties would empower SEP holders to extract a disproportionate share of the value of accused products, making an unreasonably high settlement the only plausible outcome, and thereby raising prices to consumers. . . . Even more troubling, issuance of an Exclusion Order in the face of unfulfilled FRAND commitments would undermine the standard-setting process that is so vital to U.S. innovation, economic growth, and consumer welfare." Corrected Statement Regarding the Public Interest by Non-Party Intel Corp. at 5-6, Inv. No. 337-TA-794 (Dec. 3, 2012); *see also* The Business Software Alliance's Response to the Commission's Request for Additional Written Submissions on Remedy and the Public Interest, Inv. No. 337-TA-794 (Apr. 3, 2013); Hewlett-Packard Co. Comments in Response to the Commission's Request for Written Submissions on Remedy and Public Interest, Inv. No. 337-TA-794 (Dec. 3, 2012); Third Party Sprint Spectrum, L.P.'s Statement Regarding the Public Interest, Inv. No. 337-TA-794 (Dec. 3, 2012).

[15] Comm'n Op. at 3-4, Inv. No. 337-TA-794 (June 4, 2013) ("Comm'n Op.").

The ITC decision was wrong on the patent merits and moreover did not meaningfully consider the profound public interest consequences of issuing an exclusion order on a FRAND patent. The ITC treated the FRAND issues as tantamount to a breach-of-contract claim on which Apple bore the burden and failed to meet it. No one needed to prove that Samsung's FRAND declarations imposed obligations on Samsung—even Samsung acknowledged that fact.[redacted] Yet on that basis the ITC effectively put FRAND to the side.

III. Policy Considerations Compel USTR Disapproval Of The ITC Decision

If left standing, the ITC determination permitting Samsung to use a single FRAND-committed patent to exclude Apple products from the United States marketplace will set a dangerous precedent and would undermine U.S. foreign relations by upsetting the international consensus against FRAND abuse. Further, the order is plainly inconsistent with recently stated Administration policy and contrary to statements of the agencies charged with enforcing competition policy. The order threatens to harm consumers and slow the pace of technological innovation, and will cement the ITC as the SEP-holders litigation venue of choice: it will be dramatically easier to get extraordinary relief at the ITC than in district court.

In addition, by failing to apply properly the statutory public interest factors, the ITC neglected to recognize that ***each*** of them dictates against issuing an exclusion order in this proceeding. As described below, each of the policy considerations that the USTR identified in its Guidance Regarding Written Submission requires disapproval of the ITC decision. Absent disapproval, the United States will find itself isolated in the global community in failing to enforce FRAND promises and facilitating hold up of companies that supply products with standardized features. Given the ubiquity of standards and the thousands of declared SEPs, if our trading partners were to reverse course and adopt the ITC's approach, the effect on U.S. companies would be overwhelming.

A. The ITC Determination Is Inconsistent with Administration Policy And Would Undermine United States Foreign Relations, By Upsetting The International Consensus Against FRAND Abuse.

The ITC determination makes the ITC and—because of the ITC's power—the United States, an international outlier, dramatically out of step with a consensus against FRAND abuse among regulators and courts worldwide. In the United States, the Administration, other government authorities, and U.S. courts have coalesced around rules permitting holders of FRAND-committed patents to recover FRAND royalties for their patents—the very compensation they agreed to accept for use of their patents by standard implementers—but prohibiting them from abusing their patent rights by seeking exclusion orders and injunctive relief. A series of recent determinations by courts and regulators outside the United States, including against Samsung, have reached similar conclusions.

For example, on December 21, 2012, the European Commission issued a Statement of Objections stating its preliminary conclusion that Samsung had violated competition law by its pursuit of injunctions against Apple on Samsung's asserted SEPs.[17] Notably, just three days before the European Commission issued its Statement of Objections, Samsung withdrew all its requests for injunctive relief based on SEPs

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16 [redacted] Samsung's Pre-Hearing Brief at 160, Inv. No. 337-TA-794 (May 3, 2012).

European Commission, "Antitrust: Commission Sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents" (Dec. 21, 2012), *available at* http://europa.eu/rapid/press-release_IP-12-1448_en.htm.

in *European* courts, citing "the interest of protecting consumer choice."[18] Yet, Samsung nonetheless continues to seek exclusionary relief to bar Apple's products from the ***United States*** market.[19] Samsung's withdrawal of its injunction requests in Europe did not deter the European Commission from bringing action against Samsung, and its enforcement proceeding has been paralleled by rigorous judicial and regulatory attention to FRAND abuse across Europe and Asia. The ITC did not even discuss this development. These decisions recognize that the stakes are high and that the FRAND rules must be enforced.

Disrupting this international consensus would have serious consequences for U.S. economic and political relations. It would empower holders of FRAND patents to hold up innovators with ***product-differentiating*** technology for exorbitant royalty or other licensing terms, on threat of exclusion from the United States market. That could well cause other jurisdictions to reverse course and begin excluding American goods—including computers, mobile devices, and other consumer electronics—from their markets based on FRAND-committed patents. The United States would be unable to protest, given the actions of its own ITC.

The need for policy intervention is particularly great given the United States' prior assurances to foreign countries—in the context of a 1989 GATT proceeding—that Section 337 exclusion orders are the "functional equivalent" of a district court injunction against a domestic manufacturer, made necessary where the supplier of the accused infringing products is outside United States jurisdiction or otherwise difficult to reach or identify.[20] By providing a remedy that would decidedly not be available in similar circumstances against infringing domestic products in U.S. domestic courts—and one that is not "necessary," as described above—the ITC's action raises the same concerns that led to the 1989 GATT action. Moreover, as the legislative history of the ITC's own statute makes clear, the "public health and welfare and the assurance of competitive conditions in the United States economy must be the ***overriding considerations*** in the administration of this statute."[21] Those same concerns have animated the consensus against FRAND abuse among domestic and international authorities, as explained below.

1. Conflict With White House Policy

On June 4, 2013, the same day the ITC issued its determination in this proceeding, the National Economic Council and the Council of Economic Advisers released a report, "Patent Assertion and U.S. Innovation," that recognizes both the implications of the FRAND bargain and the dangers of patent hold-up:

> When standards incorporate patented technologies, owners of those patents benefit from expanded marketing and licensing and licensing opportunities, while the public benefits from products embodying the best technical solutions. However a product that complies with such a standard will necessarily read on these patents, creating a potential incentive for patent owners to raise the price of a license after

[18] *See, e.g.*, Ex. A to Respondent Apple Inc.'s Notice of New Facts Related to the Commission's Questions on the Issues Under Review, and on Remedy, Bonding, and the Public Interest, Inv. No. 337-TA-794 (Dec. 21, 2012); Don Reisinger, "EU Set to Charge Samsung in Antitrust Case – Report," CNet (Dec. 20, 2012), *available at* http://news.cnet.com/8301-1035_3-57560201-94/eu-set-to-charge-samsung-in-antitrust-case-report/.

[19] The ITC dismissed Samsung's concession that seeking injunctive relief threatened harm to European consumers as irrelevant to the issues before it: "we see little relevance to Samsung's statement . . . that Samsung will not pursue injunctive relief for certain patents in European courts." Comm'n Op. at 52 n.11.

[20] GATT Panel Report, *United States Section 337 of the Tariff Act of 1930*, L/6439, adopted Nov. 7, 1989, BISD 36S/345, paras. 5.31-5.33.

[21] S. Rep. 93-1298, at 197 (1974) (emphasis added) (quoted with approval in DOJ/PTO Statement, *supra* note 1, at 10).

> the standard is set.[22]

On that same day, a White House task force recommended better aligning the standard for ITC exclusion orders with the test for injunctions in the district court. The ITC decision did the opposite, by departing from the ITC's existing statutory mandate to consider the public interest.

2. Conflict With Department Of Justice Policy

The ITC's determination also contravenes the Department of Justice's articulation of Administration policy. In a joint statement with the Patent and Trademark Office, the Department explained how ITC exclusion orders based on FRAND-committed patents distort the FRAND negotiation process and undermine the public interest:

> A decision maker could conclude that the holder of a F/RAND-encumbered, standards-essential patent had attempted to use an exclusion order to pressure an implementer of a standard to accept more onerous licensing terms than the patent holder would be entitled to receive consistent with the F/RAND commitment—in essence concluding that the patent holder had sought to reclaim some of its enhanced market power over firms that relied on the assurance that F/RAND-encumbered patents included in the standard would be available on reasonable licensing terms under the SDO's policy. Such an order may harm competition and consumers by degrading one of the tools SDOs employ to mitigate the threat of such opportunistic actions by the holders of F/RAND-encumbered patents that are essential to their standards.[23]

In fact, the Department of Justice has opened an investigation into the very Samsung conduct the ITC has now endorsed: seeking exclusion of Apple products from U.S. markets based on FRAND-committed patents.

Moreover, the ITC's decision undermines the Department of Justice's efforts to reinforce the global consensus that—absent extraordinary circumstances[24]—exclusionary relief based on FRAND-committed patents is inappropriate. At a speech to an international conference on patents and standard-setting in October 2012, the Deputy Assistant Attorney General, Antitrust Division, stated that "it would seem appropriate to limit a patent holder's right to seek an injunction to situations where the standards implementer is unwilling to have a neutral third-party determine the appropriate F/RAND terms or is unwilling to accept the F/RAND terms approved by such a third-party."[25] For another U.S. government entity to impose an exclusion order based on a FRAND-encumbered patent (absent those exceptional circumstances) would impair the Administration's international competition advocacy, encourage other

[22] Pres.'s Council of Econ. Advisors, Nat. Econ. Council, & Office of Sci. & Tech. Pol., "Patent Assertion and U.S. Innovation" at 12 (June 2013), *available at* http://www.whitehouse.gov/sites/default/files/docs/patent_report.pdf.
[23] DOJ/PTO Statement, *supra* note 1, at 6.
[24] Given the special considerations that attend FRAND patents, the public interest dictates that the ITC could properly issue an exclusion order on a FRAND patent, but only in limited circumstances—such as where the accused infringer is a foreign entity not subject to jurisdiction in a United States court, or where the alleged infringer had refused to pay FRAND royalties previously set by a court or arbiter. This case presented no such circumstances.
[25] Renata Hesse, Deputy Assistant Attorney General, Antitrust Division, "Six 'Small' Proposals for SSOs Before Lunch" at 9, Remarks as Prepared for the ITU-T Patent Roundtable, Geneva, Switzerland (Oct. 10, 2012), *available at* http://www.justice.gov/atr/public/speeches/287855.pdf.

nations to exclude U.S. products based on FRAND-committed patents, and do great harm to U.S. economic and political relations.[26]

3. Conflict With Federal Trade Commission Policy And Actions

The Federal Trade Commission—the expert competition and consumer agency whose guidance the ITC is statutorily required to consider—has found that threatening or seeking exclusionary relief based on FRAND-committed SEPs violates federal competition law, namely Section 5 of the Federal Trade Commission Act.[27] It is difficult to imagine a starker conflict between an ITC determination and the views of an expert agency that it is required to consider: ignoring the FTC's views, the ITC has endorsed precisely the same conduct that the FTC has declared to constitute a violation of federal law.

Further, in its Statement of The Public Interest to the ITC in another proceeding involving Apple products ("the 745 Investigation"), the FTC explained why the threat of an exclusion order distorts the FRAND bargaining process and harms U.S. competition and consumers: "[A] royalty negotiation that occurs under threat of an exclusion order may be weighed heavily in favor of the patentee in a way that is in tension with the [F]RAND commitment. . . . In these ways, the threat of an exclusion order may allow the holder of a [F]RAND-encumbered SEP to realize royalty rates that reflect patent hold-up, rather than the value of the patent relative to alternatives, which could raise prices to consumers while undermining the standard setting process.[28]

Critically, the FTC also explained why "[F]RAND-encumbered SEPs present considerably different issues" from other patents for purposes of considering an ITC exclusion order under the public interest factors:

> A [F]RAND commitment provides evidence that the SEP owner planned to monetize its IP through broad licensing on reasonable terms rather than through exclusive use. Consistent with the proper role of the patent system, remedies that reduce the chance of patent hold-up associated with [F]RAND-encumbered SEPs can encourage innovation by increasing certainty for firms investing in standards-compliant products and complementary technologies. Such remedies may also prevent the price increases associated with patent hold-up without necessarily reducing incentives to innovate.[29]

4. Conflict With Congressional Statements

The ITC determination also contradicts bipartisan comments to the Commission from members of Congress. In a letter to the ITC in the 745 Investigation, six Senators—including the Chairman and the Ranking Member of the Subcommittee on Antitrust, Competition Policy and Consumer Rights—observed that because companies making FRAND commitments "have pledged not to exercise exclusivity over such patents, they should not expect the grant of an exclusion order when they are in violation of an

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[26] *See* Presidential Determination regarding *Welded Stainless Steel Pipe and Tube Industry*, 43 Fed. Reg. 17789 (Apr. 26, 1978) (disapproving ITC determination in Inv. No. 337-TA-29 that would be "detrimental to the national economic interest and to the international economic relations of the United States").

[27] Statement of the Fed. Trade Comm'n at 2, *In the Matter of Google Inc.*, FTC File No. 121-0120 (Jan. 3, 2013), *available at* http://www.ftc.gov/os/caselist/1210120/130103googlemotorolastmtofcomm.pdf ("In addition to harming incentives for the development of standard-compliant products, the threat of an injunction can also lead to excessive royalties that may be passed along to consumers in the form of higher prices."); Analysis of Agreement Containing Consent Order to Aid Public Comment at 4, *In the Matter of Robert Bosch GmbH*, FTC File No. 121-0081 (FTC Nov. 26, 2012) ("Seeking injunctions against willing licensees of FRAND-encumbered standard essential patents . . . is a form of FRAND evasion and can reinstate the risk of patent hold-up that FRAND commitments are intended to ameliorate").

[28] Third Party United States Federal Trade Commission's Statement on the Public Interest at 3-4, Inv. No. 337-TA-745 (June 6, 2012), *available at* http://www.ftc.gov/os/2012/06/1206ftcwirelesscom.pdf ("FTC 745 Public Interest Statement").

[29] *Id.* at 5 (footnote omitted).

obligation to license their patents on FRAND terms."[30] They then submitted that "[a]ny precedent that would enable or encourage companies to . . . commit to license . . . patents on RAND terms, and then seek to secure an exclusion order despite a breach of that commitment would . . . implicate significant policy concerns. Such an outcome would severely undermine broad participation in the standards-setting process, which would in turn threaten the meaningful benefits these standards provide for both industries and consumers."[31] Several of these Senators re-submitted that letter to the ITC in this present 794 investigation, stressing that they "trust[ed] that you will carefully consider and give due weight to these critical public policy concerns in your analysis."[32] Likewise, bipartisan leadership members of the Committee on the Judiciary of the House of Representatives expressed similar concerns in both the 752 and 794 investigations.[33]

5. Conflict With Patent Office Policy

The United States Patent Office has also recognized the hold-up danger inherent in SEPs. In testimony before the Senate on June 20, 2012, David Kappos, then Director of the Patent and Trademark Office, recognized the potential problem when "patents then that are pledged under FRAND terms are later enforced for exclusion orders or injunctions, and I think that the hold-up power that a patent gains over whatever standard that is chosen can actually be quite dangerous and debilitating to an industry if it is misused."[34] Director Kappos further endorsed the letter sent by a bipartisan group of senators in the 745 investigation (discussed above), stating, "letters like the one you sent are helpful in my view to guiding everyone to reach the right balance."[35]

6. Conflict With Decisions Of United States Courts

The ITC's determination is particularly troubling because it creates an avenue for evading U.S. court decisions holding SEP owners to their FRAND commitments to license for FRAND royalties only and not to exclude standard implementers from the U.S. marketplace. In *Realtek Semiconductor Corp. v. LSI Corp.*,[36] a federal district court in California recently enjoined a party from pursuing an ITC exclusionary remedy on allegedly standard-essential patents. The court found that the act of initiating an ITC complaint before even making a FRAND offer—exactly what Samsung did here—"is inherently inconsistent and a breach of defendants' promise to license the patents on [F]RAND terms."[37]

In a district court decision currently on appeal to the Federal Circuit (where the FTC has filed an *amicus* brief supporting the decision[38]), Judge Richard Posner of the Seventh Circuit (sitting by designation) explained why a FRAND commitment necessarily forecloses seeking injunctive relief:

> By committing to license its patents on FRAND terms, Motorola committed to license [its declared-essential patent] to anyone willing to pay a FRAND royalty and

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[30] Letter from Senators Kohl *et al.* to the Hon. Deanna Okun, Inv. No. 337-TA-745 (June 19, 2012).
[31] *Id.*, *see also* Letter from Senators Maria Cantwell & Patty Murray to the Hon. Irving Williamson, Inv. No. 337-TA-752 (June 28, 2012); Letter from Senators Kohl et al. to the Hon. Deanna Okun, Inv. No. 337-TA-752 (June 19, 2012).
[32] Letter from Senators Mike Lee et al. to the Hon. Irving Williamson, Inv. No. 337-TA-794 (May 21, 2013).
[33] Letter from Representatives Howard Coble, Melvin Watt, Spencer Bachus, & Steve Cohen to the Hon. Irving Williamson, Inv. No. 337-TA-794 (May 10, 2013); Letter from Representatives Lamar Smith, Melvin Watt, & John Conyers to the Hon. Deanna Okun, Inv. No. 337-TA-752 (June 7, 2012).
[34] Audio Recording: Oversight of the United States Patent and Trademark Office: Implementation of the Leahy-Smith America Invents Act and International Harmonization Efforts (June 20, 2012), *available at* http://www.judiciary.senate.gov/hearings/hearing.cfm?id=d1d944e8c0b3e2a582633afaeb6ba43a.
[35] *Id.*
[36] No. C-12-03451-RMW, 2013 WL 2181717 (N.D. Cal. May 20, 2013).
[37] *Id.* at *6.
[38] Brief of Amicus Curiae Federal Trade Commission Supporting Neither Party at 11, *Apple Inc. v. Motorola, Inc.*, Nos. 2012-1548, 2012-1549 (Fed. Cir. Dec. 4, 2012) ("[*a*] *fortiori*, a commitment to offer a license to *all* comers on FRAND terms should be sufficient to establish that a reasonable royalty is adequate to compensate the patentee . . . .").

> thus implicitly acknowledged that a royalty is adequate compensation for a license to use that patent. How could it do otherwise? How could it be permitted to enjoin Apple from using an invention that it contends Apple *must* use if it wants to make a cell phone with UMTS telecommunications capability . . . . [39]

Judge Posner then described the FTC's Public Statement in the 745 Investigation (discussed above) as "impl[ying] that injunctive relief is indeed unavailable for infringement of a patent governed by FRAND," and confirmed that "its logic embraces any claim to enjoin the sale of an infringing product" because of the " 'potential economic and competitive impact of injunctive relief on disputes involving SEPs'."[40] Applying the *eBay* factors, Judge Posner observed that Motorola could never show that damages were an inadequate remedy since "[a] FRAND royalty would provide all the relief to which Motorola would be entitled if it proved infringement."[41]

Similarly, Judge James Robart of the Western District of Washington held on summary judgment that Motorola could not use its declared-essential SEPs to pursue injunctive relief against Microsoft.[42] This decision followed that court's earlier ruling—affirmed by the Ninth Circuit—preliminarily enjoining Motorola from pursuing injunctive relief in Germany against Microsoft.[43] Judge Robart subsequently issued a 207-page decision setting FRAND rates for two Motorola SEP portfolios, illustrating how such rates are properly set in district courts—and showing that SEP holders have an effective remedy available in those courts.[44]

7. Conflict With European And Asian Courts And Regulators

Courts and regulatory authorities outside the United States are enforcing FRAND commitments rigorously and condemning injunctions based on FRAND-committed patents.

On February 28, 2013, the Tokyo District Court dismissed Samsung's complaint against Apple for alleged infringement of a Samsung patent declared essential to the UMTS wireless standard after concluding that Samsung had committed an "abuse of rights" under the Japanese Civil Code by, among other things, improperly seeking an injunction based on a patent it had promised to license on FRAND terms.[45] The court held that Samsung's conduct rendered its patent unenforceable.[46]

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[39] *Apple Inc. v. Motorola, Inc.*, *supra* note 11, at 914 (emphasis in original).
[40] *Id*. (quoting FTC 745 Public Interest Statement, *supra* note 28).
[41] *Id.* at 915.
[42] *Microsoft Corp. v. Motorola, Inc.*, No. 10-1823, 2012 WL 5993202, at *6 (W.D. Wash. Nov. 30, 2012) (dismissing Motorola's claim for an injunction on patents for which it had made a RAND declaration because that commitment meant "Motorola cannot demonstrate irreparable harm").
[43] *See Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp.2d 1089 (W.D. Wash. 2012), *aff'd*, *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 884 (9th Cir. 2012) ("Implicit in such a sweeping promise is, at least arguably, a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made.").
[44] *See Microsoft Corp. v. Motorola, Inc.*, No. 10-1823, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).
[45] *See* Respondent Apple Inc.'s Notice of New Facts Related to the Commission's Questions on the Issues Under Review, and on Remedy, Bonding, and the Public Interest, Inv. No. 337-TA-794 (Mar. 4, 2013).
[46] In addition, the Shenzhen Intermediate People's Court, found that InterDigital had violated China's Anti-Monopoly Law by seeking an exclusion order at the ITC based on a FRAND-encumbered SEP while it was in negotiations with an implementer over a royalty rate. *See* Form 10-K, InterDigital, Inc. at 23 (Feb. 26, 2013), *available at* http://files.shareholder.com/downloads/IDCC/2438652851x0xS1405495-13-10/1405495/filing.pdf. Although China's treatment of intellectual property rights has been problematic in other contexts, this decision properly recognized the anticompetitive impact of SEP holders abusing FRAND and seeking injunctions.

Similarly, on March 14, 2012, the District Court of the Hague denied Samsung's attempt to enjoin Apple's sales of iPhones and iPads that allegedly infringed four patents, and found Samsung's pursuit of an injunction on a FRAND patent to be incompatible with the FRAND commitment.[47]

Likewise, as noted above, on December 21, 2012, the European Commission charged Samsung with violating European antitrust law when it issued a Statement of Objections that "sets out the Commission's preliminary view that under the specific circumstances of this case, where a commitment to license SEPs on FRAND terms has been given by Samsung, and where a potential licensee, in this case Apple, has shown itself to be willing to negotiate a FRAND licence for the SEPs, then recourse to injunctions harms competition."[48] On May 6, 2013, the European Commission followed up with an action against Motorola, stating: "The European Commission has informed Motorola Mobility of its preliminary view that the company's seeking and enforcing of an injunction against Apple in Germany on the basis of its mobile phone standard-essential patents ("SEPs") amounts to an abuse of a dominant position prohibited by EU antitrust rules."[49]

Finally, following the European Commission's Statement of Objections in Samsung, the Regional Court of Düsseldorf observed that the requirements that Germany law currently placed on standard implementers to avoid injunctions based on FRAND-committed patents potentially conflict with the Statement of Objections.[50] Accordingly, the German court has asked for a European Court of Justice (ECJ) ruling regarding whether the German requirements are consistent with EU Competition law.

B. The Statutory Public Interest Factors Require Disapproval

In reviewing the ITC's public interest factors—on which USTR has also requested briefing—we first explain how the ITC misapplied the public interest analysis, leading it to disregard the views of government authorities it was statutorily required to consider. We then show that each of the public interest factors dictates against issuing an exclusion order in this proceeding.

1. The ITC Did Not Meaningfully Engage With The Public Interest—And Particularly The Long-Term Consequences Of Its Decision

The ITC misapplied its own governing statute by failing properly to consider the public interest before entering an exclusion order. Most significantly, the ITC erred by focusing exclusively on its views regarding the ***immediate, short-term effects*** from excluding older Apple products from the U.S. market. It therefore limited its analysis to sales volumes for the excluded products and the availability of competing products—asking only whether there would be immediate deprivations for consumers of certain classes of mobile devices.[51]

But the ITC wholly failed to engage with the policy dimensions of its decision. The ITC did not address the ***dynamic and long-term*** harm that an exclusion order will bring to standard-setting activities and innovation for differentiating features that distinguish standard-compliant products in the marketplace.

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[47] D.C. Hague, Mar. 14, 2012, Dkt. Nos. 400367 / HA ZA 11-2212, 400376 / HA ZA 11-2213, 400385 / HA ZA 11-2215 (Samsung Elecs. Co. Ltd/Apple Inc.).

[48] Press Release, European Comm'n, Antitrust: Commission Sends Statement of Objections to Samsung on Potential Misuse of Mobile Phone Standard-Essential Patents (Dec. 21, 2012), *available at* http://europa.eu/rapid/press-release_IP-12-1448_en.htm.

[49] *See* Press Release, European Comm'n, "Antitrust: Commission Sends Statement of Objections to Motorola Mobility on Potential Misuse of Mobile Phone Standard-Essential Patents (May 6, 2013), *available at* http://europa.eu/rapid/press-release_IP-13-406_en.htm.

[50] LG Düsseldorf, Mar. 21, 2013 – 4b O 104/12.

[51] *E.g.*, Comm'n Op. at 109 (considering the "number of products that would be affected by remedial orders based on infringement of the '348 patent" as a proxy for "'competitive conditions in the United States economy' and the effect on 'U.S. consumers'").

This led the ITC to disregard the views of the government authorities it was required to consider (i.e., FTC and DOJ), as well as U.S. and foreign judicial and regulatory developments. By failing to accord appropriate significance to the FRAND commitment, and failing to appreciate the public interest implications that attend such commitments, the ITC determination will place every negotiation for a FRAND license under the shadow of a credible threat that standard-compliant products will be excluded from the U.S. market. The ITC has given SEP holders the very patent hold-up weapon that government authorities and courts have condemned.

Remarkably, the ITC's decision fails to consider the FTC's or the DOJ's views on competition and the effect on consumers, notwithstanding the ITC's obligation "[d]uring the course of each investigation . . . [that it] shall consult with, and seek advice and information from . . . the Department of Justice [and] the Federal Trade Commission."[52] Indeed, as noted above, Commissioner Aranoff acknowledged that the Commission had not even attempted to address "policy arguments that the risk of hold-up occurring is sufficiently great to warrant denying an exclusion order to Samsung in this investigation" because it is "not a policy-making body and is not empowered to make that decision," and noted that "[t]he President may, should he so choose, weigh the relative risks of hold-up and reverse hold-up in deciding whether to disapprove the remedy the Commission is issuing today."[53] That the ITC has failed its obligation to consider other government authorities' views and treated the public interest factors as toothless, makes it all the more imperative that the President accept that invitation.

2. The ITC's Decision Would Harm Competitive Conditions In The United States Economy By Removing Products And Chilling Incentives To Innovate In Standards-Based Markets

Allowing declared-essential patent owners, such as Samsung here, to seek exclusionary remedies at the ITC threatens significant harm to competition in the U.S. economy. As Professor Janusz Ordover—former Chief Economist for the Department of Justice—explained in his expert declaration that Apple submitted to the ITC (attached as Exhibit A to this submission), an exclusionary remedy is likely to have two principal effects on competition. *First*, it can result in the immediate removal from the market of a firm that offers innovative and competitive products.[54] *Second*, and more fundamentally, an exclusion order can chill the incentives of all firms that rely on standards to invest in researching and developing standard-compliant products.[55] That is because such an exclusion order empowers a SEP holder to hold up implementers by exploiting market power conveyed by the fact of standardization, rather than by the intrinsic value of the invention represented by the particular patent. The patent holder and the prospective licensee have highly asymmetric risks and costs in a case where an exclusion order is possible.[56] The FRAND patent owner's potential losses are foregone licensing revenues, which are relatively predictable and finite, but the prospective licensee faces potentially massive losses should it be excluded from the U.S. market.[57]

Professor Ordover does not stand alone in these views. Indeed, in a statement made to the ITC by 19 law professors in the 745 investigation, submitted as Exhibit B hereto:

> Some of us have been called "pro-competition"; others among us have been accused of being "pro-patent." However, we all agree that ITC exclusion orders generally should not be granted under § 1337(d)(1) on the basis of patents subject to obligations to license on "reasonable and

[52] *See* 19 U.S.C. § 1337(b)(2).
[53] Comm'n Op. at 113-14, n.23.
[54] Ordover Decl. ¶ 34.
[55] Ordover Decl. ¶¶ 34-35.
[56] Ordover Decl. ¶ 16.
[57] *Id*.

non-discriminatory" (RAND) terms. Doing so would undermine the significant pro-competitive and pro-consumer benefits that RAND promises produce and the investments they enable. A possible exception may arise if district court jurisdiction is lacking, the patent is valid and infringed, and the public interest favors issuing an exclusion order.[58]

This view that availability of exclusionary relief exacerbates the hold-up problem is widely recognized by the President, the FTC, the Department of Justice, and industry participants, as discussed in more detail above. The FTC has repeatedly emphasized the potential harm to competition that granting exclusionary or injunctive remedies for FRAND patents presents. In its Public Interest Statement the 745 Investigation, it stated "ITC issuance of an exclusion or cease and desist order in matters involving [F]RAND-encumbered SEPS, where infringement is based on implementation of standardized technology, has the potential to cause substantial harm to U.S. competition, consumers, and innovation."[59] More recently, in its action against Bosch, the FTC observed that threatening injunctions on SEPs "can harm incentives to develop standard-compliant products . . . [and] lead to excessive royalties that can be passed along to consumers in the form of higher prices."[60]

As an example of an innovative company that perceives the threat from FRAND abuse, Intel made a submission to the Commission that observed that "issuance of an Exclusion Order in the face of unfulfilled FRAND commitments would undermine the standard-setting process that is so vital to U.S. innovation, economic growth, and consumer welfare."[61]

Samsung contends that the presence of competing handsets in the U.S. market, including from Samsung and others, demonstrates that there will be no effect on competition by the removal of Apple devices.[62] But that consumers will, in the short run, have access to some other products says nothing about the long-term, dynamic harm to competition and innovation in the United States that would come from subverting the standard-setting process and facilitating patent hold-up.

3. The ITC Decision Would Harm United States Consumers By Imposing Higher Prices And Depriving Them Of The Diversity Of Products That Standards Are Intended To Promote

The potential harm to U.S. consumers from allowing the owner of a FRAND patent to renege on its commitment through seeking an exclusionary remedy is also clear. In the short-run, customers will have fewer choices in the market if a product is excluded.[63] But more fundamentally, entry of an exclusion order threatens consumers through higher prices and decreased innovation. As Professor Ordover explains, facing the threat of an exclusion order, the prospective licensee's upper bound for a royalty is no longer just the inherent value of the FRAND-encumbered patent, pre-standardization, but rather the lost profits it faces if it had to cease selling standards-compliant products.[64] That change in bargaining position will lead to non-FRAND royalties and, in turn, higher prices for consumers.

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[58] Richard J. Gilbert, Carl Shapiro *et al.*, RAND Patents and Exclusion Orders: Submission of 19 Economics and Law Professors to the International Trade Commission at 2, Inv. No. 337-TA-745 (July 9, 2012), *available at* http://digitalcommons.law.scu.edu/facpubs/435/.

[59] FTC 745 Public Interest Statement, *supra* note 28, at 1.

[60] Statement of the Federal Trade Commission at 1, *In the Matter of Robert Bosch GmbH*, F.T.C. File No. 121-0081 (F.T.C. Nov. 26, 2012), *available at* http://www.ftc.gov/os/caselist/1210081/121126boschcommissionstatement.pdf.

[61] Corrected Statement Regarding the Public Interest by Non-Party Intel Corp., *supra* note14, at 6.

[62] Samsung's Initial Submission in Response to the Commission's March 13, 2013 Notice on Remedy and the Public Interest at 8, Inv. No. 337-TA-794 (Apr. 3, 2013).

[63] Ordover Decl. ¶ 42.

[64] Ordover ¶ 16.

Moreover, an exclusion order here will allow other SEP owners to threaten exclusion orders against prospective licensees (for UMTS and beyond), which will bring continuing dynamic harm to U.S. consumers. SSOs will be reluctant to develop new standards for fear that SEP hold-up will impair dissemination of their standards. Innovators will have disincentives to invest in differentiating technology to distinguish their products in the marketplace because they will be subject to SEP holders extracting hold-up value by threatening ITC exclusion orders. Meanwhile, developers of technologies seeking to be standardized that follow the rules will have to worry that they will not receive fair value for their inventions because other SEP holders will extract non-FRAND royalties for their SEPs, thereby depressing output of standard-compliant products and reducing licensing returns. And the SEP holder's credible threat to exclude the implementer's product will impair parties from reaching FRAND license agreements without costly and burdensome litigation. All this will result in substantial harm to U.S. consumers.

As the FTC has recently observed, "breaking the connection between the value of an invention and its reward" threatens fundamental harm to the patent system:

> Hold-up and the threat of hold-up can deter innovation by increasing costs and uncertainty for other industry participants, including those engaged in inventive activity. It can also distort investment and harm consumers by breaking the connection between the value of an invention and its reward – a connection that is the cornerstone of the patent system. ***The threat of hold-up may reduce the value of standard setting, leading firms to rely less on the standard setting process and depriving consumers of the substantial procompetitive benefits of standard setting***.[65]

In its Public Interest Statement to the ITC, Intel has observed that "companies will become reluctant to agree on standards and to incorporate them into their products if SEP holders can unfairly exploit the resulting standard-derived market power through Exclusion Orders," as Samsung seeks to do here.[66]

The ITC suggests that the real danger to consumers is through "reverse" hold-up (or "hold out") by Apple threatening standard-setting. This ignores the record evidence that Apple has repeatedly told Samsung it would enter a cross-license using a true FRAND framework, and has explicated that framework in detail—both as to the royalty base (the price of the baseband chip) and the royalty rate (guided by the parties' respective shares of SEPs). Moreover, as Judge Posner explained, and as corroborated by Hewlett-Packard's public interest submission in the 745 Investigation, even without the threat of injunctive relief, an implementer has strong incentives to compromise to avoid litigation costs and the risks of a court-determined FRAND rate that is higher than what the implementer could have negotiated.[67] These incentives are symmetrical between FRAND patent owners and implementers, both of which face litigation costs and uncertainty.[68]

Finally, it is remarkable that the Commission labeled "hypocritical" Apple's statement that it would pay a FRAND royalty upon a final determination that it infringed a valid patent. Apple made that statement at a time when it had been determined ***not to infringe*** the '348 patent. That continued to be the

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65 FTC 745 Public Interest Statement, *supra* note 28, at 3 (emphasis added).
66 Corrected Statement Regarding the Public Interest by Non-Party Intel Corp., *supra* note 14, at 6.
67 *See Apple Inc. v. Motorola, Inc.*, *supra* note 11, at 915 ("Of course litigation would also be costly for Apple, and this might induce it to pay the [maximum reasonable FRAND royalty] rather than fight."); Ex. A to Hewlett-Packard Co. Comments in Response to the Commission's Request for Written Submissions on Remedy and Public Interest, *supra* note 14, at 14 ("Potential licensees have ample incentive to enter into licensing agreements on reasonable terms to avoid uncertainty in business planning and litigation costs," including that the average patent trial costs $6.25 million).
68 *See Apple Inc. v. Motorola, Inc.*, *supra* note 11, at 915.

status under the ALJ's September 2012 decision until June 4, 2013. That the ITC would suggest that a party should pay a FRAND royalty on a patent adjudicated to be neither infringed nor essential demonstrates just how far the ITC was required to reach to justify its decision. Moreover, under the ITC's reasoning, a standard implementer would be required to waive its rights to contest the patent merits as the price for insisting on its right to a license on FRAND terms. That would violate fundamental patent policy: the Supreme Court has long recognized the importance of permitting challenges to flawed patents even where a license is in place.[69] And surely it must be relevant that Samsung has, for 10 months, been an adjudicated infringer of three of Apple's utility patents, three design patents, one registered trade dress and one unregistered trade dress in the parties' dispute in the U.S. District Court for the Northern District of California—but has decided that it will not pay the jury's award until it has been finally determined to have infringed a valid patent.

4. The ITC Decision Would Undercut The Production Of Like Or Directly Competitive Articles In The United States

An exclusion order based on a FRAND-committed patent also risks undermining the production of like or directly competitive products in the United States. As explained above, if a SEP holder can impose above-FRAND rates through the threat of exclusion orders, industry participants will lose incentives to adopt or continue to use the standard and innovate with differentiating standard-compliant products. That, in turn, will lead to decreased research and development and production of competing devices in the United States going forward.

5. The ITC Decision Would Harm The Public Welfare

Congress has repeatedly endorsed the importance of interoperability standards to American citizens. In enacting the National Technology Transfer and Advancement Act of 1995, for instance, it required that "all Federal agencies and departments" use standards "developed or adopted by voluntary consensus standards bodies."[70] Further, Congress later found that "technical standards developed or adopted by voluntary consensus standards . . . allow[] the national economy to operate in a more unified fashion."[71] Indeed, the importance of standard-setting led Congress to grant standard-setting organizations certain special rights under the Standards Development Organization Advancement Act of 2004.[72] The threat posed to standard setting by issuing exclusion orders based FRAND-committed patents will undermine the public welfare interests recognized by Congress.

IV. Requested Action

For all these reasons, the ITC decision should be disapproved. The stakes here are at least as high as those where the USTR has historically intervened. For example, in the *Alkaline Batteries* matter, President Reagan disapproved an ITC determination regarding gray-market imports because the determination conflicted with the publicly stated views of the Administration and implicated policy that was currently under Executive Branch review.[73] Here, those same conditions obtain, but the ITC decision also conflicts with decisions of the U.S. courts and regulatory and judicial actions across Europe and Asia. Likewise, in the *Welded Stainless Steel Pipe and Tubes* matter, President Carter disapproved a cease and

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[69] *See Lear, Inc. v. Adkins*, 395 U.S. 653, 670 (1969); *Blonder-Tongue Labs., Inc. v. Univ. of Illinois Found.*, 402 U.S. 313, 349-50 (1971) ("the holder of a patent should not be insulated from the assertion of defenses and thus allowed to exact royalties for the use of an idea that is not in fact patentable or that is beyond the scope of the patent monopoly . . . .").
[70] Pub. L. No. 104-113, 110 Stat 775 (1996).
[71] Pub. L. No. 108-237, 118 Stat 661 (2004).
[72] *See* 15 U.S.C. § 4301 *et seq*.
[73] Determination of the President Regarding *Certain Alkaline Batteries*, 50 Fed. Reg. 1655 (Jan. 11, 1985) (disapproval of Inv. No. 337-TA-165).

desist order against Japanese respondents found to be engaged in predatory pricing of imported steel products, based on (among other factors) detrimental effect on the national economic interest and international economic relations of the United States—which, as explained above, are imminent risks of the ITC's decision in this case.[74] The USTR should disapprove the decision and thereby ensure that the domestic and international consensus against FRAND abuse remains intact.

At a bare minimum, the USTR should disapprove the decision on the ground that it did not provide any delay period to allow Apple, its customers, suppliers, and affected carriers to adjust to the exclusion order, including by seeking to design around the single SEP at issue. While this would not repair the injury to the larger FRAND framework that the ITC decision will cause, it would at least mitigate its harmful impact in the short term.

The USTR's broad authority to disapprove the ITC's determination for policy reasons extends to disapproval based on objections to the scope or form of the ITC's remedial orders. For example, in *Headboxes and Papermaking Machines*, Inv. No. 337-TA-82 (1981), the President disapproved a determination that included a general exclusion order where a limited exclusion order was deemed sufficient to protect complainant.[75] The ITC subsequently issued a limited exclusion order.[76] Similarly, in *Molded-In Sandwich Panel Inserts and Methods for their Installation*, Inv. No. 337-TA-99 (1982), the President disapproved a determination that included cease and desist orders against domestic purchasers of imported products.[77] The ITC subsequently issued a determination without those additional orders.[78]

Likewise in this Investigation, even if the USTR does not disapprove the ITC's determination on FRAND policy grounds, significant additional policy reasons warrant disapproval of the ITC's determination for its lack of an appropriate phase-in period.

Before the ITC, Apple requested a five-month delay in the effective date of any remedial orders.[79] The OUII supported Apple's request. According to OUII, "[A]ny harm that an exclusion order might cause to U.S. consumers or competitive conditions in the U.S. economy could be mitigated by delaying the effective date of the exclusion order by four to six months, thus allowing [GSM] vendors time to switch to comparable substitute products before the exclusion order takes effect."[80] The ITC's rejection of Apple and OUII's proposals raises significant policy concerns.

To begin, before the ITC issued its June 4 decision, Apple had been determined to be not infringing. The ITC reached a contrary result only by adopting for the first time wholly new interpretations of the patent claims. How can a party design around a patent before it knows it is allegedly infringing and the new meaning of the patent has been decided? It cannot, and Apple and its baseband processor component supplier (Intel) should have been allowed a period of time to design around the ITC's newly minted interpretation. Indeed, the ITC's determination is inconsistent with its own precedent on phased-in remedial orders. In Inv. No. 337-TA-710, for example, the ITC allowed a four-month delay

[74] Presidential Determination regarding *Welded Stainless Steel Pipe and Tube Industry*, 43 Fed. Reg. 17789 (Apr. 22, 1978).
[75] Presidential Disapproval of Determination of the U.S. International Trade Commission in Investigation No. 337–TA–82, *Certain Multi-ply Headboxes*, 46 Fed. Reg. 32361 (June 22, 1981).
[76] *See* Comm'n Action and Order, Inv. No. 337-TA-82, 46 Fed. Reg. 57774 (Nov. 25, 1981).
[77] Presidential Disapproval of the Determination of the U.S. International Trade Commission in Inv. No. 337–TA–99, *Certain Molded-In Sandwich Panel Inserts and Methods for Their Installation*, 47 Fed. Reg. 29919 (July 9, 1982).
[78] Comm'n Action and Order, Inv. No. 337-TA-99, 47 Fed. Reg. 42847 (Sept. 29, 1982).
[79] *See, e.g.*, Respondent Apple Inc.'s Submission in Response to the Commission's Request for Additional Written Submissions on Remedy and the Public Interest at 20, Inv. No. 337-TA-794 (Apr. 3, 2013).
[80] Response of the Office of Unfair Import Investigations to the Commission's March 13, 2013 Notice Requesting Additional Written Submissions on Remedy and the Public Interest at 10-11, Inv. No. 337-TA-794 (Apr. 3, 2013) (citing Comm'n Op. at 83, *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710 (Dec. 29, 2011) (delaying exclusion of HTC smartphones by four months to minimize impact on third parties)).

in the effective date of remedial orders even though the ALJ had already determined infringement of the same claims that ultimately formed the basis for the exclusion order.[81]

Moreover, the ITC overlooked the considerable adverse competitive impact on affected cellular carriers. In its Opinion, the ITC incorrectly stated that "none of the affected networks [i.e., carriers] submitted any statements in response to the Commission's multiple public notices. Such silence indicates that any adverse impact on these networks may be *de minimis* at best."[82] This was simply incorrect and there can be no dispute that this was a fundamental misapprehension of a critical part of the record. In fact, two of the affected carriers—GCI and CT Cube—submitted declarations in response to the Commission's March 13, 2013 Notice. Both confirmed that their ability to offer the iPhone 4 as an entry-level iPhone model is an important part of their iPhone sales [redacted] Accordingly, both carriers voiced support for a five-month delay in the effective date of any remedial orders to allow them to transition to other devices without harming their businesses and customers.[84] Such a transition period would enable the carriers to identify alternative smartphones to offer at the same price point as the iPhone 4, perform necessary qualification and testing of the alternative devices on their networks, and obtain regulatory approval.[85]

V. Conclusion

The ITC's determination excluding a multi-component, multi-function product incorporating myriad patented and unpatented technologies for infringement of one patent on an extraordinarily small portion of that product and for which Samsung promised to license all implementers for FRAND royalties was wrong on the law and the facts. To be sure, if this were simply another instance of legal or factual error the decision could be corrected in the normal course at the Federal Circuit. But this is a case with much broader ramifications. As we have demonstrated, the ITC decision stands alone against the rising tide of executive, regulatory, and judicial voices condemning threats of exclusion as a vehicle for patent hold-up both in the United States and among trading partners. And, it stands alone for good reason. The ITC decision is contrary to the policies underlying standard setting bodies, the policies underlying FRAND commitments, the policies prohibiting patent hold-up and the public interest and welfare under Section 337. The ITC has taken action that threatens an international political, regulatory, and judicial consensus aimed at critical economic issues cutting across the world-wide economy. And, it has done so for a party, Samsung, that seeks nothing more than hold-up leverage to make exorbitant licensing demands.

We respectfully submit this is a case that deserves the President's attention, and Apple is grateful that USTR has decided to conduct a full review. Apple believes this review will confirm that the ITC decision: (1) misconceived the nature of a FRAND commitment and failed to comport with the ITC's statutory mandate to consider the public interest, (2) conflicts with domestic and international institutions' consensus against FRAND abuse, and (3) imposes an unwarranted and overly stringent immediate exclusion order. Apple respectfully requests that the USTR disapprove the decision.

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[81] *Certain Personal Data and Mobile Commc'n Devices and Related Software*, Inv. No. 337-TA-710, Comm'n Op. at 83 (Dec. 29, 2011).
[82] Comm'n Op. at 111; *see also id.* at 116.
[83] *See* Exs. A-B to Respondent Apple Inc.'s Submission in Response to the Commission's Request for Additional Written Submissions on Remedy and the Public Interest, Inv. No. 337-TA-794 (Apr. 3, 2013).
[84] *Id.*
[85] *Id.*

Respectfully submitted,

Date: June 19, 2013

Bruce Sewell
Senior Vice President and General Counsel
Apple Inc.

EXHIBIT A

UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

In the Matter of CERTAIN ELECTRONIC DEVICES, INCLUDING WIRELESS COMMUNICATION DEVICES, PORTABLE MUSIC AND DATA PROCESSING DEVICES, AND TABLET COMPUTERS	Investigation No. 337-TA-794

DECLARATION OF PROFESSOR JANUSZ A. ORDOVER IN SUPPORT OF APPLE'S SUBMISSION ON THE PUBLIC INTEREST

DECEMBER 10, 2012

CONTENTS

I. QUALIFICATIONS, ASSIGNMENT, AND SUMMARY OF CONCLUSIONS

1. My name is Janusz A. Ordover. I am Professor of Economics and former Director of the Masters in Economics Program at New York University, where I have taught since 1973. I am a Special Consultant at Compass Lexecon, an economic consulting firm that is a wholly owned subsidiary of FTI Consulting, Inc. During 1991-1992, I served as Deputy Assistant Attorney General for Economics at the Antitrust Division of the United States Department of Justice. As the chief economist for the Antitrust Division, I was responsible for formulating and implementing the economic aspects of antitrust policy and enforcement of the United States, including co-drafting the 1992 U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines. I also had ultimate responsibility for all of the economic analyses conducted by the Department of Justice in connection with its antitrust investigations and litigation.

2. My areas of specialization include industrial organization, antitrust, and regulation economics. I have served as an advisor on antitrust and regulatory issues to many organizations, including the American Bar Association, the World Bank, the Organization for Economic Cooperation and Development, the Inter-American Development Bank, and the governments of Poland, Hungary, Russia, the Czech Republic, Australia, and other countries. I have provided economic testimony in policy hearings conducted by the Department of Justice, the Federal Trade Commission and the United States Senate. I have also consulted and testified in a wide range of antitrust and intellectual property litigation matters. In February 2011, I was the recipient of Global Competition Review's Economist of the Year award. I also have served as a Member of the Economics Task Force of the American Bar Association's Antitrust Section. I have consulted extensively on antitrust and regulatory issues in telecommunications and computer industries, as well as on economic issues related to intellectual property and standard setting. My cv is attached as Exhibit 1 to this declaration.

3. In this matter, Samsung seeks to force Apple Inc. ("Apple") to cease selling certain of its handsets and tablets in the United States because Samsung alleges that the products infringe patents it claims ETSI has included in the UMTS telecommunications standard, and for which Apple has not been licensed. I have been asked by counsel for Apple to analyze the impact of

allowing a holder of a declared standard-essential patent (SEP)[1] to be granted an exclusion order under the public interest factors that the ITC is required to consider as part of its deliberation. In addition, Apple has asked me to review and respond to the analysis contained in the Declaration of Dr. Anne Layne-Farrar in support of Samsung's Statement on the Public Interest submitted to the Commission on December 3, 2012 ("Declaration").[2]

4. In brief, my conclusions are as follows:

- ETSI and other standard-setting organizations (SSO) encourage FRAND commitments for SEPs to prevent SEP holders from taking advantage of patent holdup to extract possibly exorbitant royalties from implementers that are locked into industry standards, and thereby preserve the benefits from industry standard setting.
- To permit SEP holders to obtain exclusion orders on FRAND-encumbered patents would undermine the effectiveness of FRAND commitments and lead to the very patent holdup such commitments are designed to avoid.
- Allowing exclusion orders in a declared standards-essential patent case like this would be contrary to the Section 337 public interest factors, except in highly unusual circumstances not present in this proceeding.
- Dr. Layne-Farrar's analysis is flawed in many important respects.

5. The remainder of this declaration explains the economic reasoning behind my conclusions in more detail.

1 I use "SEP" to refer to a patent that has been declared essential to an industry standard regardless of whether the patent is actually essential. SSO participants self-declare patents as essential, meaning that no independent entity reviews claimed-essential patents to determine whether they are, in fact, technically essential to comply with the standard. The cost and difficulty surrounding a determination as to whether thousands of patents declared essential to a standard are, in fact, essential means that a standard implementer -- that must satisfy the technical requirements of the standard -- cannot practically challenge each one.

2 Declaration of Anne Layne-Farrar, Ph.D. in Support of Samsung's Statement on the Public Interest, *In the Matter of Certain Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computers,* Investigation No. 337-TA-745, December 3, 2012 (hereinafter *Layne-Farrar Declaration*).

II. FRAND COMMITMENTS AS A MEANS TO PRESERVE THE BENEFITS OF STANDARDS

6. Before discussing the impact of exclusion orders on the public interest factors, I briefly describe the benefits of standards, the potential costs when the standard process is abused, and the efforts of SSOs such as ETSI to mitigate these costs by adopting rules governing the licensing behavior of SSO participants that have declared patents to be essential to a standard promulgated by the SSO.

A. BENEFITS OF STANDARDS[3]

7. Compatibility standards are commonly adopted in industries where complementary products or components, manufactured by different firms, must interoperate or communicate with each other. Compatibility standards generate a broad range of economic benefits for consumers and producers, as well as innovators. By establishing an accepted mode of interoperation, for example, standards prevent market fragmentation, thereby lowering costs due to scale economies and enlarging the overall market.[4, 5] In addition, the setting of a compatibility standard fosters product innovation and creates incentives for firms to differentiate their products based on non-standard-related dimensions. That differentiation is valuable to consumers and can

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3 For a discussion of benefits and costs of standards, *see,* Carl Shapiro (2001), "Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting," in Adam B. Jaffe, Josh Lerner, and Scott Stern, eds., *Innovation Policy and the Economy vol. 1*, Cambridge Mass. (The MIT Press), 119-150; Richard Gilbert (2011), "Deal or No Deal? Licensing Negotiations in Standard-Setting Organizations," *Antitrust Law Journal*, 77(3):855-888; and Daniel J. Gifford (2003), "Developing Models for a Coherent Treatment of Standard-Setting Issues Under the Patent, Copyright and Antitrust Laws," *IDEA: The Journal of Law and Technology,* 43(3): 331-94; and David J. Teece and Edward F. Sherry (2003), "Standards Setting and Antitrust," *Minnesota Law Review* 87:1913-94.

4 *See, e.g.,* David J. Teece and Edward F. Sherry (2003), "Standards Setting and Antitrust," *Minnesota Law Review* 87:1913-94 at 1917. Closely related to this, in industries with network effects in which the value of a product to one consumer depends on the number of other consumers using the product, standards signal that other consumers will be buying the same or compatible products and that consumers will enjoy the benefits of network economies; standards thus can help overcome consumer resistance to committing to a durable component. (Carl Shapiro (2001), "Setting Compatibility Standards: Cooperation or Collusion?" in *Expanding the Bounds of Intellectual Property* (Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman, and Harry First, eds.), Oxford University Press at 88.)

5 *See, e.g.,* Carl Shapiro (2001), "Setting Compatibility Standards: Cooperation or Collusion?" in *Expanding the Bounds of Intellectual Property* (Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman, and Harry First, eds.), Oxford University Press at 88.

enhance consumer demand for the product.[6] Importantly, standards allow any supplier – including new entrants – to compete in the downstream markets for products that implement the standard. The differentiation, competition, and follow-on innovation enabled by a standard ultimately benefits consumers. Finally, compatibility standards expand the set of products available to consumers since, without such standards, some products would not be feasible.[7]

B. COLLABORATIVELY SET STANDARDS MAY ALLOW SEP HOLDERS TO EXPLOIT MARKET POWER

8. Although collaborative standard setting offers clear benefits, it can also raise antitrust concerns and potentially harm consumers.[8] In this proceeding, the most relevant harm is that collaborative standard-setting may empower a firm that claims to hold SEPs to block other firms from practicing a standard or raise significantly their costs of doing so. Owners of declared SEPs gain the power to exclude and exploit because the process of standardization transforms what may have been only a marginally valuable patent into an essential piece of intellectual property that is needed by all firms seeking to supply standard-compliant products.[9] Once an SSO adopts a standard that includes a particular technology to perform a function in the standard, it generally becomes impossible or prohibitively difficult for standard implementers to use alternative technologies to perform that function.[10] In addition, once a standard is set, and especially as manufacturers invest in and start making products that comply with the standard, it

6 *See, e.g.*, Richard Gilbert (2011), "Deal or No Deal? Licensing Negotiations in Standard-Setting Organizations," *Antitrust Law Journal*, 77(3):855-888 at 855; Carl Shapiro (2001), "Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting," in Adam B. Jaffe, Josh Lerner, and Scott Stern, eds., *Innovation Policy and the Economy vol. 1*, Cambridge Mass. (The MIT Press), 119-150 at 138;

7 *See, e.g.*, Carl Shapiro (2001), "Setting Compatibility Standards: Cooperation or Collusion?" in *Expanding the Bounds of Intellectual Property* (Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman, and Harry First, eds.), Oxford University Press at 89.

8 *See generally*, Carl Shapiro (2001), "Setting Compatibility Standards: Cooperation or Collusion?" in *Expanding the Bounds of Intellectual Property* (Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman, and Harry First, eds.), Oxford University Press; Daniel J. Gifford (2003), "Developing Models for a Coherent Treatment of Standard-Setting Issues Under the Patent, Copyright and Antitrust Laws," *IDEA: The Journal of Law and Technology*, 43(3): 331-94.

9 *See*, Daniel G. Swanson and William J. Baumol (2005), "Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power," *Antitrust Law Journal*, 73(1), 1-58 at 7-10; *Apple Inc. v. Motorola, Inc.*, --- F. Supp. 2d ---, 2012 WL 2376664, at *11 (N.D. Ill. June 22, 2012)..

10 David J. Teece and Edward F. Sherry (2003), "Standards Setting and Antitrust," *Minnesota Law Review* 87:1913-94 at 1936-1937.

becomes infeasible to revise the standard to avoid a SEP or to drop the functionality performed by the technology that is covered by the SEP. Because standardization eliminates alternatives, it confers market power on SEP owners *ex post* (post-standardization), relative to the *ex ante* (pre-standardization) situation. That is because the SEP owners' licensing behavior is no longer constrained by alternative technologies in the same technology market(s) or the SSO's option of not standardizing the function covered by the SEP owner's technology and permitting various technologies to continue to compete to perform the function.[11] *Ex post*, the competitive constraints on the SEP owner's licensing behavior are typically eliminated.[12]

9. A SEP holder that exercises in upstream technology markets its incremental market power from the standardization of its technology harms competition in downstream markets for products that comply with the standard: such conduct can deter entry, dampen innovation incentives, and raise the prices of products in those downstream markets, thereby harming consumers in those markets. In addition, there is an entire "ecosystem" of complementary products built around a standard and a standard-compliant product. When a SEP owner exercises its incremental market power gained from the standardization process, it can adversely affect competition in the entire ecosystem, and inhibit the development, manufacture, and sale not only of standard-compliant products but also of the complementary products that are used with them. With less robust competition and higher prices in markets for standard-compliant products, the demand for such complementary products is dampened. Moreover, when implementers of a standard are not adequately protected against future holdup, the evolution of the standard itself may be distorted, with a patented technology being less likely to be included in the standard, regardless of merit, out of fear of the impact of granting market power to the technology's owner. Distortions in the standard will have detrimental effects on the evolution of the ecosystem surrounding the standard.

10. Absent rules constraining the exercise of market power acquired through standardization, SSOs would be inhibited in promulgating effective standards, firms' would have diminished

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11 To be precise, prior to standardization, the "SEP owner" is only a *potential* SEP owner because its technology has not yet been included.

12 Joseph Farrell, John Hayes, Carl Shapiro, and Theresa Sullivan (2007), "Standard Setting, Patents and Hold-up," *Antitrust Law Journal*, 74(3): 603-670 at 607-608; David J. Teece and Edward F. Sherry (2003), "Standards Setting and Antitrust," *Minnesota Law Review* 87:1913-94 at 1938.

incentives to invest in innovation related to standards-compliant products, and end product prices would rise. Ultimately, such conduct harms consumers.

C. FRAND COMMITMENTS CAN CONSTRAIN THE EXERCISE OF MARKET POWER, PROTECT THE STANDARD SETTING PROCESS, AND PRESERVE THE BENEFITS OF STANDARDS

11. To constrain the exercise of market power conferred on the SEP owner by standardization and avoid the threat to effective standards that patent holdup presents, most SSOs secure commitments from standard-setting participants to license their SEPs under fair, reasonable, and nondiscriminatory ("FRAND") terms.[13, 14] I believe the primary purpose of these FRAND requirements is to mitigate the deleterious economic consequences of opportunistic behavior that can be facilitated by standard setting, while maintaining powerful incentives for firms to innovate and participate in the standard-setting process and promoting broad adoption of the standard. In particular, among other objectives, FRAND commitments keep SEP holders from exercising pricing power other than that attributable to the *ex ante* advantage of the technologies covered by the SEPs over *ex ante* alternatives. To allow a SEP holder to exploit market power conferred by standardization rather than the intrinsic, *ex ante* value of its technology would be inefficient and would distort innovation incentives because it would provide a private reward that exceeded the benefit of the invention relative to the next-best alternatives.

12. ETSI's IPR Policy, to which Samsung has pledged to adhere, requires that the SSO request that ETSI members that have patents that are potentially essential for the practice of a standard promise to license those patents on FRAND terms and conditions to anyone practicing the standard:

> When an ESSENTIAL IPR relating to a particular STANDARD is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an undertaking in writing that it is prepared to

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13 For a discussion of FRAND licensing requirements as a response to the hold-up problem, *see*, Carl Shapiro (2001), "Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting," in Adam B. Jaffe, Josh Lerner, and Scott Stern, eds., *Innovation Policy and the Economy vol. 1*, Cambridge Mass. (The MIT Press), 119-150 at 128; Daniel G. Swanson and William J. Baumol (2005), "Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power," *Antitrust Law Journal*, 73(1), 1-58 at10-25.

14 If SEP owners are not willing to give FRAND assurances, their proprietary technologies may be excluded from the standard.

> grant irrevocable licences on fair, reasonable and non-discriminatory [FRAND] terms and conditions under such IPR…The above undertaking may be made subject to the condition that those who seek licences agree to reciprocate.[15, 16]

13. Such FRAND commitments promote investment and innovation by assuring potential licensees that they will be able to acquire licenses to declared SEPs on FRAND terms and that declared SEP holders cannot block them from implementing the standard.

14. In principle, a negotiation between an IP owner and a potential licensee before the standard is set would result in a fair and reasonable royalty. Although the exact royalty would be determined by the bargaining process between the two parties,[17] it would fall somewhere in the range between the minimum that a willing licensor would accept and the maximum that a willing licensee would be willing to pay *ex ante*. The minimum royalty is defined by the licensor's reservation price: the smallest amount the licensor would be willing to accept rather than have its patented technology excluded from the standard. The maximum royalty that a licensee would be willing to pay is the *ex ante* value of the patented technology relative to alternatives. A royalty demand exceeding this maximum would cause the potential licensee to turn to the next best alternative.[18] Critically, the range of fair and reasonable royalties assumes that neither party is locked in by virtue of having expended sunk costs that weaken its bargaining power.[19]

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15 *ETSI IPR Policy*, § 6.1.

16 Although the ETSI IPR Policy does not mention injunctions or exclusion orders explicitly, Dr. Michael Walker, former chairman of the board of ETSI, testified at trial that they are inconsistent with a FRAND commitment. *See* Hearing Tr. 1350:9-20 ("It does not explicitly say no injunction. What it does say, though, is that the …way you do secure your IPR, protect your IPR within ETSI is to seek a license with anyone who wishes to implement the standard under FRAND terms. So it is all about seeking a license, not preventing use of IPR, which an injunction is at the end of the day.").

17 For instance, if a licensee holds SEPs of its own, it will be able to negotiate a cross license because the ETSI policy requires reciprocation on SEPs. The explicit royalty paid will appear to be lower than it otherwise would, although taking into account the payment in kind that comes in the form of a cross license to its own SEPs the total consideration should still fall within the reasonable range in order to be considered FRAND.

18 This same analysis helps in understanding the SSO's decision of whether to include in the standard a technology that an SSO member has declared to be essential for that technology. If the royalty demand of the IP owner exceeds the *ex ante* value of the IP, then the SSO would turn to its next best alternative and exclude the "overpriced" IP from the standard.

19 The licensor can also be held-up when, for example, licensees *ex post* collectively insist on a rate that is below what the licensor could have gotten before committing its intellectual property to the

D. THE AVAILABILITY OF EXCLUSION ORDERS DISTORTS THE *EX POST* BARGAINING PROCESS AND IS INCONSISTENT WITH AND UNDERMINES FRAND COMMITMENTS

15. Although the *ex ante* negotiating construct is useful for framing the issues, negotiations over SEP royalties commonly occur long after a standard is set and alternatives are eliminated. In that case, seeking (or threatening to seek) an exclusion order to evict a standard implementer from the market fundamentally distorts the bargaining process between the SEP holder and the potential licensee. From an economic perspective, seeking or threatening to seek an exclusion order (except in narrow circumstances I discuss below) is incompatible with the premise of FRAND. This is because the threat of exclusionary relief gives the SEP owner tremendous incremental bargaining power that it can use to extract non-FRAND royalties from a potential licensee. As described above, if the SEP owner and potential licensee engage in an *ex ante* negotiation, the potential licensee would be willing to pay no more than the *ex ante* value of the patented technology relative to the next best alternative. But when an exclusion order is available *ex post*, the SEP holder obtains bargaining leverage far beyond what it would have had before the standard was set.

16. When exclusionary relief is available on FRAND-encumbered patents, after promulgation of the standard, the SEP holder's and potential licensee's risks and costs from failing to agree on license terms are highly asymmetric. If an exclusion order is granted, the SEP owner stands to suffer only the financial losses of foregone licensing revenues. By contrast, the potential licensee faces possibly huge losses if its products are excluded from the market, which cannot be recouped even if the licensee is ultimately able to start selling its products. In the simplest case, under threat of exclusionary relief, the maximum royalty that a potential licensee would be willing to pay is capped not by the value of the SEP relative to *ex ante* alternatives but by the level of profits that the potential licensee would lose if it were forced to exit the production or sale of standard-compliant products.[20] The increase in the licensee's maximum

standard and agreeing to FRAND terms. The issue before the Commission is not about this concern.

20 In a more complicated setting where there are several SEP holders, one can conceive of a bargaining situation in which each of the SEP holders will be able to extract only a fraction of the available quasi-rent, which is the difference between the licensee's potential aggregate profits exclusive of any recovery of sunk costs. *See*, Anne Layne-Farrar, A. Jorge Padilla, and Richard Schmalensee (2007), "Pricing Patents for Licensing In Standard Setting Organizations: Making Sense of FRAND Commitments," *Antitrust Law Journal*, 74:671-706.

willingness to pay as a result of the exclusion threat typically endows the SEP owner with substantial incremental bargaining power that it would not have if exclusionary relief were unavailable. As a result of this shift in bargaining power, assuming that the parties agree on license terms, these terms will be worse for the licensee – i.e., entail higher royalty rates – as compared to what they would have been absent the exclusion threat. Higher royalties ultimately harm consumers.[21] In effect, using threat of exclusion, the SEP holder is able to appropriate for itself a portion of the profits that the potential licensee will lose if it is prevented from bringing its product to market. It bears emphasis, moreover, that in the case of the UMTS standard, if exclusion orders were available, standard implementers would face this hold up threat from dozens of holders of declared SEPs for the UMTS standard alone, not to mention that products implementing the UMTS standard typically comply with many other standards as well.

17. Because the threat of an exclusion order dramatically shifts bargaining power from the alleged infringer to the SEP holder, it is in the latter's interest to declare an offer it has made as being FRAND and to seek exclusionary relief if the offer is not accepted. When this threat pertains to FRAND-encumbered SEPs that the SEP owner has committed to license, the SEP holder's exclusionary power is not limited to the intrinsic value of its patented technology relative to alternative technologies pre-standardization. Rather, the SEP owner's enhanced exclusionary power reflects the market power that flows from the inclusion of its SEPs in the standard, i.e., the very incremental market power that the SEP owner agreed to forego when it made the FRAND commitment. Inclusion in the standard carries with it certain benefits and also costs: the obligation to license and concomitant curtailment of the right to seek exclusionary relief is one such cost, but that cost is entirely consistent with the overarching objectives of wide adoption of the standard while fostering innovation incentives for licensors and licensees.[22]

18. Thus, a SEP holder's threat to use a potential licensee's refusal to pay the demanded royalty to prevent the potential licensee from practicing the standard is inherently inconsistent with a FRAND commitment from an economic perspective. The requirement to license all on FRAND terms would be meaningless if the SEP holder were allowed to obtain an exclusion

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21 Consumers may be harmed even if higher royalties are not actually paid and passed through to them; if the potential licensee is evicted from the market, the consumers may be harmed by the loss of downstream competition.

22 Of course, with cross-licensing, a firm can be both a licensor and a licensee.

order evicting a potential infringer from the market based on a SEP owner's unilateral determination that the terms refused by the infringer were FRAND.

III. THE SECTION 337 PUBLIC INTEREST FACTORS MANDATE AGAINST EXCLUSIONARY ORDERS ON FRAND-COMMITTED PATENTS

19. In this section, I address from an economic perspective the issue raised in the Commission's Question 1, namely "which (if any) of the 337 (d)(1) public interest factors preclude issuance of …an [exclusion] order" based on an infringement of a patent (or patents) that are subject to FRAND undertakings.

20. I understand that there are four public interest factors bearing on the question whether an exclusion order is appropriate. These four factors are: (1)"the public health and welfare"; (2) "competitive conditions in the United States economy"; (3) "the production of like or directly competitive articles in the United States"; (4) effects on "United States consumers." Economic analysis of these factors mandates against imposing exclusion orders on products that have that have been found to infringe FRAND-committed patents. The only possible exceptions, which I note below, do not apply in this proceeding.

21. At bottom, the fundamental rationale for this conclusion is that FRAND-encumbered patents are in relevant respects different from patents that are not subject to FRAND commitments. In particular, an owner of intellectual property that is subject to a FRAND commitment has voluntarily committed to restrict its intellectual property rights by agreeing to license to all standard implementers on fair, reasonable, and non-discriminatory terms – and to forego any right to exclude it might otherwise have had. This is in contradistinction to an owner of an unencumbered patent who is under no obligation to license its intellectual property and has the right to extract as high a royalty as the market will bear.

22. There are sound economic reasons why the FRAND commitment must be construed to bar exclusionary relief. First, including a patent in the standard typically dramatically changes the economic value of the patent. As I explained above, a patent covering technology offering only a minor technological benefit – and therefore of minor value to implementers relative to alternatives – becomes highly valuable once it is included in the standard (and technology alternatives have been eliminated). Standard-setting organizations have developed rules, such as the call for FRAND commitments, that aim to foster the development and broad acceptance of

the standard while affording the implementers protection from the dangers and adverse economic consequences of patent hold up that aims to extract incremental value attributable to standardization itself, while still allowing innovators to obtain compensation for the innate, *ex ante* value of their invention.

23. Second, the licensor has voluntarily agreed to declare its IP essential to the standard and voluntarily accepted the limitations on its licensing rights; that is, it has agreed to license to all implementers of the standard on fair, reasonable, and nondiscriminatory terms. Standard implementers, in turn, rely on that commitment and make investments in new and innovative products on the understanding that they will be entitled to a FRAND license and the declared SEP holder will not be able to prevent them from bringing their products to market. For a patent that is not FRAND-encumbered, by contrast, a product supplier makes its investment decisions without any expectation that the patent owner must license on FRAND terms and may not seek to exclude the supplier's products.

24. Third, in return for the FRAND limitation on its licensing rights, the patentee receives potentially highly valuable benefits from having its patents included in the standard. The patentee obtains the right to collect (FRAND) royalties on every sale of a product that implements the standard – which in the case of UMTS and many other standards represents a huge base of sales on which to obtain royalties. In addition, by participating in the standard-setting process, the patentee enjoys increased influence on the evolution of the standard in ways that may benefit its portfolio of patents. Furthermore, the patentee may receive a valuable "first-mover" advantage because it is positioned to commercialize quickly downstream products that incorporate its (now standardized) technology. It is because it receives these and other benefits that industry participants are willing voluntarily to participate in the standard setting process and submit their technology for inclusion in industry standards. In doing so, the would-be SEP holder willingly accepts that its compensation from standard implementers will be limited to FRAND royalties and that it will have no right to keep innovators from bringing to market products that practice the standard (and hence its patents).

25. Let me now point to substantial errors in Dr. Layne-Farrar's economic analysis that lead her wrongly to conclude that exclusion orders based on infringement of FRAND-encumbered

patents can be consistent with the public interest factors.[23] In supporting her stance, Dr. Layne-Farrar relies heavily on her concerns about "reverse hold-up." As she defines it, reverse hold-up occurs when a potential licensee refuses to accept a license offered at FRAND rates, forcing the SEP owner to accept final royalty rates that are below FRAND. (Recall that the usual concern is that the licensee will be forced to accept rates that are potentially significantly above the FRAND benchmark.) Dr. Layne-Farrar describes the risk of reverse holdup as "equally significant" as the risk of patent holdup by a SEP holder, and opines that exclusion orders are an "important tool" to give SEP holders some recourse against recalcitrant potential licensees. But Dr. Layne-Farrar both overstates the harms and understates the efficacy of the remedies available to a SEP holder.

26. Much of Dr. Layne-Farrar's analysis is grounded in drawing a false equivalence between the bargaining dynamics of the licensing of SEPs and non-SEPs. Unlike in the case of SEPs, where industry and implementers are locked in to the standardized technology, royalties for unencumbered patents are constrained by the implementer's option to design around the patent and use an alternative technology or drop a feature altogether without risking the loss of standards-compliance." Dr. Layne-Farrar's analysis of "reverse hold-up" totally misses the mark in ignoring the fact that some or all of the hold-up value of the SEP stems from its inclusion in the standard and not from any intrinsic value of the relevant intellectual property. Where non-SEPs are involved, market forces can still constrain the patent owner's hold-up power. For SEPs, however, neither easy design-around, nor switching to an alternative technology, nor dropping the feature is readily feasible. As a result, relative to non-SEPs, an SEP owner has more leverage from threatening exclusion *and* the firm implementing the patent has a weaker resistance point. Because the hold-up power of a SEP is linked to the sunk costs[24] incurred by the implementer and other industry participants, in effect, the conversion of an ordinary patent into a SEP can vastly increase the costs associated with avoiding practicing the infringing IP from the cost of designing-around to the cost of exiting.[25]

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23 I do not attempt to comment here on every flaw in Dr. Layne-Farrar's analysis, only those that undermine her conclusions most significantly.

24 "Sunk costs are entry or exit costs that cannot be recovered outside the relevant market." U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines* at 16 (Aug. 19, 2010).

25 This point can best be illustrated with an example. Assume that the SEP at issue covers a technology that can be easily removed from the device. The one-time cost of removing the

27. Dr. Layne-Farrar's conclusions also rely on her "layman's understanding of patent licensing negotiations and patent enforcement" for SEPs. But her understanding is wrong in critical respects that further undermine her attempt to equate SEPs and non-SEPs. For example, she claims that the fact standard implementers can sue over alleged non-FRAND offers "provides real teeth to FRAND commitments."[26] But the right to litigate, of course, does nothing to remove or mitigate the hold-up power that the SEP holder can exercise by threatening to exclude the implementer's products. And an implementer that sues a declared SEP holder must assume potentially very substantial litigation expenses, not to mention the risk of a court setting a higher rate than it could have negotiated before the trial. Second, she claims that implementers have the option to "invent around" a SEP.[27] But a SEP, by definition, is a patent that an implementer must practice to implement a standard and cannot typically be designed around (if it could ever be designed around at all). Third, Dr. Layne-Farrar claims that an implementer can omit a patented feature if it is commercially unimportant.[28] But it generally is not possible to omit technology covered by a SEP from standard-compliant products because such products must interoperate with other products and networks that incorporate the technology; even if the product would be interoperable without the SEP, the commercial success of non-standard-compliant products is highly doubtful. Fourth, she claims that unlicensed implementers lack substantial sunk costs in their products.[29] But implementers, of course, typically incur large sunk costs in designing and marketing standard-compliant products. There is no reason to assume that these costs cannot be much higher than the sunk R&D expenditures of the patent owner on development of the technology at issue.

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technology and replacing it with another technology is $1 million. This puts a limit on the hold-up power in a typical, non-SEP setting. Now, because the technology is part of the standard, the associated intellectual property is a SEP. As a result, an infringer would have to forgo the net present value of profits from the device if it does not gain the license and is forced to exit since it simply cannot avoid infringing the SEP while still implementing the standard. Hence the costs of refusing a license are now elevated to the level of profits that would be lost (gross of license fees) if the firm were to exit. This figure could vastly exceed the $1 million in redesign and replacement costs instanced earlier. As a result, the hold-up power of the identical patent – which represents the same innate invention value – is vastly elevated by inclusion in the standard.

[26] *Layne-Farrar Declaration*, ¶ 35.

[27] *Layne-Farrar Declaration*, ¶ 39.

[28] *Layne-Farrar Declaration*, ¶ 39.

[29] *Layne-Farrar Declaration*, ¶ 39.

28. In addition, Dr. Layne-Farrar argues that, absent exclusionary relief, there are "litigation asymmetries" that favor the potential licensee.[30] But as Judge Posner's recent decision in *Apple Inc. v. Motorola Inc.* correctly explains, absent the threat of exclusionary relief there are no such asymmetries. (Rather, as I have explained, it is the availability of such exclusionary relief that creates bargaining asymmetries.) To use Judge Posner's example, suppose that the maximum FRAND royalty for a particular SEP would be $10 million. If the patentee had to sue to obtain that $10 million, it would incur substantial litigation costs. Thus, absent the threat of an injunction, a potential licensee might agree to pay $10 million less anticipated litigation costs.[31] "Of course litigation would also be costly for [the licensee], and this might induce it to pay the $10 million rather than fight."[32] And in the litigation, the licensee risks incurring not only costs, but also a higher royalty than it could have bargained for without litigation.[33] Thus, absent the threat of exclusionary relief both the SEP holder and the potential licensee have strong incentives to reach agreement on FRAND terms, and there is no simply reason to believe that potential licensee enjoys a superior bargaining position.

29. Moreover, contrary to Dr. Layne-Farrar's contention, a potential licensee that obtains an unfavorable ruling on a FRAND rate may suffer harm going forward that extends beyond its royalty rate for the patents at issue. Notwithstanding Professor Layne-Farrar's assertion, it is not typically possible to invent around SEPs in response to an unfavorable ruling. In any case, I and others have proposed that an implementer who refuses to pay FRAND royalties as set by a court could be subject to an exclusion order – so the SEP holder has recourse once a court (not just the SEP holder) has declared a royalty rate to be FRAND. In addition, other SEP holders might try to use the unfavorable FRAND determination against the potential licensee in future disputes over FRAND royalties by arguing that the determination sets a favorable benchmark to support a high royalty rate for their own SEPs.

30. Finally, Dr. Layne-Farrar argues that exclusion orders should be broadly available for FRAND-encumbered patents because "an exclusion order must be deemed warranted [under the

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30 *Layne-Farrar Declaration*, ¶¶ 37-42.

31 *Apple Inc. v. Motorola, Inc.*, F. Supp. 2d, 2012 WL 2376664, at *12-13 (N.D. Ill. June 22, 2012).

32 *Id. at *13.*

33 *Id. at *12.*

public interest factors] before it will be granted."[34] But Dr. Layne-Farrar's conception of when an exclusion order might be warranted misapprehends the proper role of such orders. She argues throughout her declaration that exclusion orders must be available to constrain the "reverse holdup" that would otherwise result in SEP holders receiving unreasonably low royalties for their FRAND-encumbered patents. But under *eBay* (on which Dr. Layne-Farrar relies), as far as I understand, the purpose of exclusionary relief is *not* to arm the patentee with bargaining leverage – but to provide the patentee adequate relief when an award of (properly calculated) damages cannot accomplish that objective (and other requirements are satisfied). As Judge Posner points out, U.S. courts do not grant injunctions to give parties additional bargaining power to enforce a claimed right: "You can't obtain an injunction for a simple breach of contract on the ground that you need the injunction to pressure the defendant to settle your damages claim on terms more advantageous to you than if there were no such pressure."[35]

31. At bottom, Dr. Layne-Farrar's proposal to allow exclusion orders would grant a SEP holder the right to exercise market power conferred through the standardization process and extract more than the rate that is consistent with the intrinsic value of the intellectual property contributed to the standard. That intrinsic value is best gauged by what the parties would have negotiated before the intellectual property is "baked into" the standard. Dr. Layne-Farrar proposes that exclusion orders only be allowed—not that they be automatic. But just the threat of an exclusion order, as I described above, dramatically alters the bargaining positions of the SEP holder and the potential licensee and facilitates the successful exercise of market power. Even if the matter never ends up in litigation, the threat of an exclusion order is sufficient to result in competitive harm if it leads to a rate that is not consistent with FRAND principles.

32. Although Dr. Layne-Farrar posits that reverse holdup is a serious and otherwise irremediable problem, but for the ability to seek and obtain an exclusion order, as I have explained, the SEP holder in fact has the right to litigate against a reluctant licensee and to

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34 *Layne-Farrar Declaration*, ¶ 50. Dr. Layne-Farrar also claims that exclusion orders can be appropriate because "[e]xclusion orders can be stayed" and "the presence of a pending injunction can be a force for a reasonable settlement with an otherwise unwilling licensee." (*Id.* at 50.) But a SEP owner's use of a stayed exclusion as a tool for bargaining leveraging is, of course, no less contrary to the public interest than the use of the threat of an exclusion order to gain bargaining leverage.

35 *Apple Inc. v. Motorola, Inc.*, F. Supp. 2d, 2012 WL 2376664, at *12-13 (N.D. Ill. June 22, 2012).

thereby obtain precisely what it is owed: a FRAND royalty as determined by the Court, but not more than that. Dr. Layne-Farrar cautions that, "We must be careful not to 'solve' one potential problem by increasing the odds that another potential problem occurs." I agree. And in this matter, Dr. Layne-Farrar's proposal to "solve" the reverse holdup problem by allowing a SEP holder to remove the constraints of the FRAND commitment is a fine example of what she cautions against.

33. I now analyze why imposing exclusion orders on FRAND-encumbered would contravene the public interest factors defined in Section 337 of the Act. To be clear, I am not arguing that such exclusion orders should never be allowed. I believe that exclusion orders may be appropriate when the potential licensee is unwilling to pay a royalty that a court or arbitrator has determined to be FRAND or possibly when a US court would lack jurisdiction over an infringer of a SEP. Other than in these limited circumstances, exclusion orders for SEPs are inconsistent with the public interest factors.

A. Public Interest Factor 2: "Competitive conditions in the U.S."

34. The interests of the United States are served by fostering a competitive market place in products that implement the standard as well as an environment that is conducive to innovation of all kinds. This interest is obviously relevant with respect to extant products that exclusion orders may evict from the market. Even if there are other products in the U.S. market, there is a real danger that the exclusion order removes from the market a firm that is innovative and that generates significant benefits to consumers in the form of innovative products developed on top of the standard. At least as important, however, are the longer-term harms to the U.S. marketplace from granting exclusionary orders based on FRAND-committed patents. As I have discussed, industry standards greatly enhance firms' incentives to invest in proprietary features and designs for standard-compliant products and lead to very substantial dynamic competition that benefits U.S. consumers. Indeed, this type of innovation is the driver behind the fast-growing telecommunications and mobile computing markets.

35. If firms cannot develop standards-compliant products free from the threat that declared SEP owners will be able to exclude their products from the market, however, that will reduce their incentives to innovate. Potential innovators will face the prospect that their new products will be subject to taxation from (often dozens) of declared-essential patent holders that can

threaten to exclude their products and thereby extort non-FRAND royalties. The mere threat of the availability of exclusion orders through the Section 337 process will undermine firms' incentives to invest in research and development, to the great detriment of the U.S. marketplace and consumers. U.S. consumers will suffer because the available products are less innovative, cost more, and offer lower quality and less variety than would have been otherwise available to them.

36. Dr. Layne-Farrar wrongly asserts that if SEP holders are unable to obtain exclusionary relief, innovative firms may be reluctant to join SSOs and may be reluctant to invest in new technologies that would enhance the value of the current standard and/or advance the development of the next generation of the standard. Her concerns are unfounded in my view. First, there are standards organizations that require that owners of SEPs license them for free. (This implies that they have to monetize their innovations through other means, such as by offering superior products that embody the standard.) There is no evidence that I am aware of that technological progress has suffered in the markets and industries linked to these standard-setting organizations. Moreover, as I explained above, ETSI and other SSOs have functioned very well and produced great benefits to industry with rules that required SEP holders to accept FRAND royalties as their only compensation for the practice of their patents.

37. Second, just because exclusion orders would not be allowed (absent extraordinary circumstances inapplicable here) does not mean that innovators will not be able to earn a reasonable rate of return on their innovations and thus will be dis-incentivized from further investments in technology. Indeed, there are many different strategies for "monetizing" the return on investment in R&D, such as through sales of products or FRAND license fees. As I have discussed, when a technology is incorporated into a widely-adopted industry standard (like UMTS), holders of declared SEPs gain an extremely broad base of standard-compliant products on which to assess FRAND royalties. That provides very strong incentives to participate in standard setting and produce inventions that get included in industry standards.

38. Third, and perhaps most important, prohibition of exclusion orders simply means that these SEP holders will not be able to earn incremental returns on their investments from U.S. firms and consumers that are not attributable to the innovative value of their patents but, rather, are attributable to the ability to hold up the implementers for supra-competitive license fees. Stated another way, Dr. Layne-Farrar does not explain why U.S. licensees and consumers should

be taxed with excessive rates so as to deliver above-competitive returns to innovators who have voluntarily agreed to license their innovations on FRAND rates in the first place. A prohibition on exclusion orders does not deprive the innovators of the return that is consistent with the economic value of their contribution to the standard. On the contrary, properly developed FRAND rates aim to ensure such a return.

39. It is also important to recognize that, for vertically-integrated declared SEP holders like Samsung, the excessive, non-FRAND returns from availability of exclusionary orders would not be limited to hold-up value in patent licensing negotiations. Samsung would also receive the margins on the incremental sales of Samsung devices that would now be facing less competition in the U.S. marketplace were Apple's products to be excluded. In fact, it is well-known in industrial organization economics that a vertically integrated firm – such as Samsung – may have incentives to disadvantage its rival (or rivals) that require the firm's component(s). In the instant case, the relevant component is not a physical item but rather access to the patent that is claimed to be essential to a standard. Thus, besides trying to extract above-FRAND rates for its self-declared SEPs, Samsung has additional reasons to exclude Apple's devices from the U.S. market, namely, to capture the benefit from diversion of Apple's sales to Samsung's competing devices. These increased margins and the resulting downstream price increases – which come at the expense of U.S. consumers – are another critical form of harm to U.S. competitive conditions that would come in this case from granting Samsung an exclusion order based on declared SEPs.

40. Finally, the owner of FRAND-encumbered SEPs, armed with the ability to obtain an exclusion order, can also use that threat to try to gain access to proprietary, differentiating innovation held by the (alleged) infringer. This is a relevant consideration because, when assessing whether the offer to license is consistent with FRAND, it is not necessarily sufficient to examine only the level of the demanded license fee – it is also important to consider other elements of the offer, such as whether the license offer is conditioned on access to the potential licensee's proprietary, differentiating patents. These patents are different from SEPs inasmuch as their owner is under no compulsion to license them to anyone, especially not to a competitor. In contradistinction, the owner of a SEP has made an irrevocable commitment to license its IP to all firms, including actual and potential competitors. Extracting access to differentiating IP can have detrimental consequences on the ability of firms to compete effectively against owners of the FRAND-encumbered SEPs. Given that one purpose of a standard is to create a common

platform on which rivals can build their standard-compliant but differentiated products, when the ability to sustain differentiation is undermined, the competitive advantage can be lost, possibly irreparably. Once again, this will diminish incentives for innovators to invest in new products that bring massive benefits to consumers and thereby harm competitive conditions in the United States.

B. PUBLIC INTEREST FACTOR 3: "THE PRODUCTION OF LIKE AND DIRECTLY COMPETITIVE PRODUCTS IN THE UNITED STATES"

41. An exclusion order can have potentially devastating impact on the manufacture and sale of directly competitive products in the U.S. As discussed with respect to Public Interest Factor (2), an exclusion order would undermine the FRAND licensing regime and severely damage incentives to innovate for products that comply with industry standards. Permitting declared SEP holders to use threats of product exclusion based on U.S. patents to extract non-FRAND royalties will lead to lower levels of R&D surrounding and production of wireless devices in the United States. Although an exclusion order might be in the public interest if the SEP holder were likely to suffer an irreparable damage if the infringing products are not stopped from coming into the country rapidly, such irreparable damage is not plausible in the case of SEPs. The reason is simple: by agreeing to license its patents on FRAND terms, the declared SEP holder has willingly agreed to accept a FRAND license fee as full compensation for use of the its intellectual property by other firms – rivals or not. Consequently, the damage (if any) from an infringement can be readily converted into a dollar award. By its own admission, nothing more is required to make the SEP holder completely whole for the use of its patents by a standard implementer.

C. PUBLIC INTEREST FACTOR 4: EFFECTS ON "UNITED STATES CONSUMERS"

42. The effects on U.S. consumers from an exclusion order against Apple's products would be plainly negative for at least two reasons. First, as noted, there is a potential for prices to increase following a removal from the marketplace of desirable products, like Apple's. Second, even if prices do not increase, the range of choices would be narrowed as a consequence of the exclusion of Apple's products.

43. Moreover, in my view, it is appropriate to consider not only the short-term impact from granting an exclusion order but also a long-term impact on consumers that accounts for the reduced incentives of firms to develop new intellectual property and products. I already

indicated that an exclusion order is likely to have adverse effects on the economic incentives of the alleged infringer and other innovators, especially if it forces them to accept rates (and other terms) that are not consistent with FRAND principles and which include a mark-up for the exclusionary market power embodied in a SEP. In my view, there is no reason why a negotiation between a licensor and a licensee free of the threat of market eviction should lead to a license fee that does not recognize the full economic value of the invention before the standard is set. If the rate is set by an impartial tribunal, the resulting rate should (on average) also reflect the FRAND principles and thus not leave the licensor undercompensated.[36] In sum, it is wrong to conclude that licensors of FRAND-encumbered SEPs need the threat of exclusion order (or injunctive relief) to obtain rates that compensate them fairly for their net economic contribution to the standard.

IV. CONCLUSION

44. Collaborative standard setting offers potentially great benefits, but also can endow SSO participants with market power that is attributable to the fact of standardization itself, not to the intrinsic value of their inventions. If unconstrained, this market power may be exercised to the detriment of consumers and innovators. ETSI (and other SSOs) encourage FRAND commitments as a means of restraining SEP declarants from exercising the incremental market power conferred by standardization, thereby securing the benefits from their standard-setting efforts. Actions that weaken or undermine FRAND commitments (that SSO participants voluntarily undertook) threaten the public interest by leading to increased prices and/or excluding from the market products that consumers highly value and diminishing incentives to engage in innovation in the United States and elsewhere. Exclusion orders not only would weaken or undermine FRAND commitments by increasing dramatically the bargaining power of SEP holders in negotiations with potential licensees, but also are unnecessary for the SEP holder to obtain the royalty that it has already acknowledged is acceptable and full compensation for its contribution to the standard, namely, a FRAND royalty. Allowing exclusion orders would lead to the very patent holdup that FRAND commitments are designed to avoid, harming consumers and damaging innovation incentives, and thus is inconsistent with the public interest.

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[36] As I explained above, Dr. Layne-Farrar overstates the ability of potential licensees to design around or avoid SEPs, which undermines her argument that even if courts get the FRAND rate right "on average," SEP holders can be harmed by court-determination of FRAND rates.

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Exhibit 1: Curriculum Vitae of Janusz A. Ordover

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EDUCATION

1968-1973	Columbia University, New York, New York Graduate Department of Economics and European Institute of the School of International Affairs Doctoral Dissertation: Three Essays on Economic Theory (May 1973). Ph.D 1973.
1967-1968	McGill University, Montreal, Canada Departments of Economics and Political Science
1963-1966	Warsaw University, Warsaw, Poland Department of Political Economy. B.A. (equiv.), 1966.

HONORS

2011	"The Economist of the Year 2010" voted by the Global Competition Review
1973	Columbia University: Highest distinction for the doctoral dissertation
1971-1972	Columbia University: Honorary President's Fellow
1969-1971	Columbia University: President's Fellow
1967-1968	McGill University: Honors Student
1964, 1965	Warsaw University: Award for Academic Achievement, Department of Political Economy
	Who's Who in the World Who's Who in America Who's Who in the East

PROFESSIONAL EXPERIENCE

June 1982 - present	Professor of Economics Department of Economics, New York University, New York, New York
Sept. 1996 - Aug. 2001	Director of Masters in Economics Program Department of Economics, New York University, New York, New York

Summer 1996- 2000	Lecturer International Program on Privatization and Reform Institute for International Development, Harvard University, Cambridge, Massachusetts
Aug. 1991 - Oct. 1992	Deputy Assistant Attorney General for Economics Antitrust Division United States Department of Justice, Washington, D.C.
Sept. 1989 - July 1990	Visiting Professor of Economics School of Management, Yale University, New Haven, Connecticut
	Lecturer in Law Yale Law School
Mar. 1984 - June 1988	Visiting Professor of Economics Universita Commerciale "Luigi Bocconi", Milan, Italy
June 1982 - Feb. 1985	Director of Graduate Studies Department of Economics, New York University
Sept. 1982 - June 1986	Adjunct Professor of Law (part-time) Columbia University Law School, New York, New York
Feb. 1982 - June 1982	Acting Director of Graduate Studies Department of Economics, New York University
June 1978 - June 1982	Associate Professor of Economics Department of Economics, New York University
Sept. 1979 - May 1990	Lecturer in Economics and Antitrust New York University Law School
Sept. 1977 - June 1978	Member, Technical Staff Bell Laboratories, Holmdel, New Jersey
	Associate Professor of Economics Columbia University
	Visiting Research Scholar Center for Law and Economics, University of Miami, Miami, Florida
Sept. 1973 - Aug. 1977	Assistant Professor of Economics New York University
Summer 1976	Fellow, Legal Institute for Economists, Center for Law and Economics, University of Miami
Summer 1976	Visiting Researcher Bell Laboratories, Holmdel, New Jersey

OTHER PROFESSIONAL ACTIVITIES

2011	Organizer, Session on the 2010 Agencies Horizontal Merger Guidelines, 2011 Spring Meetings, Antitrust Section, American Bar Association, Washington DC
2010 – present	Member, ABA Section of Antitrust Law, Economics Task Force

2006 - present	Special Consultant, Compass Lexecon (formerly Compass)/FTI Company, Washington, D.C.
2003 - 2006	Director, Competition Policy Associates, Inc. ("Compass"), Washington, D.C.
1997 – 1999	Consultant, Inter-American Development Bank, Washington, D.C.
1997 – 2009	Board of Editors, *Antitrust Report*
1995 – 2001	Consultant, The World Bank, Washington, D.C.
1998 – 2004	Senior Consultant Applied Economic Solutions, Inc., San Francisco, California
1995 - 2000	Senior Affiliate Cornerstone Research, Inc., Palo Alto, California
various	Testimony at Hearings of the Federal Trade Commission
1994 - 1996	Senior Affiliate Law and Economics Consulting Group, Emoryville, California
1994 - 2000	Senior Affiliate Consultants in Industry Economics, LLC, Princeton, New Jersey
1993 - 1994	Director Consultants in Industry Economics, Inc., Princeton, New Jersey
1992 - 1993	Vice-Chair (*pro tempore*) Economics Committee, American Bar Association, Chicago, Illinois
1990 - 1991 1992 - 1995	Senior Consultant Organization for Economic Cooperation and Development, Paris, France
1991	Member *Ad hoc* Working Group on Bulgaria's Draft Antitrust Law The Central and East European Law Initiative American Bar Association
1990 - 1991	Advisor Polish Ministry of Finance and Anti-Monopoly Office Warsaw, Poland
1990 - 1991	Member Special Committee on Antitrust Section of Antitrust Law, American Bar Association
1990 - 1991	Director and Senior Advisor Putnam, Hayes & Bartlett, Inc., Washington, D.C.
1990 - 1996	Member Predatory Pricing Monograph Task Force Section of Antitrust Law, American Bar Association
1989	Hearings on Competitive Issues in the Cable TV Industry Subcommittee on Monopolies and Business Rights of the Senate Judiciary Committee Washington, D.C.

1989	Member EEC Merger Control Task Force, American Bar Association
1988 - present	Associate Member American Bar Association
1987 - 1989	Adjunct Member Antitrust and Trade Regulation Committee, The Association of the Bar of the City of New York
1984	Speaker, "Industrial and Intellectual Property: The Antitrust Interface" National Institutes, American Bar Association, Philadelphia, Pennsylvania
1983 - 1990	Director Consultants in Industry Economics, Inc
1982	Member Organizing Committee Tenth Annual Telecommunications Policy Research Conference, Annapolis, Maryland
1981	Member Section 7 Clayton Act Committee, Project on Revising Merger Guidelines American Bar Association
1980	Organizer Invited Session on Law and Economics American Economic Association Meetings, Denver, Colorado
1978 - 1979	Member Department of Commerce Technical Advisory Board Scientific and Technical Information Economics and Pricing Subgroup
1978 – present	Referee for numerous scholarly journals, publishers, and the National Science Foundation

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Economic Association
American Bar Association

PUBLICATIONS

A. Journal Articles

"Coordinated Effects in Merger Analysis: An Introduction," *Columbia Bus. Law Review*, No. 2, 2007, 411-36.

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EXHIBIT B

7-9-2012

Rand Patents and Exclusion Orders: Submission of 19 Economics and Law Professors to the International Trade Commission

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By Electronic Filing
July 9, 2012
The Honorable James R. Holbein
Secretary, U.S. International Trade Commission
500 E Street, S.W.
Washington, DC 20436

Re: *In the Matter of Certain Wireless Communications Devices, Portable Music and Data Processing Devices, Computers, and Components Thereof,* Investigation No. 337-TA-745

SUBMISSION OF 19 ECONOMICS AND LAW PROFESSORS

The Statute Requires the ITC To Consider Competitive Conditions and Consumers

19 U.S.C. § 1337(d)(1) states: "If the Commission determines, as a result of an investigation under this section, that there is a violation of this section, it shall direct that the articles concerned, imported by any person violating the provision of this section, be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry."[1] Congress intended public interest considerations to be "paramount" to the statute's administration. S. Rep. No. 93-1298, 93rd Cong., 2d Sess. 193 (1974).[2] Under Commission Order, administrative law judges of the ITC now may take evidence on the public interest at the outset of a case, rather than waiting until the end.[3]

Our Qualifications To Talk about Competitive Conditions and Consumers

In this submission, we consider one aspect of Section 337 (d)(1): the impact of excluding products that practice standards-essential patents (SEPs) on competitive conditions and United States consumers.[4] We have studied patent and competition policy for years, and in some cases decades. Collectively we have published over 100 scholarly articles, casebooks, treatises, and book chapters, on the subjects of standards,

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1 19 U.S.C. § 1337(d)(1).

2 The Senate Report further reads: "Should the Commission find that issuing an exclusion order would have a greater adverse impact on the public health and welfare; on competitive conditions in the United States economy; on production of like or directly competitive articles in the United States; or on the United States consumer, than would be gained by protecting the patent holder [] then [an] [] exclusion order should not be issued." S. Rep. No. 93-1298, 93rd Cong., 2d Sess. 197 (1974).

3 Rules of Adjudication and Enforcement, 19 CFR Part 210, 76 Fed. Reg. 64803 (Oct. 19, 2011) *available at* http://www.usitc.gov/secretary/fed_reg_notices/rules/finalrules210.pdf.

4 In so doing, we take no position on Questions 1-6 of the Request for Written Submissions, which ask about the particulars of this case.

competition policy, patent remedies, patent licensing, administrative law, and the International Trade Commission.

We provide these views as teachers and scholars of economics, antitrust and intellectual property, remedies, administrative, and international intellectual property law, former Department of Justice lawyers and chief economists, a former executive official at the Patent and Trademark Office, a former counsel at the ITC Office of the General Counsel, and a former Member of the President's Council of Economic Advisers.

The ITC Should Not Grant Exclusion Orders Based on SEPs Subject to RAND Commitments

Some of us have been called "pro-competition"; others among us have been accused of being "pro-patent." However, we all agree that ITC exclusion orders[5] generally should not be granted under § 1337(d)(1) on the basis of patents subject to obligations to license on "reasonable and non-discriminatory" (RAND) terms. Doing so would undermine the significant pro-competitive and pro-consumer benefits that RAND promises produce and the investments they enable. A possible exception may arise if district court jurisdiction is lacking, the patent is valid and infringed, and the public interest favors issuing an exclusion order. We explain our position below.

SEPs Subject to RAND Commitments Differ from Other Patents

The Federal Circuit has said that "Congress intended injunctive relief to be the normal remedy for a Section 337 violation."[6] However, the Federal Circuit has also repeatedly stated that "the Commission has broad discretion in selecting the form, scope, and extent of the remedy."[7] Furthermore, a unique set of factors comes into play for SEPs that are subject to RAND commitments. Holders of SEPs put aside their rights to exclude when they agree to make their technology available on terms that are reasonable and non-discriminatory and imply that legal remedies (i.e. monetary damages) are adequate.[8] Through their promises, patent holders have traded the right to exclude for the privilege of being declared essential to the standard.

Having a patent declared standards-essential benefits the patent holder. Broadly-adopted standards like Wi-Fi get implemented in thousands of products sold to

[5] And ITC cease and desist orders, the grant of which are governed by § 1337(f)(1).
[6] *Spansion, Inc. v. United States Int'l Trade Comm'n*, 629 F.3d 1331, 1358 (Fed. Cir. 2010). cert. denied, 132 S. Ct. 758, 181 L. Ed. 2d 482 (U.S. 2011).
[7] *Hyundai Electronics Industries Co., Ltd. v. U.S. Intern. Trade Com'n*, 899 F.2d 1204, 1209 (Fed. Cir. 1990), citing *Viscofan, S.A. v. United States Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed.Cir.1986).
[8] See *eBay Inc. v. MercExchange*, L.L.C., 547 U.S. 388, 391 (2006) (a plaintiff must demonstrate the inadequacy of legal remedies before a court may grant injunctive relief).

hundreds of millions of consumers, in many cases earning large royalty streams. Failure to be included in a standard, in contrast, can relegate a technology to irrelevance. Knowing this, patent owners are often willing to provide standards setting organizations (SSOs) with RAND commitments and lobby for the privilege to do so,[9] even though the standards setting process may be painstaking and slow.[10] Indeed, royalty-free or RAND licensing of standard-essential patents is required by many of the major standards bodies including American National Standards Institute (ANSI), which administers and coordinates US private sector standards among 100,000 companies, and the European Telecommunication Standards Institute (ETSI), which sponsors the development of European telecommunications standards among more than 700 members.[11]

Critically, SEPs cannot, by definition, be designed around without sacrificing compliance with the standard. This makes them different than non-SEP patents that, if they cover minor features, can be designed around without sacrificing key functionality. While inventing around does not eliminate the danger of patent hold-up, it does provide a check on the bargaining power wielded by patent holders that seek injunctive relief. This check is much weaker when the patents are standards-essential. There, disabling even a single feature to avoid infringement of an SEP can greatly detract from the value of a product by making it inoperable for its intended purpose, for example, a laptop that cannot connect to a Wi-Fi network. Furthermore, many consumers, counting on standards to provide the functionality they require, are unwilling to purchase non-compliant products. An exclusion order that forces manufacturers to produce non-compliant products would undermine the network effects associated with successful standards and harm consumers.

Furthermore, hundreds or even thousands of patents can read on a single standard, especially in the information and communications sector of the economy. In the ETSI

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[9] Joseph Farrell et al., *Standard Setting, Patents and Hold-Up*, 74 Antitrust L.J. 603, 606 (2007).

[10] Discussed, e.g. in Carl Shapiro, *Setting Compatibility Standards: Cooperation or Collusion?*, *in* EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY 85 (Rochelle Dreyfuss et al. eds., 2001), and Timothy Simcoe, *Standard Setting Committees: Consensus Governance for Shared Technology Platforms*, 102 American Economic Review 305 (2012).

[11] Guidelines for Implementation of the ANSI Patent Policy (February 2011), ANSI Essential Requirements, at Section II and *available at* http://publicaa.ansi.org/sites/apdl/Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/Guidelines%20for%20Implementation%20of%20ANSI%20Patent%20Policy%202011.pdf; ETSI's IPR Policy (Nov. 30, 2011), at Annex 6 *available at* http://www.etsi.org/website/aboutetsi/iprsinetsi/iprsinetsi.aspx. *See also* Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 Calif. L. Rev. 1889, 1906 (2002) (finding that 29 out of the 36 standard-setting organizations studied with policies required RAND licensing, another 6 required outright assignment and three others suggested but did not require FRAND licensing). *See also* Benjamin Chiao, Josh Lerner, and Jean Tirole, *The Rules of Standard-Setting Organizations: An Empirical Analysis*, 38 RAND Journal of Economics 905.

standard setting organization, patent owners have declared more than 750 unique patent families as essential to the GSM cellular standard, more than 1,600 as essential to the third-generation UMTS cellular standard, and more 500 as essential to the fourth generation LTE cellular standard.[12] More than 900 patents have been declared to be essential to the MPEG-2 standard for encoding digital video and audio, including over 100 US patents.[13]

This situation – which is common to SEPs – gives owners of SEPs undue bargaining leverage if they are permitted to obtain injunctions, because the inability to practice even a single SEP will result in the product being noncompliant. As a result, the bargaining leverage of patents covering minor aspects of the standard far outweighs their contribution.[14] The Federal Trade Commission has reached this same conclusion, based on reasoning very similar to ours.[15]

Excluding Products that Practice SEPs Adversely Impacts Competitive Conditions and Consumers

19 U.S.C. § 1337(d)(1) does not compel the Commission to grant exclusion orders. Rather, it empowers the ITC to evaluate whether or not an exclusion order is in the public interest, and to proceed accordingly. The Federal Circuit parses the statute to identify four separate factors.[16] "The enumerated public interest factors include: (1) the public health and welfare; (2) competitive conditions in the United States economy; (3) the production of like or directly competitive articles in the United States; and (4) United States consumers."[17] On the three occasions that the ITC has declined to enter an injunction,[18] its focus has been on two factors: the public interest in health and welfare and the unavailability of alternatives. We use these precedents to inform our

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[12] K. Blind et al., *Study on the Interplay between Standards and Intellectual Property Rights (IPRs), Tender No ENTR/09/015 (OJEU S136 of 18/07/2009) Final Report*, April 2011.

[13] MPEG LA, MPEG-2 Patent Portfolio License Briefing (Aug. 4, 2010); *See also* Richard J. Gilbert, *Ties That Bind: Policies to Promote (Good) Patent Pools*, 77 Antitrust Law Journal No. 1, 13 (2010).

[14] *See* Farrell, et. al, supra, Mark Lemley and Carl Shapiro, *Patent Holdup and Royalty Stacking,* 85 Texas Law Review 1991, Carl Shapiro, *Injunctions, Hold-Up, and Patent Royalties* (2010), 12 American Law and Economics Review 218; *See also* Richard J. Gilbert, *Deal or No Deal? Royalty Negotiations by Standard Development Organizations*, 77 Antitrust Law Journal 855 (2011).

[15] *United States Federal Trade Commission Statement on the Public Interest,* Inv. No. 337-TA-745. (June 2012)

[16] See *Spansion*, 629 F.3d at 1358 (Fed. Cir. 2010).

[17] *Id.*

[18] *See* Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern *In re Certain Automatic Crankpin Grinders at 17-18*, USITC Inv. No. 337-TA-60 (Dec. 17, 1979); Commission Action and Order *In re Certain Inclined-Field Acceleration Tubes* at 22-31, USITC Inv. No. 337-TA-67, (Dec. 29 1980); Commission Memorandum Opinion *In re Certain Fluidized Supporting Apparatus and Components Thereof*, at 1-2, USITC Inv. No. 337-TA-182, 337-TA-188, 225 U.S.P.Q. 1211, 1984 WL 63741 (Oct. 5, 1984).

description below of how competitive conditions and consumers are particularly impacted when the use of SEPs is withheld through an exclusion order.

First, companies count on the availability of standards-essential technology to make significant investments. Electronics manufacturers spend hundreds of millions of dollars on fabrications plants that can make products compatible with a standard such as the IEEE 802.11 wireless local area network protocol. Comparable sums are spent in the information and communications sector to design and build products that comply with various product standards. The companies making these investments depend on their ability to license any technology necessary to comply with these standards on reasonable terms. They typically become "locked-in" to the standard, meaning that a significant portion of their investments would be rendered uneconomic if they were blocked from producing standards-compliant products.

If the ITC were generally to allow RAND-obligated patents to be used as the basis of injunctions, this would undermine the basic bargain RAND commitments represent. Industry participants would be less willing to make the investments needed to design and build standards-compliant products, due to the risk they will later be unable to make and sell those products. A clear statement from the ITC that it will generally *refrain* from issuing exclusion orders for SEPs, in contrast, will increase certainty for firms making investments in complementary technology.[19]

Second, these investments promote competition and inure to the benefit of United States consumers.[20] There are an estimated 700,000 standards and technical regulations around the world, and 450 standards setting organizations in the United States alone. [21] Without these organizations and the standards they develop, the Internet would not work, phones could not talk to each other, and it would be harder to buy printer paper.[22] Standards facilitate network effects – the more devices that can read my text messages, the more valuable my text messages become. Open standards enable greater

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[19] Federal Trade Commission, *supra* at 5.

[20] For a thoughtful recent statement describing how standards promote competition and generate substantial benefits to consumers, while elevating the dangers of patent holdup, see the February 13, 2012 Statement by the Department of Justice's Antitrust Division regarding its decision to close its investigations into several transactions involving SEPs, *available at* http://www.justice.gov/atr/public/press_releases/2012/280190.htm. It closed these investigations in part based on commitments not to seek injunctions in disputes involving SEPs. However, citing "more ambiguous statements that do not provide the same direct confirmation," the Division stated that it "continues to have concerns about the potential inappropriate use of SEPs to disrupt competition and will continue to monitor the use of SEPs in the wireless device industry."

[21] Report to the European Round Table of Industrialists (ERT) prepared by FIPRA International, October 2010, pp.3, 12 and *available at* http://www.ert.eu/sites/default/files/Standard%20setting%20in%20a%20changing%20global%20landscape%20Final%20Report_0.pdf.

[22] Lemley, *supra* at 1892.

competition in interoperable products and services. [23] A lack of standardization, in contrast, can leave a consumer "stranded" - as anyone who has forgotten the charge cord for their mobile phone can attest.

Proprietary formats can lead to greater market power when the technology is not made available to all comers.[24] Undoing the standards bargain through an exclusion order may leave consumers who have already bought the product stranded, unable to get support or services for products already purchased.[25]

Furthermore, issuing an order to exclude standards-compliant products would have consequences not only on individual respondents but also on third parties – for example, service providers, application developers, and other members of the ecosystem of the enjoined product.[26] The larger the market for the enjoined product, the greater the collateral impact.

Finally, we are mindful of several other relevant sources of authority. One is the Federal Trade Commission's official comment on issues of public interest in this case.[27] Similar to the present comment, it urges the ITC to consider the "[h]igh switching costs combined with the threat of an exclusion order could allow a patentee to obtain unreasonable licensing terms despite its RAND commitment…because implementers are locked into practicing the standard." [28] Agencies don't often comment publicly in ITC cases,[29] giving the FTC's statement additional significance. The Department of Justice has also publicly expressed its concern about the use of RAND patents to seek

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[23] Shapiro, *supra* at 89-90.
[24] *Id.*
[25] *Id.* at 72, 79-84.
[26] See *Certain Baseband Processors*, p. 153 ("The potential harm to economic actors, in this case including handset manufacturers and telecommunications service providers, is properly part of our *EPROMs* analysis, and we have indeed fully weighed potential harm to third parties and to legitimate trade in that prior analysis. In fact, under our *EPROMs* analysis, we found that full downstream relief was *not* permitted in this investigation due to, among other things, the magnitude of the impact on third parties.") (ultimately concluding "a downstream remedy with a grandfathering exception does not raise public interest concerns" because "the relief we propose has a much more limited impact on availability of 3G-capable handsets, and thus a lesser impact on the public interest.") (*see also id.* at 153-154).
[27] *United States Federal Trade Commission Statement on the Public Interest,* Inv. No. 337-TA-745 (June 2012).
[28] *Id.* at 3.
[29] Based on a search of EDIS, the ITC's electronic docketing system and related research. Politicians have sent letters on behalf of their constituents to the ITC. *See generally* Colleen Chien, *Publicly Influencing the ITC* (unpublished paper, on file with the author). 19 USC 1337 (b)(2) requires the ITC to consult with governmental departments and agencies "as it considers appropriate." According to the legislative history, the requirement of these consultations reflects Congress' "[belief] that the public health and welfare and the assurance of competitive conditions in the United States economy must be the overriding considerations in the administration of this statute." S. Rep. No. 93-1298, 93rd Cong., 2d Sess. 197 (1974).

injunctions.[30] The President has made several statements about the importance of wireless technologies for consumers and the national economy.[31] In previous cases when the ITC has declined to award or has tailored an exclusion order, it has relied upon such official comment and agency, Presidential and Congressional policy to explain its position.[32]

In addition, the statute's legislative history addresses opportunistic behavior by patent holders. It cautions against using the statute to reward such behavior, noting that an "exclusion order should not be issued…particularly in cases where there is evidence of price gouging or monopolistic practices in the domestic industry." S. Rep. No. 93-1298, 93rd Cong., 2d Sess. 107 (1974).

Money Damages, not Injunctions, are the Appropriate Remedy for SEPs Subject to RAND Commitments

In short, though standards create value by facilitating interoperability and enabling competition in complementary products to thrive, they increase the vulnerability of standards implementers to patent holdup. RAND promises counter these concerns. They reassure companies that they will not be held up, but rather will be able to access the required technologies on fair, reasonable, and non-discriminatory terms.

Holders of SEPs who have promised to license their patents on reasonable terms should not generally be allowed to obtain injunctions against products that comply with the standard. Regardless of the respondent specifics referred to in Question 7 of the Request for Written Submissions, the patentee has received the benefit of the bargain by having their patented technology included in the standard. In return, they are obligated to license their patent on RAND terms. Allowing holders of SEPs to obtain injunctions would give the RAND licensing obligation an implicit "unless we don't feel like it" clause that would render the commitment virtually meaningless.

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[30] *See* February 13, 2012 Statement by the Department of Justice's Antitrust Division, *supra*.

[31] See *Verizon Statement on the Public Interest,* Inv. No. 337-TA-745 (June 2012).

[32] *See* Commission Action and Order *In re Certain Inclined-Field Acceleration Tubes* at 21, USITC Inv. No. 337-TA-67, (Dec. 29 1980) (citing in support of its decision to not grant an order enjoining Dowlish tubes used for research, "the President and the Congress have issued declarations of support for basic science research," and "[t]he National Science Foundation Act" (in this case the NSF submitted a comment); Opinion of Vice Chairman Alberger and Commissioners Bedell and Stern *In re Certain Automatic Crankpin Grinders* at 17-18, USITC Inv. No. 337-TA-60, 205 U.S.P.Q. 71, 0079 WL 419349 (Dec. 17, 1979)(justifying the Commission's decision not to exclude efficient crankpin grinders in part by "the fact that Congress and the President have also clearly established a policy requiring automotive companies to increase the fuel economy of the automobiles they produce."); *See also* Commission Decision in *Certain Baseband Processor* (TA-337-543), where the ITC custom tailored the injunction it ordered, and cited the public comments of FEMA and the FCC.

Patent owners may legitimately worry that without the threat of an injunction, infringers will turn down reasonable offers. We are sympathetic to these concerns. However, district courts are in a better position to deal with them by imposing attorneys' fee sanctions for bad behavior or enhanced damages in certain situations.[33] District courts also can issue injunctions, even for SEPs subject to RAND commitments, if the equities favor doing so.

Exceptions to the Rule and Injunction Tailoring

As one of us has written elsewhere: "[t]here is at least one situation where an ITC action and exclusion order on the basis of a RAND patent may be appropriate, however. [] In the cases when the district court lacks jurisdiction over a defendant but the *in rem* jurisdiction of the ITC is available, [34] the ITC provides the patentee with its only recourse." [35] In such cases, ITC review and relief may be appropriate, provided that the other prerequisites to relief have been met. However, it may well be the case that even if the ITC is the only venue in which relief is available, an exclusion order is still not appropriate due to the failure to meet public interest or other prerequisites.

If the ITC decides to issue injunctions based on SEPs subject to RAND commitments, we urge the Commission to consider tailoring its order to minimize harm to the public interest, for example through delay or grandfathering. Delaying injunctions can address certain holdup problems. Faced with the threat of an exclusion order, the respondent will sometimes design around the standard even if it means disabling standards essential functionality.[36] But if the patent is found invalid or not infringed, the effort will have been wasted.[37] Delaying the exclusion order reduces investment in unnecessary design-arounds and gives competitors time to adjust.[38] Grandfathering existing models can also help consumers, at a minimal cost to the patentee. Thus, in *Certain Baseband Processors*, the Commission adjusted the scope of the exclusion order by grandfathering

[33] Joseph Scott Miller, *Standard Setting, Patents, and Access Lock-In: RAND Licensing and the Theory of the Firm*, 40 Ind. L. Rev. 351, 390 (2007).

[34] 65% of ITC cases have a district court counterpart, suggesting that this isn't a problem in the majority of cases, since the ITC and district court both have the power to hear the case. *See* Colleen Chien, *Patently Protectionist? An Empirical Analysis of Patent Cases at the International Trade Commission*, 50 WM. & MARY L. REV. 63, 64 (2008).

[35] Colleen Chien & Mark Lemley, *Patents, Holdup,* and *the ITC* __Cornell Law. Rev. (forthcoming 2012), at 53, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1856608.

[36] *See* Lemley & Shapiro, *supra* at 2002.

[37] See *id.* at 2002, n. 71.

[38] See *id.* at 2038, Commission Decision in *Personal Data and Mobile* Communications *Devices* TA-337-710, at 81. ("T-Mobile itself has advised the Commission that a four-month transition period would likely be sufficient . . . . We find T-Mobile's suggestion to be reasonable and within our authority to implement.").

in existing models of handsets."[39] Likewise, in *Personal Data and Mobile Communications Devices,* the Commission grandfathered refurbished replacement handsets into its exclusion order.[40] In *Sortation Systems*[41] and *Transmission Trucks*,[42] the ITC exempted from its exclusion order spare parts to service existing systems and facilities, citing public interest.

Responses to Questions 8-13

In sum, we believe that ITC relief should generally not be granted under §1337(d)(1) on the basis of patents subject to RAND commitments.[43] A possible exception arises in cases where district court relief is unavailable due to a lack of jurisdiction and the patent is valid, infringed, and public interest favors granting relief. In the rare case where an ITC exclusion order is appropriate, the ITC should make use of its remedial flexibilities, including grandfathering and delay, to minimize harm to competition and U.S. consumers.

Applying these principles to the Commission's specific questions,[44] we believe that the answer to Question 8 is "affirmative": a RAND obligation should generally preclude issuance of an exclusion order, except as we have described. The addition of the patentee's unwillingness to offer or license their RAND obligated patents as contemplated by Questions 9-12, or a failed negotiation as contemplated by Question 13, should not change this result. The patentee has committed to making the technology available on RAND terms, and received the benefit of that bargain. If the respondent fails to accept an offer made to them that has been determined by a

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[39] Commission Decision in *Certain Baseband Processors* Inv. No. 337-TA-543, *supra* at 150.

[40] Commission Decision in *Personal Data and Mobile Communications Devices* 337-TA-710, *supra* at 83. ("HTC shall be permitted to import into the United States [for 19 months] . . . refurbished handsets to be provided to consumers as replacements.").

[41] *Certain Sortation Systems, Parts Thereof, and Products Containing Same*; Notice of Violation of Section 337 of the Tariff Act of 1930 and Issuance of Limited Exclusion Order, 68 Fed. Reg. 5047 (Jan. 31, 2003) ("The Commission determined to include an exemption in the limited exclusion order for importations of spare parts for United Parcel Service's Hub 2000 facility in Louisville, Kentucky.").

[42] *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy-Duty Trucks, and Components Thereof*, Termination of Investigation; Issuance of a Limited Exclusion Order and a Cease and Desist Order, at 3, EDIS Doc. ID. 228343, USITC Inv. No. 337-TA-503 (Apr. 7, 2005) ("The limited exclusion order does not cover parts necessary to service infringing automated mechanical transmission systems installed on trucks prior to the issuance of the order.").

[43] Though the question of whether relief should be relief on the basis of SEPs not subject to FRAND is beyond the scope of the ITC's request, we note that many of the same impacts to consumers and competitive conditions discussed in this comment also extend to this situation.

[44] As discussed above at note 2 we take no position on Questions 1-6 which ask about this specific investigation or otherwise do not implicate public interest concerns. Question 7 is addressed *supra* at the top of page 6.

suitable fact finder to be RAND, district court damages, sanctions, and/or injunctions may be appropriate.

We thank the Commission for the opportunity to comment on these important issues.

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