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N O R T H W E S T E R N JOURNAL OF TECHNOLOGY AND INTELLECTUAL PROPERTY

"Going Once . . . Going Twice . . . Licensed Under the Most Reasonable and Non-Discriminatory Bidding Terms!"

David L. Newman



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"Going Once . . . Going Twice . . . Licensed Under the Most Reasonable and Non-Discriminatory Bidding Terms!"

By David L. Newman*

In March 2008, the Federal Communications Commission (FCC) closed an unprecedented license auction that was carefully tailored to maximize fees to be collected by the government and to fairly distribute a natural resource: the air. In particular, the 700MHz band being vacated in 2009 by analog TV broadcasters was auctioned off to as many as 266 companies that filed applications to participate in the bidding. The FCC developed an elaborate auction system in 1994 that provides for a Simultaneous Multiple Round auction, which involves the use of the FCC's own Auction Bidding System software and an Auction Tracking Tool spreadsheet for use by bidders. This carefully-planned and developed FCC auction system raised over \$19 billion. This FCC auction should provide inspiration for other industries in need of new streamlined systems to fairly and effectively distribute technology, such as through a license auction system discussed in this article.

I. Introduction

Standardization of technology provides assurances that the capital inputs by technology firms will be rewarded due to the widespread adoption of such standardized technology. However, there is a tension present between intellectual property ownership and the standards-setting process, which has been readily apparent in the ongoing legal battles among Apple, Google, Microsoft, Motorola Mobility, and Samsung as well as the investigations by the Department of Justice and the European Commission.² The restrictive rights inherent in intellectual property ownership sometimes run contrary to the goals of industry-wide adoption of standards. Thus, many standard development organizations (SDOs) have instituted rules that allow for the standards-setting process to move forward (and avoid patent hold-up³), while also recognizing patent ownership by its

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¹ "Auction of 700 MHz Band Licenses Closes," *Public Notice*, FC.C. DA-08-595 (rel. Mar 28, 2008), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-08-595A1.pdf (last visited Nov. 17, 2012).

²See Press Release, U.S. Dep't of Justice, Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigations of Google Inc.'s Acquisition of Motorola Mobility Holdings Inc. and the Acquisitions of Certain Patents by Apple Inc., Microsoft Corp. and Research in Motion Ltd. (Feb. 13, 2012), available at http://www.justice.gov/opa/pr/2012/February/12-at-210.html.

³ Patent holdup occurs where a standard is promulgated that includes technology covered by patent(s)

standard-setting members and other parties. This article provides a detailed description of a new license auction system that can help improve the standards-setting process, discusses the benefits of such a license auction system, and analyzes why such a system would likely avoid antitrust concerns.

A lynchpin for completing a license negotiation is the royalty rate term.⁴ In many cases, following agreement upon that single term, most of the other terms of a license can be quickly agreed upon. From that premise, I conclude that in order to develop a system where technology can be quickly licensed and distributed, there must be a fair and streamlined method of determining a reasonable royalty rate. I propose a new license auction where the framework of the licensing dispute resolution process is agreed upon ex ante (prior to adoption of a standard) and a royalty rate is set by potential licensees bidding in a carefully organized modified Dutch auction occurring ex post (after the standard or technology has been adopted). In particular, I propose the following modified Dutch auction process (to be explained in greater detail in Section IV): 1) A target royalty rate is set for one or a group of essential patents; 2) the target royalty rate valuation analysis and number of licenses to be auctioned are posted online; 3) registered anonymous bidders review the valuation analysis and submit bids to raise or lower the rate; 4) after the closing of the auction, the patentee reviews bids and sets a rate that will maximize royalties based on the rates bid; and 5) bidders are given 30 days to execute a standard license agreement. While this article focuses on such a proposed license auction system in the standards development arena, the proposed auction system provides an Alternative Licensing Resolution (ALR) process for facilitating a streamlined technology distribution process that may be implemented in other areas as well, such as settling lawsuits.

Many SDOs have developed patent policies that require patent owners to provide for licensing of essential/necessary patents on reasonable and non-discriminatory terms (RAND) in order to alleviate patent hold-up. However, the RAND requirements have been unclear and have resulted in a lack of specificity with respect to licensing terms. "RAND was not defined and provided little guidance in licensing negotiations." Although RAND-Z (royalty-free) policies address some of these concerns, RAND-Z fails to compensate a patent owner for its research and development efforts (but may allow for broad technology usage that may provide for generation of revenue for related add-on services or products). The benefits of RAND and FRAND obligations have been questioned, and in their current renditions have been determined to be disadvantageous to

(usually without a full disclosure of the licensing terms associated with such patent(s)) and following adoption of the standard the standard adopters are required to license the patent(s) at unfavorable terms.

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⁴ Arguably such a negotiation cannot occur until the potential licensee sees value in obtaining the license, e.g. that the patent is probably valid, that her accused technology is infringing and that avoiding litigation costs is a priority. New ADR processes are needed to expedite this analysis as well. For our discussion, we will use the term "royalty rate" to include all price components of a license agreement including per unit license rates, license fees, royalty rates based on net sales, gross sales, net profits, gross profits, lump sum payments, etc.

⁵ The Evolving IP Marketplace: Aligning Patent Notice and Remedies with Competition, (F.T.C.), March 7, 2011, at 22, available at http://www.ftc.gov/opa/2011/03/patentreport.shtm (last visited Nov. 10, 2012) [hereinafter FTC 2011 IP 3 Report].

⁶ Fair, Reasonable, and Non-Discriminatory (FRAND) terms. Hereinafter, "RAND" will be used throughout the article to mean "RAND" or "FRAND."

licensees and patentees.⁷ The standard-setting environment would benefit greatly from the use of a balanced dispute resolution mechanism, such as the proposed license auction, to help participants arrive at fair, reasonable, and non-discriminatory terms.

II. RAND COMMITMENTS OF STANDARDS ORGANIZATIONS

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Standards organizations have a variety of intellectual property policies. Cataloging all of the policies is beyond this article, but below is a brief sampling of the RAND guidelines and requirements from patent policies of some prominent SDOs and certifying bodies. A brief review of these RAND policies should provide some insight into the state of the solutions now provided by SDOs to deal with patent hold-up. While each of these SDOs have RAND requirements, none provide guidance or a process by which the parties may arrive at such RAND terms.

A. ANSI

The core of the American National Standards Institute (ANSI) patent policy requires a patent holder to provide an assurance that "a license will be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination."

B. ITU

The core of the International Telecommunications Union (ITU) patent policy (along with IEC and ISO) requires a commitment that "the patent holder is willing to negotiate licenses with other parties on a non-discriminatory basis on reasonable terms and conditions."

 $^{^{7}}$ John W. Schlicher, Settlement of Patent Litigation and Disputes 307 (2011).

 $^{^8}$ Am. Nat'l Standards Inst., Guidelines for Implementation of the ANSI Patent Policy \S 3.1.1 (2011), available at

http://publicaa.ansi.org/sites/apdl/Documents/Standards% 20Activities/American% 20National% 20Standard s/Procedures,% 20Guides,% 20and% 20Forms/Guidelines% 20for% 20Implementation% 20of% 20ANSI% 20P atent% 20Policy% 202011.pdf ("Statement From Patent Holder: Prior to approval of such a proposed American National Standard., the Institute shall receive from the identified party or patent holder. . . either: assurance in the form of a general disclaimer to the effect that such party does not hold and does not currently intend holding any invention the use of which would be required for compliance with the proposed American National Standard or assurance that: a) license will be made available without compensation to the applicants desiring to utilize the license for the purpose of implementing the standard; or b) a license will be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.").

⁹ INT'L TELECOMM. UNION, COMMON PATENT POLICY FOR ITU-T/ITU-R/1S0/IEC, available at http://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx ("(2). If a Recommendation | Deliverable is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise: (2.1) The patent holder is willing to negotiate licences free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions . . . (2.2) The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions . . (2.3) The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, the Recommendation | Deliverable shall not include provisions depending on the patent.").

C. JEDEC

The core of the Joint Electronic Device Engineering Council (JEDEC) requires a commitment that that "each Committee Member, as a condition of Participation, agrees to offer to license on RAND terms, to all Potential Licensees." ¹⁰

D. VITA

The core of the VMEbus International Trade Association (VITA) patent policy requires a FRAND commitment and disclosure of the maximum royalty rate.¹¹

E. IEEE

The Institute of Electrical Electronics Engineers, Inc. (IEEE) patent policy requires an assurance 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. At its sole option, the Submitter may provide with its assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms." ¹²

III. RAND TERMS DO NOT GO FAR ENOUGH TO ENSURE FAIRNESS

Merely requiring a licensor to agree to provide "reasonable and non-discriminatory" terms, as delineated by the policies above, does not provide an appropriate level of comfort to standards adopters (although the VITA practice of attaching a draft license to the letter of assurance alleviates much of the vagueness). The

¹⁰ JOINT ELECTRON DEVICE ENG'G COUNCIL, JEDEC PATENT POLICY § 8.2.4 (2003) available at http://www.jedec.org/sites/default/files/JEDEC%20Patent%20Policy_050310.pdf ("RAND Patent Licensing Commitment. ...[E]ach Committee Member, as a condition of Participation, agrees to offer to license on RAND terms, to all Potential Licensees, such Committee Member's Essential Patent Claims for the use, sale, offer for sale or other disposition of a portion of a product in order to be compliant with the required portions a final approved JEDEC Standard issued during the period of membership in that committee.").

¹¹ VSO POLICIES AND PROCEDURES Revision 2.6 § 10.3.2 (2009), available at http://www.vita.com/home/VSO/vso-pp-r2d6.pdf ("Each WG Member must declare the maximum royalty rate for all patent claims that the VITA Member Company he or she represents (or its Affiliates) owns or controls and that may become essential to implement the Draft VSO Specification. WG Members are encouraged to attach to the Declaration a draft licensing agreement for all patent claims essential to implement the Draft VSO specification...License terms must in all other respects be fair, reasonable, and non-discriminatory.").

¹² Inst. of Elec. & Elecs. Eng'rs, Inc., IEEE-SA Standards Board Bylaws § 6.2 (2012), available at http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf ("If the IEEE receives notice that a [Proposed] IEEE Standard may require the use of a potential Essential Patent Claim, the IEEE shall request licensing assurance . . . from the patent holder or patent applicant. [License assurance includes:] . . . A statement 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. At its sole option, the Submitter may provide with its assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms.").

phrase "fair, reasonable, and non-discriminatory" is "inherently ambiguous." What a licensee considers "reasonable" is often times not what a licensor would consider "reasonable"." In view of the level of litigation in the standards area, a doctoral dissertation concluded that "the lack of definition of (F)RAND's and the ambivalent policies of most SSO's do not prevent opportunistic behavior [i.e. patent ambush]". No SDO, "court or enforcement agency has offered a workable and generally accepted definition of fair and reasonable licensing terms." A process that introduces the ability for licensees to ratify the license rate, or even help set such a rate, is needed in order to truly arrive at a "reasonable" royalty rate. A license auction ensures a "reasonable" result because the licensee will only be agreeable, and will only enter a bid, when the rate available by auction is deemed "reasonable" to the licensee. ¹⁶

IV. PROPOSED AUCTION

A. A License Auction Would Level the Playing Field

A system that recognizes that intellectual property rights (IPRs) exist and moves immediately to a process to determine a reasonable royalty rate or license fee would encourage more rapid distribution of technology leading to a more efficient licensing market. The use of an auction as a price exploration method is appropriate for IPRs since auctions make intrinsic sense when different opinions about the value of an item exist. Additionally, using an auction system to set a reasonable royalty rate could help provide assurances to executives that the playing field is being leveled and shareholders are getting a fair deal. Also management would be assured that technology is being licensed in a more efficient market system where multiple parties and market forces set rates in a fair way.

B. Proposed Auction Steps

¶13 The auction process I propose for setting a reasonable royalty is a modified Dutch auction that would proceed as follows:

1) The patent owner or an independent valuation expert¹⁸ analyzes the relevant market and technology and sets a target price or a reasonable royalty rate. For

¹³ LARRY GOLDSTEIN & BRIAN KEARSEY, TECHNOLOGY PATENT LICENSING: AN INTERNATIONAL REFERENCE ON 21ST CENTURY PATENT LICENSING, PATENT POOLS AND PATENT PLATFORMS 330 (2004) [hereinafter Goldstein].

¹⁴ CLAUDIA TAPIA, INDUSTRIAL PROPERTY RIGHTS - TECHNICAL STANDARDS AND LICENSING PRACTICES (FRAND) IN THE TELECOMMUNICATIONS INDUSTRY 137 (2010) [hereinafter Tapia].

¹⁵ Richard J. Gilbert, *Deal or No Deal? License Negotiations in Standard-Setting Organizations*, 77 ANTITRUST L.J. 855, 859 (2011)[hereinafter Gilbert].

¹⁶ F.T.C. 2011 IP 3 Report, supra note 5, at 22-23. Such an auction can occur ex ante or ex post depending on the standards-setting. But even ex post auctions can use valuation data based on "...the ex ante value of the patented technology at the time the standard is chosen."

¹⁷ James Surowiecki, *Going, Going, Gone: Who Killed the Internet Auction*, WIRED (May, 17, 2011, 9:48 PM), http://www.wired.com/magazine/2011/05/ff_endofauction/.

¹⁸ The Business Development Academy has established a certification process for patent valuation analysts from which potential valuation experts may be selected for such a process; Business Development Academy, http://www.bdacademy.com. The Licensing Executive Society (LES) provides a certification

example, if the expert determines that a 5% royalty is fair, the target price can be set at 5. 19

- 2) The target rate valuation analysis and information about the technology and accompanying patents are published and posted on the pertinent website, along with the number of licenses to be auctioned, the standard terms of the license agreement, ²⁰ including the registration fee to be paid to participate in the auction, and a date for the auction. ²¹ For example, 100 licenses may be auctioned on July 1. ²²
- 3) On July 1, bidders who have registered and paid a registration fee may anonymously bid for the number of licenses desired and the desired purchase price. For example, the bid may be for 1 license at 4.5 (meaning that such a winning bidder would pay a 4.5% royalty rate upon execution of one license). In some circumstances, the licensor may set a reserve price. In other circumstances, speculators may be allowed to bid in order to obtain licenses to establish a pool of licenses to be transferred after the auction closes to late standards adopters. ²⁴

process that may provide a pool of patent experts to confirm the validity of a patent for such a license auction. The experts may be sworn to act as a neutral - collecting data from all parties and making a determination in a neutral fashion via a process for Alternative Licensing Resolution (ALR). Such an ALR and auction process may be readily applicable outside the standards environment as well and may include a step that provides for prior art searching to confirm the validity of the patent to be auctioned.

¹⁹ Other pricing mechanisms for unit rate licenses can be used. For example, if the licensor wishes to auction licenses to use a wireless transmission technology she could license off bundles of 1 million minutes at \$50 each bundle. The rate cannot exceed any maximum rate irrevocably offered by a patentee pursuant to an ex ante disclosure policy of an SDO, such as VITA commitment outlined in Section II D. *supra* note 11.

²⁰ While the terms of each license agreement should be uniform for each individual auction, different auctions for different patents in different industries will have underlying license agreement terms that vary. Furthermore, it may be necessary to have a first auction for a patent for use of the technology in a first market segment or product category (at a first royalty rate or unit rate) and a second auction for the same patent for use of the technology in a second market segment or product category (at a second royalty rate or unit rate).

²¹ Gilbert, *supra* note 15, at 876 (posting licensing terms can benefit the patentee as well as avoid discriminatory outcomes).

²² In order to avoid discrimination, the licensor sometimes may offer an additional group(s) of licenses in supplemental auction(s) held at least annually. If third parties request licenses after close of all auctions, SDO rules might require the patentee to grant substantially the same terms as offered via the initial auction(s); with some penalty allowed—such as a higher upfront license fee.

²³ In some cases, the auction may follow a Vickrey format where subsequent bids must go higher or may follow a best offer format. The specific format of each auction may vary based on industry and number of potential bidders. Nevertheless, when using a Dutch auction format, follow-up bidding or additional bidding rounds should be allowed, where bidders are provided a spreadsheet of the interim anonymous bidding results so that bidders may raise their bids.

²⁴ In order to encourage standards participants to resolve licensing disputes without resorting to litigation an SDO could require a patentee to use the proposed license auction system at least once so that all standards adopters that desire a license have at least one opportunity to have "good faith" negations in order to obtain a license under terms set according to the proposed auction process. The SDO rules could release the patentee from a requirement to provide a uniform royalty rate following such "good faith" negotiations, so that all remedies are available to a patentee should litigation under the essential patents ensue against a standards adopter who had at least one opportunity to obtain the license terms resulting from the initial

4) After the close of the auction, the licensor will review the submitted bids (while the identity of the bidders remains anonymous) and determine where to set a clearing price (similar to a Second Item Auction). ²⁵ For example, if a total of ninety licenses were bid at 4.5, four licenses at 5.0 and six licenses at 5.5 the licensor may select 4.5 as the clearing price, so that all licensees would obtain a uniform price license at a 4.5% royalty rate. ²⁶ In this example, the bids at 5 and 5.5 would also obtain licenses at the 4.5% rate. ²⁷

- 5) Following the auction, a spreadsheet of the bidding results is posted online, each winning bidder is advised of the clearing price, and the winning bidders are given 30 days to execute a standard license agreement (prepared by the independent expert) at the clearing price/royalty rate. Otherwise, the bidder's substantial registration fee will be forfeited.
- For the example given above, all one hundred of the offered licenses will be executed at a royalty rate of 4.5% and a fair royalty rate will have been set according to market forces. The above auction system has parallels to auction systems currently being held by WR Hambrecht & Co. called Open IPO and a similar auction system used by the United States Department of the Treasury, through the Federal Reserve Bank of New York (FRBNY), which raises funds for the U.S. Government using a Dutch auction via the Trading Room Automated Processing System (TRAPS). Also, the Intellectual Property Exchange International (IPXI) plans to use a Dutch auction procedure to price the first tranche of Unit License Right (ULR) contracts. I believe the auction system described above would create a successful marketplace by: allowing information to flow smoothly, protecting property rights, requiring people to live up to their promises,

auction. Thus, a patentee who decides to litigate following an auction, can expect damages that at least offset the high cost of patent litigation (and not be concerned about FTC action because third parties could not assert coercion by the patentee in the face of an SDO rule providing notice that the patentee may raise rates). *In re* Negotiated Data Solutions LLC, (F.T.C.), 0510094, (2008).

Standards adopters who pass-up the opportunity to bid or participate in the auction would be aware that the patentee may later pursue infringers and demand higher rates and damages without running afoul of its RAND commitments.

²⁵ In cases where the licensor's minimum rate has not been met with the current bidding, the licensor may institute some alternative price discovery mechanism for the entire group of bidders or return to one-by-one closed-door negotiations with each interested party. In such a case, each of the bidders' identities from the failed auction will continue to be maintained anonymously from the licensor so that the licensor cannot gain any tactical advantage in later negotiations.

²⁶ Others have suggested that the auction losers should pay a higher royalty rate than the auction winners. *See* THOMAS GIEBE & ELMAR WOLFSTATTER, GOVERNANCE EFFICIENCY ECON. SYS., *LICENSE AUCTIONS WITH ROYALTY CONTRACTS FOR (WINNERS AND) LOSERS*, 9-10 (Rep. 199, 2007), *available at* http://www.sfbtr15.de/uploads/media/199.pdf (Patentee should be allowed the ability to reject low bids and not be required to set a uniform rate, so that bidders are motivated to provide higher bids.).

²⁷ In the case of a patent pool using such an auction process, the licensing manager or group of patent owners could decide which rate to accept.

²⁸ Careful consideration should be given to whether a licensee is given a right to transfer the license and under what terms the transfer may be made. Providing a right to transfer would invite speculators to participate in the auction, which may benefit the licensor by adding upward pressure to the bidding. But in order to insure that such a right to transfer the license does not call into question whether the final terms are RAND when a speculator assigns the license to a standards adopter the original license agreement should restrict the speculator from charging an exorbitant transfer fee, where the license is one of the few remaining licenses available to standards participants at that time.

curtailing side effects on third parties, and fostering competition.²⁹ Due to the speed and the level playing field established by the proposed auction process, it is likely that third party, non-standards participants may also choose to use the proposed auction process to license IPRs, even though no *ex ante* commitment exists for such third parties.³⁰

C. Rate Will Be Reasonable to Licensees

Charging the same royalty rate to all licenses avoids discrimination.³¹ However, even in an auction process where the bidders obtain varying license rates based on each bid, such a process is much more likely to result in fair and reasonable terms than a one-on-one *ex post* bilateral negotiation process. In any case, when a licensee has submitted a bid to set its own royalty rate and obtains a rate influenced by market forces, such a rate can be presumed to be fair and reasonable from the licensee's point of view.³² In addition, by setting the rate term of the license on a royalty basis (as opposed to a lump sum or unit rate), much of the potential unfairness to the licensee is alleviated. Because the licensee only pays for what she uses, the licensee does not need to predict her usage in order to estimate the value of the license. For example, some recent Covenant Not to Sue (CNS) license auctions require the licensee to make a bid to set a lump sum dollar value for the entire length of the CNS.³³ Predicting a lump sum value is difficult and requires the bidder to consider the remaining life of the patent. These difficult valuation issues are not present in the proposed license auction based on a royalty rate.

D. Rate Will Be Reasonable to Licensor

Since the licensor can analyze each of the bids and award licenses based on any one of the submitted bids at the end of the proposed auction, the licensor will be satisfied with a fair rate. The *ex post* timing of the auction importantly allows the licensor to more easily gauge market penetration and the scope of the use of the standardized technology at the time of auction and when the terms of the standard license agreement are drafted. Licensees likewise will benefit from posting bids *ex post* since they will have a clearer view of the value of the patented technology at the beginning of commercialization, while also benefitting from knowing a fair and streamlined licensing/ADR process had been put in place *ex ante*. Finally, the combination of providing auction procedures that i) provide that bidders/licensees cannot jointly set a rate, ii) provide some level of competition

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 $^{^{29}}$ See John McMillan, Reinventing the Bazaar, A Natural History of The Markets, ix-x (2002)

³⁰ Gilbert, *supra* note 15, at 861 (gauging the exact outcomes of the proposed license auction using economic modeling, such as a Nash bargaining solution may be difficult due to complicating factors including uncertain outcomes, asymmetric information about the value of technologies, differential bargaining power and skill.).

Wuxi Multimedia, Ltd. v. Koninklijke Philips Electronics, N.V., 04CV1136 DMS BLM, 2006 WL 6667002 (S.D. Cal. Jan. 5, 2006) *aff'd sub nom*, Wuxi Multimedia Ltd. v. Koninklijke Philips Electronics, N.A., 280 F. App'x 968 (Fed. Cir. 2008).

An auction that includes processes and guidelines that insure fairness may influence a bidder's tendency to only bid as low as possible or not bid at all. *See* RICHARD H. THALER, THE WINNER'S CURSE 34 (1994) [hereinafter THALER].

³³ Realtime Data Offers Covenant Not to Sue through ICAP Patent Brokerage, ICAP PATENT BROKERAGE (Aug. 24, 2011) http://icappatentbrokerage.com/news/realtime-data-offers-covenant-not-sue-through-icap-patent-brokerage (last visited Nov. 26, 2012).

between bidders, and iii) set the timing of an agreement among the standards participants to establish the auction parameters ex ante (usually before the patentee has sunk its cost of developing the standardized technology), will help to avoid reverse holdup.³⁴

V. DOJ AND FTC VIEW OF PROPOSED AUCTION FEATURES

Although the Department of Justice (DOJ) or the Federal Trade Commission (FTC) has not reviewed the proposed license auction process, some of its features have been reviewed favorably in other contexts by the DOJ.

A. DOJ Has Endorsed Transparency in Standards Setting

Unfettered discussions amongst standards participants relating to licensing terms ¶18 could lead to antitrust concerns. However, the DOJ has indicated that certain limited disclosures regarding licensing terms can be appropriate and may foster competition. In a business review letter dated October 30, 2006, the DOJ's Antitrust Department reviewed the VITA rule regarding the disclosure of the most restrictive patent terms to be offered by patent holders during the standard-setting process. ³⁵ The DOJ concluded, "VITA's proposed patent policy is an attempt to preserve competition and thereby to avoid unreasonable patent licensing terms that might threaten the success of future standards and to avoid disputes over licensing terms that can delay adoption and implementation after standards are set."36 The DOJ stated, "adopting this policy is a sensible effort by VITA to address a problem that is created by the standard setting process itself. Implementation of the proposed policy should preserve, not restrict competition among patent holders."³⁷ The DOJ further commented, "[t]he proposed policy should not permit licensees to depress the price of licenses for patented technologies through joint action because it prohibits any joint negotiation or discussion of licensing terms among the working group members or with third parties at all VSO and working group meetings."³⁸ The VITA policy required the patent holders to declare ex ante, the maximum royalty rate and most restrictive non-price licensing term that will be required to implement an eventual VITA standard.

In a similar fashion, the DOJ determined that the Patent Policy proposed by the Institute of Electrical Electronics Engineers, Inc. (IEEE) and its standards association (IEEE-SA) would not invite antitrust enforcement action.³⁹ As cited above, the IEEE Patent Policy requires a Letter of Assurance (LOA) including RAND commitments and allows a patent holder to augment the LOA with a sample licensing agreement, a not-toexceed license fee or other material terms. By allowing SDOs and their members to choose between technologies based on technical specifications and also the licensing

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³⁴ See WorkshopTranscript, Joseph Farrell, Tools to Prevent Patent "Hold-Up" F.T.C at 245 (June 21, 2011), available at http://www.ftc.gov/opp/workshops/standards/transcript.pdf.

³⁵ See Letter from Thomas Barnett, Asst. Att'y Gen., Dep't of Justice, to Robert Skitol, Counsel, VITA (October 30, 2006), available at http://www.justice.gov/atr/public/busreview/219380.htm.

³⁶ *Id.* at 7. ³⁷ *Id.*

³⁹ Letter from Thomas Barnett, Asst. Att'y Gen., Dep't of Justice, to Michael Lindsay, Counsel, IEEE (April 30, 2007), available at http://www.justice.gov/atr/public/busreview/222978.htm.

terms, the DOJ opened the door for *ex ante* discussions when they are limited to specific terms. A recent study funded by the National Institute of Standards and Technology (NIST) determined that in certain circumstances an *ex ante* disclosure policy can improve "the overall openness and transparency of the standards-development process."

B. The Proposed Auction Provides Transparency

As a result of the auction process, transparency is provided with respect to standard license terms, royalty rate, and the process by which such terms are reached. Such transparency should reduce the risk of antitrust claims. The auction and pre-auction process proposed here would require patent owners to agree *ex ante* on an auction process by which a reasonable royalty will be ascertained. Similar to the VITA policy, a declaration could also be required *ex ante* regarding the most restrictive non-price term that will be required of a licensee and other terms of the license. Further, our proposed process would involve carefully controlled *ex post* activities to provide the disclosure of a target royalty rate by the patent owner with assistance from a valuation expert. Thereafter, the licensees and standards participants would be able to act voluntarily and unilaterally via an auction to accept or reject such a target rate by bidding for an alternate rate, sometimes higher and other times lower, depending on the desirability of such licenses.

The proposed auction should provide for anonymous bidding, so that the patent owner will not know the identity of the bidder. This way, it would be nearly impossible for the patent owner to discriminate against certain parties and prevent them from obtaining a license. Also, the identity of losing bidders should not be disclosed to the patentee. Such disclosure undesirably results in labeling a losing bidder as a potential infringer. Furthermore, because bidder identities will be anonymous, no collusion or price setting will be possible among bidders. Such an auction could provide an ADR process that is made available to all licensees and patentees according to SDO rules. The DOJ has approved at least one ADR process established by a standards group. 43

C. Prohibited Ex Ante Discussions

An *ex ante* discussion is a discussion that occurs by standards members before the adoption of a standard. Discussions that may lead to collusion on pricing terms are considered *per se* an antitrust violation and could include situations where manufacturers use the cover of multilateral licensing negotiations to reach naked agreements on the

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⁴⁰ Jorge Contreras et al., *An Empirical Study of the Effects of Ex Ante Licensing Disclosure Policies on the Development of Voluntary Technical Standards*, NATIONAL INST. OF STANDARDS AND TECH., 1 (GCR 11-934, June 27, 2011).

⁴¹ George S. Cary et.al., *The Case For Antitrust Law to Police the Patent Holdup Problem In Standard Setting*, 77 ANTITRUST L. J. 913, 933 (2011).
⁴² See, Daniel G. Swanson & William J. Baumol, *Reasonable and NonDiscriminatory (RAND)*

⁴² See, Daniel G. Swanson & William J. Baumol, *Reasonable and NonDiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power, 73* ANTITRUST L. J. 1, 15 (2005) (discussing ex ante auction model where patentees submit sealed bid (license) terms to be selected by an SDO) [hereinafter Swanson & Baumol].

⁴³ The arbitration process proposed by the VITA patent policy was approved by the DOJ. Letter, *supra* note 34.

prices of the products they sell downstream.⁴⁴ In addition, such wide-ranging joint discussions among standards participants that result in exclusion of some participants' products may also increase litigation risks even where bona fide *per se* antitrust claims do not exist.⁴⁵

D. Permissible Ex Ante Discussions

The realm of permissible *ex ante* discussions was extended in September 2005 when FTC Chairman Deborah Majoras, delivered a speech that commented favorably on SDO rules allowing communications about royalty rates during the standards development process. Chairman Majoras explained that concerns regarding a *per se* ban on price fixing may have been too restrictive and announcements of pricing intentions or royalty discussions may provide pro-competitive benefits. She stated, [a] patent holder's voluntary and unilateral disclosure of its maximum royalty rate. . . is highly unlikely to require antitrust scrutiny because the unilateral disclosure of a price is not a collective act. And on its own, it is not an exclusionary practice. Chairman Majoras continued, joint ex ante royalty discussions that are reasonably necessary to avoid hold-up do not warrant per se condemnation. The FTC has recently been joined by the European Union in its support of *ex ante* disclosures. Standard-setting agreements providing for ex ante disclosures of most restrictive licensing terms, will not, in principle, restrict competition within the meaning of Article 101 (1).

It has been stated that there would be no viable *per se* claim against *ex ante* consideration of license terms in view of the 2004 Standards Development Organization Advancement Act which "encourages discussion among intellectual property owners and other interested standards participants regarding the terms under which relevant intellectual property rights would be made available for use in conjunction with the standard or proposed standard." I propose further "advancement" by SDOs in order to attain truly RAND licensing by allowing for adoption of an auction mechanism, *ex ante*, that will allow for setting fair, reasonable, and non-discriminatory licensing terms, *ex post*.

While many objections to *ex ante* discussions have been voiced during SDO policy deliberations, many of these objections are concerned with some potential negative side-effects on the standards process rather than pure antitrust concerns. For each of these objections there are equally supportable counterarguments that demonstrate that *ex ante*

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⁴⁴ U.S. v. Socony-Vacuum Oil Co., 310 U.S. 150, 223-24 (1940).

⁴⁵ See Addamax Corp. v. Open Software Found., Inc., 888 F.Supp. 274, 281-82 (D. Mass 1995), Aff'd 152 F.3d 48, 52 (1st Cir. 1998).

⁴⁶ Deborah P. Majoras, Chairman, Fed. Trade Comm'n, *Standardization and the Law: Developing the Gold Mean for Global Trade*; Stanford University (Sept. 23, 2005), *available at* http://www.ftc.gov/speeches/majoras/050923stanford.pdf.

⁴⁷ *Id*. at 7.

⁴⁸ DG Enterprise and Industry Workshop, July 15, 2011, Digital Talking Points re. Ex Ante Disclosure of Licensing Conditions quoting: European Comm'n, *Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements*, 72 (Nov. 1, 2010), *available at.* http://ec.europa.eu/enterprise/sectors/ict/files/ict-policies/exante-disclosure/digital-europe_en.pdf (last visited Nov. 26, 2012).

⁴⁹ Robert A. Skitol, *Concerted Buying Power: Its Potential for Addressing the Patent Hold-up Problem in Standard Setting*, 72 ANTITRUST L. J. 727, 738, (2004-2005), *citing* 150 Cong. Rec. H3656-H3657 (June 2, 2004).

discussions would benefit an SDO.⁵⁰ Nevertheless, the auction and pre-auction process proposed here attempts to alleviate some of those objections discussed in more detail below.

E. Are Auction Rules Permissible Ex Ante Discussions?

The auction proposal of this Perspective is not the first time such an idea has been addressed.⁵¹ The use of auctions was previously proposed by the President of the JEDEC, which serves as the semiconductor and solid-state engineering standardization body of the Electronic Industries Alliance.⁵² The JEDEC President John Kelly wrote, "[i]f more than one patent holder is offering its technology for inclusion in a standard, the SDO shall conduct an auction in which each such patent holder is provided the opportunity to publicly state its royalty demands and to change those demands after learning of the other patent holder's royalty demands."⁵³ Thus, the JEDEC has endorsed license auctions as permissible *ex ante* discussions.

The license auction system as proposed herein would require standards participants to set the framework and rules for the auction prior to adoption of the standard. The system would also likely be a permissible *ex ante* discussion as long as such framework discussions comply with the rule of reason, and the establishment of the rules of the auction does not permit collusion between the patent owner and bidders to set an unfair price for consumers. Many concerns regarding the collusion that could occur among standards participants engaging in *ex ante* discussions have been alleviated by the present proposal's requirement that only the framework of the auction be agreed upon *ex ante*, leaving the actual bidding and "price-setting" component for a carefully controlled process following the adoption of the standard. The discussions *ex ante* should be similar to the discussions regarding selection of an alternative dispute resolution (ADR) clause in a contract. (e.g. "The parties agree that any disputes involving this agreement shall be resolved according the commercial arbitration rules of the AAA.") Such narrow discussions between standards participants regarding the auction rules to be adopted are unlikely to invite FTC scrutiny.⁵⁴

F. Are Ex Post License Discussions Permissible?

Although few opinions have been provided regarding ex post license discussions, the same principles discussed above regarding ex ante activity should apply to ex post

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⁵⁰ See, Tapia, supra note 14, at 176 (exhibiting a chart providing "Arguments Against Ex Ante" and "Counter-Arguments.").

⁵¹ See Swanson & Baumol, supra note 41, at 10-21 (proposing an ex ante auction).

 $^{^{52}}$ See U.S. DEPT. OF JUSTICE & FED. TRADE COMM'N, Antitrust Enforcement & IP Rights, at 49 (April 2007) available at

http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf. [hereinafter *FTC 2007 IP 2 Report*].

⁵³ John J. Kelly & Daniel I. Prywes, A Safety Zone for the Ex Ante Communication of Licensing Terms at Standard Setting Organizations, ANTITRUST SOURCE, Mar. 2006, at 9.

⁵⁴ FTC 2007 IP 2 Report, supra note 51, at 54 ("[P]er se condemnation is not warranted for joint SDO activities that mitigate, hold up and that take place before deciding which technology to include in a standard.") (internal citation omitted).

activity.⁵⁵ Standards participants must use care to avoid any activity during licensing negotiations that may approach price fixing or other anti-competitive results. By implementing a third party-facilitated auction process as proposed, standards participants can reduce or eliminate direct communications amongst themselves regarding licensing negotiations. Much of the pre-auction, auction, and post-auction activity should be managed by an intermediary third party that should control communication between the patentee and licensees. Further, the third party intermediary may provide a structured process that maintains anonymity between participants and provides for a procompetitive environment that can result in lower prices for consumers.

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The intermediary should install safeguards to be sure that inappropriate, anticompetitive communication cannot occur between standards participants. The American Antitrust Institute has stated, "an important element of the rule of reason analysis of any such joint discussion/negotiation should be in consideration of process safeguards reasonably designed to minimize the risks of any such anticompetitive effects." ⁵⁶ By implementing such a protected auction process *ex post*, SDOs can ensure the auction process is a pro-competitive *ex ante* and *ex post* activity. The DOJ and FTC have stated that *ex ante* (and *ex post*) negotiations of licensing terms have "strong potential for procompetitive benefits." ⁵⁷

VI. BENEFITS OF THE PROPOSED LICENSE AUCTION

A. Market Forces Harnessed to Set License Terms is Pro-Competitive

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The purpose of the proposed auction process is to harness market forces in order to establish license terms in a pro-competitive environment. eBay's auctions are an example of a dynamic pricing marketplace enhanced by online capabilities that provide a pro-competitive environment. Sellers no longer have to worry about proper pricing because an auction allows the seller to "get the right price every time . . . because the price [is] determined strictly by demand." If a marketplace for IPRs achieves even a fraction of the success of eBay's auction system, technology distribution in the US would be improved significantly. License auctions provide superior results compared to more traditional licensing strategies. As Judge Giles Rich stated, "[a patent] has value directly related to the value of [the patentee's] invention, as determined by the marketplace." The present auction proposal will organize parties so that a procompetitive marketplace can be established. The Chief Patent Counsel of Apple Computer has stated, "[t]he emergence of an efficient marketplace [would enable firms]

⁵⁵ But see Sony Electronics, Inc. v. Soundview Tech. Inc., 157 F.Supp.2d 180, 182-90 (D. Conn. 2001) (discussing that rule of reason analyses applied with respect to setting a 5ϕ standard license rate ex post had an anti-competitive effect).

⁵⁶ Letter from Albert Foer, President, Am. Antitrust Inst., to Fed. Trade Comm'n, 10 (June 14, 2011), *available at* http://www.ftc.gov/os/comments/patentstandardsworkshop/00013-60527.pdf (regarding FTC Request for Comments and Announcement of Workshop on Standard-Setting Issues, 76 Fed. Reg. 28036 (May 13, 2011)).

⁵⁷ FTC 2007 IP 2 Report, supra note 51, at 33-56.

⁵⁸ James Surowicki, *Going, Gone: Who Killed the Internet Auction*, WIRED, May 17, 2011, at 164.

⁵⁹ See Morton I. Kamien et al., Optimal Licensing of Cost Reducing Innovation, 21 J. MATHEMATICAL ECON. 483, 485 (1992).

⁶⁰ In re Kirk, 376 F. 2d 936, 964 (C.P.A. 1967).

to align [their IP] portfolio with business needs."⁶¹ The proposed license auction would benefit both patentees and licensees because the transaction costs would be greatly reduced due to the setting of terms for multiple parties simultaneously via the auction process and use of a standard license agreement.

B. Transparency of Auctions Benefits All Stakeholders

An auction process that provides some transparency would benefit all stakeholders. First, establishing auction rules that are publicly known, and can be relied on by standards participants, will bring a level of comfort and predictability to the licensing process. For example, SDOs could loosen ex ante disclosure requirements and impose an ex ante commitment by all standards participants to abide by specified ex post auction rules with respect to all essential IPRs (disclosed ex ante or ex post). Such an SDO patent policy would alleviate the heavy ex ante disclosure burdens on large companies because i) standards adopters can be assured a license will be made available through the auction process, and ii) patentees can be assured that they will not be penalized for failing to disclose all essential patents *ex ante*. ⁶² Second, the intermediary may require disclosure by the licensor with respect to all essential patents of the following: i) any prior art it has become aware of since issuance of the patents; ii) previous license agreements; iii) previous ownership; iv) other essential IPRs licensed by the patentee or that the patentee has direct knowledge; and v) encumbrances to the patents and exclusive commitments to license. 63 Third, an auction that provides real-time posting when others are placing bids (and in some circumstances the value of the bids being posted) provides for a transparent marketplace where true value of an IPR can be established (even while the identity of the bidders remains anonymous). Finally, allowing auction participants to view spreadsheets summarizing the bidding at the close of each auction round/tranche can allow parties to assess their positions and carefully determine the level at which future bids should be placed.⁶⁴ Collusion among bidders who have received competitor's bidding information can be prevented by maintaining the anonymity of each bidder's identity on the spreadsheet. This proposal only suggests disclosure of licensing terms and rates to the auction participants (who have executed non-disclosure agreements) and within each SDO. SDOs may decide whether further public disclosure would be more beneficial.

⁶¹ FTC 2011 Report, supra note 5 at 68, fn 95, (quoting Richard J. Lutton, Chief Patent Counsel, Apple Computer, Inc.).

⁶² ABA COMM. ON TECH. STANDARDIZATION, STANDARDS DEVELOPMENT PATENT POLICY MANUAL 44 (Jorge L. Contreras, ed., 2007).

⁶³ In situations where encumbrances are disclosed, the intermediary may abandon the auction process. In situations where the licensor or its predecessors entered into previous commitments, the intermediary may determine that a reasonable and non-discriminatory process would require the licensor to abide by such previous commitments. (e.g. RAND commitments to SDOs). *See In re* Negotiated Data Solutions LLC, (F.T.C.), 0510094, (2008). (discussing Negotiated Data Solutions refusal to meet commitment by previous owner to license patents covering Ethernet standard for PCs.).

⁶⁴ Gilbert, *supra* note 15, at 877 (announcing publicly: royalty schedules and other licensing terms limit *ex post* opportunism and supports non-discrimination.).

C. Intermediary Reduces Antitrust Risks

I propose an online auctioning method that provides for an intermediary body⁶⁵ to engage independent experts⁶⁶ to provide opinions regarding potential reasonable and non-discriminatory licensing terms.⁶⁷ The auctioning process would be structured and managed by the intermediary to avoid collusion or even the appearance of collusion between the parties. Communication between the licensor and licensees/bidders would only be via the intermediary and limited to i) the time period prior to the auction, in order to unilaterally provide comments with respect to a predetermined set of terms of the standard license agreement, and ii) the time period during the auction, to submit bids in order to set the license rate.

Communications regarding the terms of the standard license agreement should be carefully coordinated because such activity may be viewed as a restraint on trade or result in adverse effects on innovation. License clauses such as non-assertion, defensive termination, grant backs, and reach-through royalty agreements have received the attention of the DOJ and should be dealt with by experienced practitioners. The process

being proposed would require the intermediary body to engage at least one experienced practitioner (attorney) to act as a neutral expert to draft a standard license agreement that suits the particular industry and technology involving the IPRs for a particular auction. The intermediary should post a draft of the standard license and comments may be provided by potential bidders only via the intermediary. The neutral expert should consider the bidders' comments and, where appropriate, revise the license agreement with pro-competitive intent, non-discrimination, and fairness in mind. Requests for reconsideration and an appeal process should be provided too. Such a process would likely alleviate concerns the DOJ may have regarding joint negotiations of sensitive terms by standards participants. Some participants may fail to find the terms of the standard license agreement or the auction appropriate. Such parties may still approach the patentee independently to reach agreeable terms in a bilateral negotiation including cross-licensing. Thus, the status quo is maintained for companies with large patent portfolios, who may continue to cross-license, and the door is open for small and medium-sized

The bidding process should be undertaken anonymously, and the intermediary body should ensure that licensor and other licensees do not know the identity of the licensee

businesses to obtain fair rates via the proposed auction process.

⁶⁵ The intermediary body may be an SDO, arbitral group, arm of an accounting/consulting firm or not-for-profit organization. The intermediary may also manage the auction or may outsource the auction activity.

⁶⁶ "A credible evaluation methodology, executed by credible experts, is the basis for meaningful licensing." Goldstein, *supra* note 13, at 316. Where parties are able to foot the bill, a panel of experts may be selected to handle each issue: 1 expert nominated by the patentee; 1 expert nominated by the bidders and 1 expert nominated by the intermediary.

⁶⁷ In addition, a patent attorney neutral can be engaged to confirm the validity of the patents being auctioned. "A licensing scheme premised on invalid or expired intellectual property rights will not withstand antitrust scrutiny." See Letter from Joel Klein, Asst. Att'y Gen., Dep't of Justice, to Gerrard Beeney, Counsel, MPEG Patent Pool (June 26, 1997), available at http://www.justice.gov/atr/public/busreview/215742.htm.

¹68 FTC 2007 IP 2 Report, supra note 51, at 92.

⁶⁹ Thomas O. Barnett, *Recent Developments In Antitrust And Intellectual Property Law*, (May 16, 2007), at 4, *available at* http://www.justice.gov/atr/public/speeches/223390.htm.

⁷⁰ FTC 2007 IP 2 Report, supra note 51, at 54-56.

making the bid during the auction.⁷¹ Also, upon registration for the auction, the bidders should be required to agree not to disclose their identity to the other bidders or the licensor and each bidder should agree not to place bids in a way that will signal bidding patterns to the other licensees or licensor. Implementing these procedures and using an intermediary body should avoid potential price-setting activity between specific groups, whether intentional or not. Such isolation of each bidder—ensured by the Sherman Act⁷²—provides a blind bidding process where bidders may fear that they could lose out to other bidders and will not automatically submit a first bid at a .0001% royalty rate.

D. Non-Discriminatory Process

Open participation is the main feature of the proposed auction process that will ensure non-discriminatory conduct by the patentee. The auction should be open to any standards participant so that certain vertical or horizontal restraints are eliminated. Placing of bids should occur on a first-come, first-served basis so that no subjective measure can be introduced to restrict or prioritize a particular bid. By allowing an opportunity for all standards participants to place a bid to obtain a license, the process should be considered non-discriminatory, even if the bid ends up being a losing bid. By offering identical terms to any standards participant in an open manner, the non-discrimination prong of RAND will have been met. "Non-discrimination does not require that every licensee pay[s] the same royalty, but rather that every licensee can choose from the same royalty schedule."

Under the proposed auction process, an initial auction having a limited number of licenses made available is followed about six months later with a supplemental auction. The end result of the auction is non-discriminatory because i) the potential licensees are at least initially offered uniform license terms (except for the royalty rate that may or may not be uniform), ii) all potential licensees are provided an opportunity to place a (potentially winning) bid during the initial auction, and iii) although the rate is not held uniform for a supplemental auction(s), the patentee's market power is not enhanced by holding such a supplemental auction for losing bidders (who are anonymous to the patentee) where rates may be higher (or lower) than the initial auction. Because the patentee does not know the identity of the bidders, she cannot have an intent to exclude a particular participant. Thus, it would be difficult to prove an antitrust violation.

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⁷¹ Antitrust concerns should take precedent over consideration for allowing discussion amongst bidders in order to reduce the ill effects from the potential of the Winner's Curse. *See* THALER, *supra* note 32, at 62

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&</sup>lt;sup>72</sup> U.S. v. Streu Construction Co., 05-CR-165 (E.D.Wis. 2005), *available at* http://www.justice.gov/atr/cases/f202800/202826.htm.

⁷³ Daniel A. Crane, *Patent Pools, RAND Commitments and the Problematics of Price Discrimination*, 3 (Jacob Burns Inst. for Advanced Legal Studies, Working Paper No. 232, 2009) ("First, the 'non-discriminatory' prong of the RAND commitment should be read narrowly to prohibit only discriminatory licensing to potential downstream rivals and not price discrimination more generally, else the RAND commitment turn into an inflexible commitment to license at identical terms to all potential licensees.").

⁷⁴ Gilbert, *supra* note 15, at 859. Gilbert proposes a shift in emphasis from the "Fair and reasonable" prong of FRAND to the "non-discrimination" prong, yet provides no clear mechanism to arrive at the ND terms. We believe the license auction process proposed here provides an improved mechanism to satisfy both the (F)R and ND prongs of FRAND.

⁷⁵ *Id.* at 859.

⁷⁶ Phillip Areeda, Essential Facilities: An Epithet in Need of Limiting Principles, 58 ANTITRUST L.J.

Some SDOs may be tempted to require that the patentee offer a uniform royalty rate to all standards participants in supplemental auctions. However, such a step may undermine a bidder's motivation to place higher bids if the bidder knows the worst case scenario will be payment of the same royalty rate as the winning bidder in the initial auction in advance. To be successful, the auction must balance the requirement for non-discriminatory results with protection of the patentee's ability to harness market forces and maximize royalty revenue. Such an auction can operate well if bidders are faced with the choice of placing a competitive bid at that moment, or having to wait for a supplemental auction occurring at least six months later, where rates may go higher. In the interim, the party (if using the essential technology) may risk a potential lawsuit where damages could exceed the total payout required by the licensee, had a successful bid been posted in the initial auction. The non-discrimination portion of a FRAND commitment may be complied with when similarly situated licensees (e.g. those bidding during the same phase of an auction) are treated uniformly, rather than identical treatment for all licensees at all times.⁷⁸

Thus, the initial auction will operate best when a patentee is not be required to grant the same royalty rate in a supplemental auction as the rate granted in the initial auction. Should a standards participant have to pay a higher rate than is set at a supplemental auction, she could not reasonably allege discrimination because the lower rate was made available during the initial auction. She chose to place a non-competitive bid knowing that a higher rate could be imposed later,⁷⁹ and the patentee did not intentionally impose a higher rate on that particular standards participant in the supplemental auction, as all bidders remain anonymous during the initial and supplemental auctions. In other circumstances, additional or supplemental auctions may be held where there are alternate fields of use, territories, or quantities that may support a higher royalty rate. Having different license terms applied in different market categories should not raise discrimination issues so long as transparency and promulgation of auction rules are well-known in advance of the auctions.

E. Timing the Auction to Occur Ex Post Provides Benefits

While standards participants will agree to the broad procedures of the auction *ex* ante, the actual determination of the auction particulars occurs *ex post*. Because the auction process, including pre-auction neutral analysis, will only begin when a patentee or standards participant raises a conflict, the initial auction may occur years after the

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^{841, 852-53 (1989). (}A jury instruction in an anti-trust case as to "whether the defendant had an intention to exclude by *improper* means" must state that getting ahead in the marketplace is not "improper" and defendant is always saved by having a legitimate business purpose (e.g. maintaining the patentee's ability to properly assert her patent against infringers).).

Courts have held that setting a uniform price by multiple competing parties to establish a blanket license, such as in a patent pool, is not *per se* price fixing. Wuxi Multimedia, Ltd. v. Koninklijke Philips Electronics, N.V., 04CV1136 DMS BLM, 2006 WL 6667002 (S.D. Cal. Jan. 5, 2006) *aff'd sub nom*, Wuxi Multimedia Ltd. v. Koninklijke Philips Electronics, N.A., 280 F. App'x 968 (Fed. Cir. 2008).

⁷⁸ Gilbert, *supra* note 15, at 876.

⁷⁹ Providing notice to bidders of the ability of the patentee to raise rates in a supplemental auction (or during litigation) should avoid concerns of coercion that might raise concern for the FTC — whether the patent is later assigned to another owner or not. *In re* Negotiated Data Solutions LLC, (F.T.C.), 0510094, (2008).

standard is published. Due to the lapse of a significant amount of time after promulgation of the standard, the proposed auction process provides many benefits. ⁸⁰ First, the identification of essential patents being auctioned occurs just prior to the auction. Since significant time will have elapsed, firms are less likely to have "submarine" patent applications pending that—although not disclosed—upon issuance become "essential." Thus, the publication of patent applications after eighteen months combined with the auction occurring *ex post* will help avoid patent "ambush" situations, where pending patent applications are withheld from RAND commitments.

Second, some previously "essential" patents may have been held invalid or cancelled in an opposition, such as the new U.S. opposition proceeding⁸¹ since there will be a significant time lapse prior to the auction occurring ex post. Third, the job of the valuation expert, essentiality expert, and patent validity expert (who will be analyzing market data and technology data,) will be accomplished more easily ex post because more data is likely to be available. For example, while the valuation expert should be determining a reasonable royalty rate based on a hypothetical license negotiation occurring ex ante, the valuation expert will have greater access to accurate market data regarding the time period at issue if she is conducting the analysis ex post, such as at least a year removed from the time of the hypothetical negotiation. While Swanson and Baumol have proposed an *ex ante* auction, 82 the present facilitated auction process avoids most of the "holdup" issues that may be of concern with a standard non-facilitated ex post Swanson and Baumol stated, "[o]nce buyers sink relationship-specific investments that increase their costs of switching to alternatives, sellers [patentees] have an incentive to act opportunistically and holdup buyers [licensees] by forcing them to accept a higher price or lower quality."83 However, the proposed auction's use of neutral experts and intermediary body to facilitate the auction (discussed in detail below), agreed to ex ante by all standards participants, will lock in a fair and non-discriminatory system and prevent opportunistic "hold-up". Also, the proposed ex post auction is more practical than an ex ante auction because parties wish to avoid the expense of bidding and negotiating until as late as possible.8

F. Traditional Royalty Rate Analytics May Still Be Used

The proposed auction would still incorporate traditional modes of analysis in setting a reasonable royalty rate. Namely, the starting bid price (strike price) at which the royalty rate is set would be determined by considering factors that damage experts and valuation experts commonly consider. I propose that a valuation expert be engaged by the intermediary body in order to study the patented technology, industry, and the benefits obtained by using the patented technology with respect to each auction. The valuation neutral can rely on the Georgia Pacific factors, cost method, income method,

⁸⁰ A non-discriminatory process may include a bidding regime and a maximum per firm royalty that the firm would accept. The rate could be higher if the firm bid ex post compared to bidding ex ante. Gilbert, *supra* note 15, at 871.

⁸¹ Leahy-Smith America Invents Act of 2011, 35 U.S.C. §321 (2012). (including a Post-Grant Review Proceeding).

⁸² Swanson & Baumol, *supra* note 41, at 19-20.

⁸³ *Id*. at 80.

⁸⁴ *Id*. at 16.

market method, royalty stacking, or entire market value to set the starting royalty rate bid price. As endorsed by the FTC, a valuation expert shall apply the hypothetical negotiation framework to determine a reasonable royalty rate and cap the royalty at the incremental value of the patent technology over alternatives available at the time the standard was chosen. In fact, adopting a set protocol to be used by valuation neutrals for all auction valuations (and publishing same) would instill a high level of confidence in potential licensees who can decide *ex ante* to invest in product development knowing a uniform and fair license agreement will be made available. Chief Judge Randall Radar, discussing how to improve the resolution of patent conflicts, recently stated, "settlements must occur on fair, neutral, and justified economic terms".

VII. LICENSE AUCTION AND NEW ADR PROCESS AVOIDS HOLD-UP

The proposed auction system allows standards participants to agree *ex ante* on a set of ADR procedures to be implemented by a third party intermediary in order to establish RAND license terms. Instituting such ADR procedures in advance will help avoid uncertainty and greatly reduce the possibility of opportunistic behavior by patentees. The standards adopters will have an assurance *ex ante* that the sunk costs of development of technology will not be too high compared to the RAND license terms, which will be made available via a facilitated ADR process and the license auction *ex post*. Holdup is avoided due to the commitment by patentees *ex ante* to the license auction as an ADR process where neutral experts, made available and vetted by the intermediary body, will help guide the parties to RAND terms set in a transparent manner.

The intermediary body will have an ADR process in place, including a means for selecting neutral experts from a roster of highly qualified people. A specialized ADR process, Alternative Licensing Resolution (ALR), is called for that culminates in the execution of a license agreement. The intermediary body will manage the ALR process and vet neutral experts to be sure they are of the highest qualifications, have a variety of

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⁸⁵ At the same time, the method used by the valuation expert should be different than that used during litigation; so that the patentee who plans to litigate the patent subsequent to the license auction is not prejudiced by the rate set for the auction. Also, in order to distinguish the valuation prepared for the auction from a damages analysis undertaken for litigation, the valuation expert will be setting a strike price for the initiation of the bidding for the auction—not a "reasonable royalty rate" for the final license agreement.

⁸⁶ FTC 2011 Report, supra note 5, at 23.

⁸⁷ Fed. Trade Comm'n and Dept. of Justice, *Joint Hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy Standards-Setting Practices: Competition, Innovation and Consumer Welfare*, 12-13 (Apr. 18, 2002) (statement of Daniel Swanson,), *available at* http://www.ftc.gov/opp/intellect/020418danielswanson.pdf ("[E]mpower a neutral third-party agent to license the [patent] on the owner's behalf on the basis of the model terms.").

⁸⁸ Chief Judge Randall Radar of the Fed. Cir., *The State of Patent Litigation*, E.D. Texas Judicial Conference, 20 (Sept. 27, 2011), *available* at http://memberconnections.com/olc/filelib/LVFC/cpages/9008/Library/The%20State%20of%20Patent%20Litigation%20w%20Ediscovery%20Model%20Order.pdf.

⁸⁹ Mark Lemley, *Ten Things to do About Patent Holdup of Standards (and One Not to)*, 48 B. C. L. REV. 149, 155 (2008) ("[R]equire patentees to specify the content of the RAND license ex ante . . . at a minimum [SDOs] need to set up an internal arbitration or discussion procedure.").

⁹⁰ See Joseph Miller, Standard Setting, Patents and Access Lock-in; RAND Licensing and the Theory of the Firm, 40 IND. L.REV. 35 (2007). (An ADR process can augment as SDO's IP policies so that upon making a RAND Commitment there is also an ADR commitment.)

subject matter expertise, and have sworn an oath to carry out their analysis in a fair, non-discriminatory, and neutral manner. The neutral experts can facilitate a fair and open ALR process that confirms the validity and essentiality of the patents, set a reasonable royalty rate (opening bid price), and provide a fair auction process so that multiple licenses can be distributed in a low-cost, non-litigious manner. ⁹¹

The intermediary body may offer various means of selecting the neutral expert. For example, a panel of three experts could be chosen where the patent owner chooses a first expert, the group of potential licensees/bidders chooses a second expert, and the first and second expert choose a third expert. In situations where the parties fail to select a neutral expert in a timely manner, or as an alternate process where only a single expert is to be used, the intermediary body may select the expert. Having such a standard expert selection process in place will allow the ALR process to be quickly initiated and presided over by reputable, experienced professionals. Instituting a reputable and fair system will allow all the standards participants to have a high degree of trust established *ex ante* when sunk costs are being made. As well the ALR system will provide assurances that a fair license rate will be available *ex post*.

Further, the intermediary body will put in place uniform guidelines consistent with current court rulings for the experts to use when conducting their analyses. For example, the valuation/damage expert will follow preset guidelines for determining what portion of the patented product sale price is to be burdened with the royalty. The guidelines will provide carefully defined exceptions for applying the entire market value royalty calculation. This system will provide a streamlined means of setting license terms and will have much lower transaction costs than litigation. Because the ALR license auction process will be agreed upon by patentees *ex ante*, such patentees will not be able to unilaterally impose unreasonable license terms because the intermediary and neutral experts will intervene to ensure truly "FRAND" terms are offered *ex post*.

Numerous lawsuits and government antitrust investigations are currently pending that stem from Motorola Mobility's (now owned by Google) "FRAND" offer of a royalty of 2.25% of the entire sale price of the standardized product (e.g. Xbox or iPhone). Had the present ALR system and uniform rules of an intermediary body been implemented by the SDO promulgating the standards involving Motorola Mobility's patents, much of these issues underlying the smart phone lawsuits and government investigations could have been avoided. The parties challenging the FRAND position of Motorola Mobility could have triggered the ALR process agreed to by Motorola Mobility *ex ante* and

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⁹¹ Mark Lemley, *Intellectual Property Rights and Standard Setting Organizations*, 90 CALIF. L.REV. 1889, 1966 (2002) ("SDOs might set up some means of dispute resolution within the organization to help resolve royalty disagreements. Resolving reasonable royalty disputes [using ADR] will almost certainly be quicker and cheaper than resorting to the courts.").

⁹² Judge Richard Posner, 7th Cir., recently endorsed appointment of neutral experts for patent conflicts.

⁹² Judge Richard Posner, 7th Cir., recently endorsed appointment of neutral experts for patent conflicts. Ameet Sachdev, *Judge Takes on Science and Law*, CHI. TRIB. May 11, 2012, at §2, at 4 ("The idea of expert witnesses who are not beholden to the parties who can provide information to judges and juries on technical issues, I think is a terrific opportunity worth exploring.").

⁹³ FED. TRADE COMM'N, *Third party US Federal Trade Commission's Statement of the Public Interest* Inv. No. 337-TA-752, available at http://www.ftc.gov/os/2012/06/1206ftcgamingconsole.pdf. Josh Ong, *Motorola seeking 2.25% of Apple's sales for standard-essential patent license*, APPLE INSIDER (Feb. 4, 2012), available at

http://www.appleinsider.com/print/12/02/04/motorola_seeking_225_of_apples_sales_for_standard_essential_patent_license.html.

engaged the intermediary body to assign a panel of experts to confirm that the Motorola patents were valid, that the patents are in fact essential for implementation of the standard, and to determine a reasonable royalty rate. The parties might merely accept the findings of the experts and move directly to execution of license agreements or proceed to the auction process outlined above. By following such a streamlined ALR process established *ex ante*, standards participants can avoid both hold-up and substantial lost resources expended to fight lawsuits.

VIII. OTHER CONSIDERATIONS

A. Alternate Auction Process to Overcome Patent Stacking Issues

¶47 The primary auction process proposed above should be satisfactory when a handful of patents have been deemed essential for a particular standard. However, I propose a modified auction process where a multitude of patents are essential for the implementation of a standard, such as in the mobile phone arena (e.g. ITU). aggregating multiple patents to be licensed by auction, patent stacking issues may be alleviated by providing an aggregate royalty rate. Similar to procedures used by patent pools, I propose a process by which experts determine which patents are essential, what aggregate royalty rate is appropriate for such group of patents and fair apportionment of such royalties based on the quantity and quality of the patents.⁹⁴ A single auction discussed above could be used to adjust the aggregate royalty rate, much as the auction process discussed previously set a royalty rate for a single patent. Such a process would allow market forces to set an aggregate royalty rate for all essential patents, even when dense patent "thickets" are present. According to apportionment terms determined by experts and reflected in a standard license agreement, the auction would provide the safeguards discussed above and allow for compliance with RAND requirements without ex post anti-competitive conduct.

B. Other Issues to Consider

I have attempted to outline a framework for a license auction system that may be implemented in various standard development contexts. However, further details and procedures should be developed to allow the proposed license auction to be compatible in certain contexts. For example, an SDO may wish to explore whether it may be beneficial to expand the use of the proposed license auction for "non-essential" patents too. If standards developers wish to license a patent portfolio including essential and non-essential patents, the proposed license auction process could be implemented to set an aggregate royalty rate for a bundle of patents. SDOs may investigate whether third parties who have not participated in the standards adoption process could be encouraged to use the proposed auction process to license their IPRs. SDOs may want to identify circumstances where a neutral-expert opinion, provided through an intermediary to provide a reasonable royalty rate as proposed above, may be sufficient to set RAND terms without having to resort to the auction process. Finally, SDOs will need to

⁹⁴ The Patent Ratings® system and IPQ® score of Ocean Tomo, an intellectual capital merchant bank firm, could be used to arrive at a fair apportionment of the royalties.

determine whether they will act as the final arbiter of issues that might arise during the proposed auction process. While the intermediary body can provide a process for reconsideration of the decisions made by it and its neutral experts, it may be helpful for certain procedural issues to be handled by appeal to the pertinent SDO.

Specific details of the auction should undergo government scrutiny, such as by providing detailed auction procedures in a Business Review Letter (BRL) to the Department of Justice. One of the issues to be addressed in the BRL would be whether limiting the number of licenses offered at an initial auction can be considered non-discriminatory when supplemental auctions may be held thereafter. The procedures presented in the BRL should likely include i) the process by which the number of licenses being offered in the initial auction is calculated (e.g., 90% of all known potential licensees for the initial auction and the remaining 10% in a supplemental auction), ii) the time period between the initial auction and supplemental auctions (e.g. is a one year delay period long enough to incentivize potential licensees to attempt to participate in the initial auction, but still pass antitrust scrutiny?), and iii) whether a different royalty rate set at the supplemental auction would be considered discriminatory when all other terms of the license agreement are identical to the license from the first auction.

The proposed auction and ALR process would provide a predictable path by which participants can set out an ADR process *ex ante* that authorities will recognize as having been a "good faith negotiation." In light of recent rulings involving whether a standard essential patent (SEP) owner may pursue an injunction that turns on the question of whether a "good faith" negotiation has occurred, the present proposal will bring much more predictability to the process of asserting SEPs. ⁹⁵ As a result of the disparate rulings occurring presently with respect to whether SEP owners may pursue injunctions, there could be a chilling effect for patent owners' participation in the standards setting process because the patentee's ability to fully enforce its patent rights is uncertain today. Since there is no clear definition of when an injunction may be pursued or what defines a "good faith" negotiation, patentees have no predictability with the current process. Where courts adopt the position that an SEP owner may not pursue an injunction and the SEP owner is nearly forced into a compulsory licensing situation, the use of the proposed ALR license auction system will at least provide some means by which the patentee can maximize its royalty generating capabilities via the auction process.

An additional topic to raise in a BRL shall focus on what remedies a patentee may pursue against parties (infringers) who fail to participate in the auction or obtain a license. The DOJ should comment on the best process by which potential licensees may be encouraged to participate in the auction, yet allow the auction process to result in terms that meet RAND obligations. For example, the patentee's ability to pursue an injunction in a lawsuit following an ALR auction should be addressed by the FTC or DOJ. In other words, will an SEP owner's participation in the proposed ALR auction process demonstrate that it has conducted a "good faith" negotiation with other standards

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⁹⁵ David Newman, *Availability of injunctive relief in patent lawsuits as a result of standards obligations*, THOMSON REUTERS NEWS & INSIGHT, (June 19, 2012), http://newsandinsight.thomsonreuters.com/Legal/Insight/2012/06_-

_June/Availability_of_injunctive_relief_in_patent_lawsuits_as_a_result_of_standards_obligations/.

⁹⁶ FED. TRADE COMM'N, *supra* note 92 (responding to the The Matter of "Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof.").

participants seeking RAND terms sufficiently to allow for pursuit of an injunction in a subsequent lawsuit?⁹⁷ In situations where a party had clear notice of the license auction and declined to participate or declined to enter a winning bid, there should be sufficient evidence that RAND terms were offered by the patentee in good faith (as confirmed by a successful auction where other bidders obtained licenses at an agreeable "RAND" rate), allowing the patentee to bring a subsequent lawsuit and pursue injunctive relief.

IX. CONCLUSION

By providing a carefully planned license auction system, a more streamlined

technology distribution system can be established. The ALR auction system would allow licensees and licensors to quickly arrive at a reasonable royalty rate and allow for licenses to be offered in a non-discriminatory manner. Such a system would simplify many IP issues for SDOs, patent pools, and litigants. Most importantly, the auction system would allow standards participants to agree *ex ante* on a set of ALR procedures to be used to set RAND license terms that help avoid antitrust concerns. In this way, hold-up situations will be avoided while still allowing patentees some flexibility, with the input of a valuation expert, to set terms and offered rates *ex post*. The use of an auction process and a license agreement with standard terms would also provide a streamlined, efficient method for establishing multiple licenses simultaneously, greatly reducing transaction costs for licensor and licensees. The auction system could also provide a database to collect royalty rate data so that future rate-setting analyses within an SDO could benefit

from the large pool of licensing data.⁹⁸ It will take the combined efforts of many players to establish the proposed ALR auction system, but unless we want much of the incentive driving our system of technology innovation to be *going once...going twice...gone*, we must work together to recalibrate and provide a new streamlined technology distribution

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system.

⁹⁷ See European Commission, Merger Procedure Article 6(1)(b) Decision, Google/Motorola Mobility, COMP/M.6381, (Feb. 13, 2012), ¶132, available at http://ec.europa.eu/competition/mergers/cases/decisions/m6381_20120213_20310_2277480_EN.pdf.

⁹⁸ Mark Lemley & Nathan Myhrvold, *How To Make A Patent Market* 36 HOFSTRA L. REV. 257, 259 (Apr. 8, 2008) ("The only people who stand to lose from mandatory disclosure of licenses are those who are taking advantage of the current state of ignorance, whether by holding up defendants or by refusing to pay for technology that everyone else is paying for.").

