August 5, 2011

Mr. Donald S. Clark
Secretary
Federal Trade Commission
Office of Secretary
Room HB113 (Annex X)
600 Pennsylvania Avenue, NW
Washington, DC 20580

Re: Patent Standards Workshop, Project No. P11 1204

Dear Mr. Clark:

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) submits these comments in response to the Federal Trade Commission's *Request for Comments and Announcement of Workshop on Standard-Setting Issues* (May 13, 2011). We first provide background information on IEEE, and we then discuss some of the specific questions posed in the *Request for Comments*.

I. IEEE

IEEE is an educational and scientific organization described in section 501(c)(3) of the Internal Revenue Code of 1986, with more than 400,000 members in over 160 countries. IEEE seeks to advance global prosperity by fostering technological innovation, enabling members' careers, and promoting community worldwide. IEEE promotes the engineering process of creating, developing, integrating, sharing, and applying knowledge about electronics and information technologies and sciences for the benefit of humanity and the profession.

A. IEEE Standards Development

One of IEEE's activities in service of its mission is the development of standards. Through the IEEE Standards Association ("IEEE-SA"), IEEE is a leading forum for development of standards that underpin many of today's technologies. IEEE-SA's standards are developed in an open process based on input from all interested parties and building consensus. With more than 1500 standards either completed or under development, IEEE-SA is a central source of standardization in both traditional and emerging fields, particularly telecommunications, information technology, and power generation. IEEE-SA conducts over 200 standards ballots every year, through which proposed standards are voted upon for technical accuracy, soundness, and acceptance. IEEE-SA thrives because of the technical diversity of its 20,000 plus participants, consisting of technology experts and interested parties from around the globe, and including individuals in corporations, organizations, universities, and government agencies.

B. The Role of Patents in IEEE Standards

IEEE-SA seeks to produce standards that any willing implementer can use and that will become widely adopted. IEEE-SA's patent policy permits the inclusion of patented technology, because the best technological approach that the standards-development participants select is or may be covered by a patent. Inclusion of patented technology without a patent commitment, however, jeopardizes the goal of widespread adoption. Consequently, IEEE-SA (like most standards development organizations (SDOs)) has adopted a patent policy intended to remove this barrier.

The first step in IEEE-SA's policies is to determine the existence of potential "essential" patent claims.[1] IEEE-SA asks every participant in a standards-development project, at every standards-development meeting, to identify any holders of potential essential patent claims, and to do so as early as possible in the standards development process.[2] IEEE-SA expects that working group participants will act in good faith and will disclose any known patents that might prove essential (or identify any persons who might hold potentially essential patents).[3]

C. Patent Commitments

IEEE-SA then asks any person so identified to state its licensing intentions. As long as the patent-holder makes a sufficient commitment,[4] then the existence of the patent will not preclude IEEE-SA from adopting the standard. The IEEE-SA policy permits the known use of essential patents (and patent applications) if IEEE-SA receives the patent-holder's or applicant's commitment that either (a) the patent-holder or applicant will not enforce any of its present or future essential patent(s) against any person complying with the standard; or (b) the patent-holder or applicant will make available a license for implementation to an unrestricted number of applicants without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination (RAND — i.e., reasonable and non-discriminatory).[5] IEEE-SA's policy

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[1] If a patent is not technically or commercially necessary for a compliant implementation of the standard, then it is not covered by the IEEE-SA's policy.

[2] IEEE-SA's current patent policy is available at http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.

[3] *See Understanding Patent Issues During IEEE Standards Development Patented Technology in IEEE Standards* ¶ 17 ("the IEEE-SA does expect that participants will conduct themselves in good faith"), *available at http://standards.ieee.org/faqs/patents.pdf*.

[4] In IEEE-SA's parlance, this commitment is referred to as a "Letter of Assurance."

[5] IEEE Standards Board Bylaws § 6, *available at* http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.

is consistent with the IPR policy requirements issued by the American National Standards Institute.[6]

Patent commitments must be durable for the standards development process to function. If a patent-holder could withdraw a commitment, then a standards-development group could not rely on it. Years of joint effort would be wasted if the standards development effort had to go back to square one. Or if the standard had already been adopted, the reneging patent-holder would be able to extract monopoly profits from all implementers (or, if the patent-holder produces its own compliant implementation, it could refuse to license to its rivals at all) because there would be no competing and non-infringing alternative for compliance with the standard because, by definition, the committed patent is "essential" for a compliant implementation of the standard. Thus, a patent commitment "is irrevocable once submitted and accepted."[7]

The patent commitment needs to be durable even if the underlying patent is transferred. From the perspective of IEEE-SA (and other SDOs) and would-be implementers of the standard, what matters is not the identity of the patent-holder, but the continuing validity of the commitment after transfer. Thus, IEEE-SA policy requires that the original provider of the commitment bind its successor to honor the commitment (who then needs to bind its successor to honor the commitment, and so on).[8]

II. Comments on Issues Identified

IEEE-SA seeks to publish standards that are widely adopted. The assertion of patent rights can certainly be a barrier to widespread adoption, but the existence of patents may provide the incentives necessary to create standardizable technologies in the first place. IEEE-SA's patent policy seeks to balance stakeholder interests.

IEEE-SA reviewed its policy in 2005-2007. One specific impetus for this review was a presentation by representatives of several companies whose employees participated in IEEE-SA standards development activities. IEEE-SA considered the original proposal and other options at great length and in a public

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[6] *See* ANSI, *Normative National Standards Policies* § 3.1 (rev. ed. 2008), *available at* http://publicaa.ansi.org/sites/apdl/Reference%20Documents%20Regarding%20ANSI%20Patent%20Policy/ANSI%20Patent%20Policy%20-%20Revised%202008.pdf.

[7] IEEE-SA Standards Board Bylaws § 6.2, *available at* http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.

[8] *Id.* ("The Submitter of a Letter of Assurance shall agree (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to (i) agree to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).").

forum. All proposals were publicly available on the IEEE-SA website. IEEE-SA's Patent Committee ("PatCom") conducted a series of six quarterly public meetings that dealt with the topic of revising the IEEE-SA patent policy. PatCom invited public comment at its meetings, and individuals spoke on all sides of the issues. After PatCom determined in a public meeting the revisions that it wished to pursue, the PatCom Chair appointed a core drafting committee to reduce the principles to specific documents appropriate for the IEEE-SA. The results of the core drafting committee's work were provided to an extended drafting committee that included representatives who had divergent views on the principles of the proposed revision but were willing to help improve the language implementing those principles. The output from the extended drafting committee was then made available for public comment. Dozens of companies and individuals offered hundreds of comments, which PatCom considered at its September 12, 2006 meeting. After resolving the comments, PatCom recommended approval of the policy. IEEE-SA's governing bodies approved the policy revision, which became effective on May 1, 2007.

A. The Problem of Hold-Up

The potential for patent hold-up certainly exists, and it certainly would be greater in the absence of IEEE-SA's current policies. As a neutral body, IEEE-SA avoids taking a position on whether any particular royalty rate or other license term is reasonable. Nevertheless, IEEE-SA can state that a perception of the existence of, or potential for, patent hold-up was one factor that apparently motivated certain stakeholders to propose revisions to IEEE-SA's patent policy in 2005.

B. The Meaning and Value of RAND Commitments

One area of concern in 2005-2007 was the meaning of the term "reasonable" in a RAND commitment. IEEE's policy asks holders of potential Essential Patent Claims to disclose licensing intentions, and one specific option is for the holder to assure that "a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination."[9]

The term "reasonable" is inherently vague. It can lead to expensive litigation whose cost and risk can impede the adoption of a socially valuable standard.[10] Even where a license negotiation does not result in litigation, the ex post negotiation of license terms (that is, negotiations occurring after a technology's

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[9] IEEE-SA Bylaws § 6.2, *available at* http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.

[10] *See, e.g.,* FTC Chairman Deborah Platt Majoras, Recognizing the Procompetitive Potential of Royalty Discussions in Standard Setting (Sept. 23, 2005), *available at* http://www.ftc.gov/speeches/majoras/050923stanford.pdf ("Experience has shown, however, that some agreements on RAND rates can be vague and may not fully protect industry participants from the risk of hold up.").

inclusion in a standard) can lead to higher royalty payments and ultimately higher prices to consumers.

In 2007, IEEE-SA adopted one provision to facilitate understanding of a patent holder's licensing position. As revised in 2007, IEEE-SA's patent policy expressly permits (but does not require) the submitter of a patent commitment to provide with its commitment (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms. Other approaches (such as VITA's policy for mandatory disclosure of maximum rates[11]) are also possible. In addition, courts can assist SDOs by clarifying the meaning of "reasonable" and its role in the hypothetical negotiation where the patent at issue covers technology that is essential to compliance with a standard. *See* Federal Trade Commission, *The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition* at p. 194 (March 2011).

C. Variations and Limitations on the Scope of a Disclosure Requirement

Participation in standards development benefits both society at large and the participants, but it also carries costs. Rules that impose a burden on participation may be justified (and indeed, may be necessary to achieve the benefits of standardization), but each burden is a cost that potential participants will consider in deciding whether to participate. Consequently, a well-governed SDO tries to write rules that fairly balance the competing interests of all stakeholders. Rules can vary between different SDOs because the fair balance of interests (or at least the perception of what is fair) may vary.

Participation that Triggers Obligation. An SDO's rules can impose a disclosure obligation only if the party on whom the obligation is imposed is a member of the SDO or otherwise participates in its activities. The kind of activity that triggers an individual's or corporation's obligation to disclose patents or identify patent-holders can vary depending on the size and nature of the SDO. For example, in a narrow-purpose SDO, mere membership in the SDO may be sufficient to require the member to make whatever disclosures the organization otherwise requires. In a broader-based SDOs (such as IEEE-SA), however, an individual or corporation might be a member of the SDO itself but have no participation in (or even knowledge of) many of the SDO's standards development activities.

Patent Searches. One limitation on the duty of disclosure seems fairly common among SDOs, and that is avoiding a requirement that a participant conduct a patent search. A patent search is expensive, time-consuming, and burdensome; requiring a patent search as the price of entry is not appropriate as a general rule for all SDOs. Some SDOs may require a patent search (or impose

[11] This policy is discussed in the U.S. Department of Justice, Antitrust Division's business review letter, *available at* http://www.justice.gov/atr/public/busreview/219380.htm.

consequences on the failure to disclose), but imposing that manner of organization on all SDOs would stifle the good work of SDOs that use a different model.

Patents that Must Be Disclosed. A patent might cover technology that is essential to a compliant implementation of a standard, or the patent might cover only one of several ways to implement the standard. IEEE-SA has addressed this issue through its definition of a potentially essential patent claim: one that "was necessary to create a compliant implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard when, at the time of the [Proposed] IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative." Participants have an ongoing obligation to supplement their disclosures. A patent may not have been essential to an earlier version of a standard, but may be essential to a later version. In IEEE-SA's policy, though, a participant can submit a "blanket" assurance that would apply to patents that later become essential.

Inherent Limitations. An inherent limitation is that no set of written rules can hope to cover all conceivable circumstances. While the written rules provide participants with substantial guidance, the cooperative nature of standards development means that an SDO's written rules should not be interpreted with strict literalism. For example, IEEE-SA has published a set of FAQs, and one of the answers is:

> . . . a participant only needs to notify the IEEE of a potential Essential Patent Claim if such participant is "personally aware" that his or her employer has a potential Essential Patent Claim. There is no duty for that employee (or anyone else in his or her organization) to conduct a patent search, *but the IEEE-SA does expect that participants will conduct themselves in good faith.* This expectation arises both from the IEEE Code of Ethics and from the background legal rules.

See Understanding Patent Issues During IEEE Standards Development Patented Technology in IEEE Standards ¶ 17, *available at* http://standards.ieee.org/faqs/patents.pdf.

D. Remedies for Failure to Disclose or Failure to Honor Patent Commitment

Most individuals and companies will comply with an SDO's rules most of the time or will voluntarily cure an inadvertent failure to comply. The enforceability of patent commitments, however, is critical both for ensuring voluntary compliance and providing a remedy for those circumstances in which a patent-holder fails to honor its commitment.

IEEE-SA has publicly stated that implementers of an IEEE standard are entitled to enforce patent commitments made to IEEE-SA. Although normally one would expect the implementer to enforce the terms, IEEE-SA recognizes that other

users of the standard may also do so. *Understanding Patent Issues During IEEE Standards Development Patented Technology in IEEE Standards* ¶ 30 ("Users and implementers may seek to enforce the terms of any Accepted Letter of Assurance.").

An SDO has a number of tools available to enforce compliance with its disclosure rules and with patent commitments.

- Membership-Related Sanctions. An SDO can limit, suspend, or revoke a violator's rights to vote or participate in standards development activities. Imposing penalties, however, can impede the standards development process. An SDO can apply its policies only to individuals and companies that participate, and too severe an enforcement policy might deter participation. At the same time, too lenient an enforcement policy might drive out the volunteers who comply with the rules.

- Nonapproval/Withdrawal of Standard. The ultimate tool is nonapproval of a standard (if the violation is discovered before approval) or withdrawal of the standard (if it has already been reviewed and published). But an SDO can face the same problem of "lock-in" that the industry faces. If the industry has already started building to the draft or published standard, then those remedies are less likely to be available and effective as a practical matter.

- SDO Enforcement of Patent Commitment. As a general matter, IEEE-SA does not intervene in licensing disputes between implementers and patent-holders. IEEE-SA wants to remain a neutral body in which IP users and IP holders both wish to participate. Moreover, IEEE-SA does not have the resources to intervene in such disputes on any regular basis. Nevertheless, there may be rare circumstances in which a refusal to honor the commitment is sufficiently important to warrant IEEE-SA intervention, and IEEE-SA has accordingly reserved the right to enforce patent commitments when IEEE-SA believes that appropriate. *Understanding Patent Issues During IEEE Standards Development Patented Technology in IEEE Standards* ¶ 30 ("In certain circumstances and at its sole discretion, the IEEE may also seek to enforce the terms of an Accepted Letter of Assurance.").

E. *Ex Ante* Disclosure of Licensing Terms, *Ex Ante* Group Discussions, and *Ex Ante* License

IEEE-SA has adopted a policy that permits (but does not require) participants to make patent commitments that disclose maximum royalties and other license terms. In accepting a patent commitment, IEEE-SA does not make any judgment on the reasonableness of the disclosed terms.

Permitted Discussion of Cost. After adopting its 2007 policy revisions, IEEE-SA now permits participants to discuss "relative costs of implementation for

different proposed technical approaches in comparison with the relative technical performance increases or decreases of those proposals," and relative costs and benefits can provide "a legitimate basis for decision-making in the standards development process." *Understanding Patent Issues During IEEE Standards Development Patented Technology in IEEE Standards* ¶ 36.

Group Discussions. Over the years, a number of stakeholders have expressed concern about any group discussion of licensing terms. One frequently expressed concern is that the participants in the room are not the most appropriate individuals for discussion – that economic terms should be discussed by licensing executives, not engineers. Another concern is that any discussion of cost might be "coercive," in the sense that proponents of competing patented technologies might feel compelled to disclose licensing terms in response to such discussion. In any event, IEEE-SA does not permit group discussions of licensing terms in IEEE forums (other than discussions of relative costs).

Group Negotiations and Patent Pools. IEEE-SA has not proposed group negotiations of licensing terms, but IEEE-SA has sought to foster the development of patent pools. IEEE-SA's past effort was directed toward standards that had been approved, not *ex ante* patent pools. The concept of an *ex ante* pool, though, is an interesting one – the *ex ante* knowledge that a patent would be included in a pool would be useful information in determining whether to include that technology in the standard. The most recent guidance on patent pools (the Justice Department's business review letters) are now more than a decade old, and it may be appropriate for the FTC to renew discussion of patent pools in the specific context of standards and with a focus on the value of *ex ante* pools (and any antitrust limitations that should be considered).

F. RAND Following Transfer of a Patent

The purpose of a patent commitment is to assure that the patent-holder (a) will license (rather than not license), and (b) will do so on RAND terms. Permitting a commitment to evaporate upon transfer would mean that the commitment is not worth much. "Patent laundering" would confer on the successor the ability to extract supra-competitive royalties. The original holder would have an incentive to create that ability and to split the value with a successor. Consequently, the appropriate rule is simple and clear: a successor should be bound by the same commitments as its transferor. As described above, IEEE-SA has adopted rules intended to achieve this result.

The FTC recognized the basic problem of successors and patent commitments in the *N-Data* matter. In its statement on issuance of the Complaint, the FTC explained that N-Data had "reneged on a prior licensing commitment to a standard-setting body and thereby was able to increase the price of an Ethernet technology used by almost every American consumer who owns a computer." Statement of the Federal Trade Commission, *In the Matter of Negotiated Data Solutions LLC*, FTC File No. 0510094 (Jan. 23, 2008) (emphasis added), *available at* http://www.ftc.gov/os/caselist/0510094/080122statement.pdf. Permitting a successor patent-holder to renege on its predecessor's commitment "could be

enormously harmful to standard-setting." *Id.* As the Commission put it, if the ability to renege on a predecessor's commitment "became the accepted way of doing business, even the most diligent standard-setting organizations would not be able to rely on the good faith assurances of respected companies. The possibility exists that those companies would exit the business, and that their patent portfolios would make their way to others who are less interested in honoring commitments than in exploiting industry lock-in." *Id.*

The European Commission's recent report discussing standards-development (as well as other forms of cooperation among competitors) explicitly addressed the continued vitality of patent commitments to SDOs when a patent is transferred, and it recommended that the SDO take steps to ensure that the commitment followed the patent:

> To ensure the effectiveness of the FRAND commitment, there would also need to be a requirement on all participating IPR holders who provide such a commitment to ensure that any company to which the IPR owner transfers its IPR (including the right to license that IPR) is bound by that commitment, for example through a contractual clause between buyer and seller.

European Commission, *Guidelines on the Applicability Of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-Operation Agreements* ¶ 285 (Jan. 14, 2011), *available at* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX: *52011XC0114(04):EN:NOT*.

In the past few years, one particular method of transfer has gained prominence: transfer in bankruptcy. The problems identified by the FTC and the European Commission do not derive from the nature of the transfer. Whether a patent is laundered voluntarily or in bankruptcy will not determine the transfer's effect on creating the ability to extract supra-competitive royalties. IEEE-SA believes that the law forbids a bankruptcy court to approve a patent transfer unless that transfer is made subject to the same patent commitments to which the bankrupt patent-holder had been subject. Nevertheless, there can be no assurance that a bankruptcy court will require a transferee to honor commitments to which the now-bankrupt holder was subject.[12]

The recent and highly publicized Nortel bankruptcy proceedings provide an illustration. Nortel employees had participated in IEEE standards development for many years, and Nortel had made a substantial number of patent commitments to IEEE-SA. Google Inc.'s "stalking horse" bid stated that Google would honor written patent commitments that appeared on a nonpublic listing of patent commitments. IEEE filed objections to a transfer that applied to fewer than all prior patent

[12] The bankrupt holder may have made commitments or may have acquired patents subject to a prior holder's commitments.

commitments. The successful bidder agreed to certain revisions to accommodate IEEE's concerns. Not all SDOs have the resources to participate in bankruptcy proceedings, and IEEE-SA does not have the resources to monitor for bankruptcies of the hundreds of patent holders (or their successors, whom IEEE-SA may or may not know) that are subject to patent commitments.

The FTC should explore the intersection of bankruptcy and patent transfers. For example, if one or more of the transfers in the *N-Data* matter had taken place through a bankruptcy court, should that have made any difference in the outcome? Would the same conduct still have constituted a Section 5 violation? Should the FTC make recommendations to bankruptcy courts in the same manner that its March 2011 report made recommendations to patent courts? Should the FTC identify an appropriate bankruptcy case for intervention?

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Thank you for this opportunity to provide these comments.

Very truly yours,

Steve Mills
President
IEEE Standards Association