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

[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

[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

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[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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