



# **DEPARTMENT OF JUSTICE**

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## **Antitrust Policy in the Information Age: Protecting Innovation and Competition**

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**Remarks as Prepared for the  
Fordham Competition Law Institute**

**New York, New York**

**September 21, 2012**

## **Introduction**

Good afternoon, it is a pleasure to be with you today at the Fordham Competition Law Institute's 39<sup>th</sup> annual conference on International Antitrust Law and Policy. Today I want to discuss an issue at the cutting edge of antitrust enforcement both here in the United States and abroad: how enforcement agencies can balance patent rights, competition and innovation in the information age. In an increasingly networked economy, it is critical that antitrust agencies ensure that standard setting and transfers of patent ownership stimulate innovation and protect competition.

The basic legal and policy frameworks— patent rights, competition, and collaboratively set standards — that protect and encourage our modern innovation-based economy are not new. Our patent system, of course, has historically played a central role in promoting innovation and economic growth by encouraging inventors to apply their knowledge, take risks, and make investments in research and development — and by publishing patents so that others can build on those inventions with further innovations. Competition is also an essential ingredient in creating incentives for invention, innovation, and risk-taking because the desire to improve existing products to maintain or gain market share pushes competitors to improve function, design, and production processes. Collaborative standard setting has long been crucial for interoperability and for the creation of new platforms on which innovation occurs. From the adoption of standard gauge rails in 1866 that eliminated network incompatibilities between the seven different types of rail gauge then in use to current efforts to protect health information, enable the use of smart grids for the delivery of electricity, and the creation of complex communications networks and sophisticated mobile computing devices – standards are ubiquitous in modern life.

Our innovation economy balances on these three pillars - patent rights, competition and standard setting – so it is essential that each is strong. It is increasingly important, therefore, in highly dynamic sectors – such as in the wireless device industry – that antitrust authorities play an active role monitoring the intersection of patent rights and standard setting with competition. Today I am going to talk about the three major ways in which the Antitrust Division is taking an active role – ensuring that the market power that can be created by standard setting is not used anticompetitively; carefully reviewing the acquisition of patent portfolios and encouraging standard setting organizations to clearly define the scope of licensing commitments required for standards essential patents.

### **Standard Setting and Competition**

Standard setting is an essential building block for innovation in sectors like the wireless device industry, but it can impact competition because of the market power a standard can create for those who own patents included in the standard. When a standard that incorporates patented technology owned by a participant in the standard-setting process becomes established, switching may become difficult and expensive, causing that particular technology to gain market power. Patent holders may seek to take advantage of that market power by engaging in patent hold-up, excluding a competitor from a market or obtaining an unjustifiably higher price for its invention than would have been possible before the standard was set. This type of hold-up raises particular concerns when alternative technologies could have been included in the standard before it was set. Patent hold-up can cause other problems as well -- it may induce users to postpone or avoid incorporating standardized technology in their products. These consumers

could also be harmed when companies implementing the standard pass on increased royalties in the form of a higher price.<sup>1</sup>

To reduce the occurrences of this type of opportunistic conduct, most standards bodies have adopted patent policies that seek commitments from participants to license the patents they own that are essential to the standard on “reasonable and non-discriminatory” (RAND) or “fair, reasonable, and non-discriminatory” (FRAND) terms.<sup>2</sup> In some cases the licensing commitment is a condition of participation in the standards body. In others, the commitment may be voluntary or the organization may offer a mechanism for opting out of the obligation to license standard-essential patents. In many cases, a failure to obtain a licensing commitment from the patent holder causes the standard body to consider whether it should modify the proposed standard to avoid including the patented technology in the standard before it is finalized. Standards bodies and their members rely on RAND licensing commitments to facilitate the bilateral licensing of patents that are needed to allow a standard to become successful and to provide assurances to implementers of the standard that the patented technologies will be available to those willing and able to license them.

By participating in the standard-setting activities and making a RAND licensing commitment, some have argued that the patent holder foregoes its right to exclude users based on

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<sup>1</sup> See U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 35-36 (2007), <http://www.justice.gov/atr/public/hearings/ip/222655.htm>.

<sup>2</sup> In the United States, members of standards bodies may commit to license patents essential to a standard on RAND terms, while in other jurisdictions such members may commit to license such patents on FRAND terms. I will use RAND to refer to both types of commitments as they appear to be substantively the same type of commitment.

infringement from implementation of the standard.<sup>3</sup> Others argue that such a licensing commitment was never meant to “preclude a patent holder from seeking injunctions in appropriate circumstances.”<sup>4</sup> Although it is true that the “essence of the property right is the power to exclude,” not just recover damages,<sup>5</sup> there may be instances in which the rights holder has gained excessive bargaining power that is not derived from, or commensurate with, the value of its invention. The law of injunctions in patent cases must be flexible and sensitive to the concern that opportunistic rights holders can exploit the threat of an injunction to extract royalties well in excess of the value of their intellectual property.<sup>6</sup> To my mind, a patent holder who makes a licensing commitment to a standards body is implicitly saying that she will license the patent claims that must be used to implement the standard to any licensee that is willing and able to comply with the licensing terms embodied in the commitment. I believe that the Supreme Court’s four-factor test in *eBay, Inc. v. Mercexchange, L.L.C.* provides a useful framework to evaluate whether and when a court should issue an injunction based on a RAND encumbered standard essential patent.

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<sup>3</sup> E.g., Joseph Miller, *Standard Setting, Patents and Access Lock-In: RAND Licensing and the Theory of the Firm*, 40 IND. L. REV. 351, 358 (2007).

<sup>4</sup> E.g., Alden Abbott, *RIM’s Prescription for Patent Peace in the Smartphone Arena*, FTC WATCH No. 811 at 10 (July 16, 2012).

<sup>5</sup> Christine A. Varney, Assistant Attorney Gen., U.S. Dep’t of Justice, Promoting Innovation Through Patent and Antitrust Law and Policy, Remarks as Prepared for the Joint Workshop of the U.S. Patent and Trademark Office, the Federal Trade Commission, and the Department of Justice on the Intersection of Patent Policy and Competition Policy: Implications for Promoting Innovation 13-15 (May 26, 2010). <http://www.justice.gov/atr/public/speeches/260101.pdf>.

<sup>6</sup> *Id.*

## **Patent Portfolio Acquisitions**

Concerns about the potential for exclusionary patent hold-up by competitors came to the forefront of our enforcement efforts last year. We undertook investigations of several large patent portfolios that included a number of RAND encumbered standard essential patents needed to produce wireless mobile devices including smartphones and tablets. These devices typically implement a significant number of telecommunication and computer standards, including cellular air interface standards, such as the 3G and 4G LTE standards, wireless broadband technologies such as WiFi and WiMax, and video compression technologies, such as H.264.

The mobile-device industry is in technological transition. Smartphones are replacing previously dominant feature cell phones at lightning speed and new computer products, such as computer tablets, have rapidly entered the market. As a result, new technological innovators have displaced some established manufacturers of feature phones, and large portfolios of patents have been offered for sale. In reviewing these patent acquisitions, the division has had concern that the hold-up potential of the RAND-encumbered standard-essential patents in these portfolios could be asserted against other members of the industry.

In February 2012, the Antitrust Division closed its investigations of the acquisition of two significant patent portfolios. The first involved Rockstar Bidco (a partnership that included Apple, Microsoft, Research in Motion, Sony, and Ericsson) and its acquisition of 6,000 patents and patent applications from Nortel at a bankruptcy auction. The Nortel portfolio also included a number of patents that Nortel had committed to license on RAND terms for uses associated with certain standards, including wireless standards. The second involved Google's acquisition of Motorola Mobility, a manufacturer of smartphones and tablet computers and the holder of 17,000 issued patents and 6,800 patent applications. Motorola had made commitments to several

standards bodies to license hundreds of these patents on RAND terms for uses implementing the standards, including both cellular air interface and Wi-Fi standards.

In both matters, the division's investigations focused on whether the acquiring firms would have the incentive and ability to exploit ambiguities in commitments the sellers made to license their patents on RAND terms to hold up implementers of the standard by raising rivals' costs or foreclosing competition, to the detriment of consumers. For example, the acquiring firms might seek to raise rivals' costs by demanding higher licensing rates, compelling cross licenses to differentiating patents valued in excess of the RAND rate, charging licensees the entire portfolio royalty rate when licensing only a small subset of the patents in its portfolio, or seeking to prevent or exclude products that infringed these patents from the market altogether. After thorough investigations, the Division concluded that neither acquisition was likely to substantially lessen competition for wireless devices. In particular, we determined that neither Research in Motion nor Microsoft was likely to use any standard-essential RAND-encumbered patents from the Nortel portfolio to harm their rivals by excluding them from the markets or charging supracompetitive royalties, because they would be unable to attract a sufficient number of customers to purchase their smartphones to make up for the loss of licensing revenue. In addition, we found that Microsoft previously entered cross-license agreements with the majority of its Android-based original equipment manufacturers (OEM) competitors and that its newly acquired patents would be included in these agreements.

With respect to Google, we found that Motorola Mobility had a long history of licensing its RAND-encumbered standard-essential patents and had been engaged in extended disputes with Apple, Microsoft, and others before Google sought to acquire the company and its patent

portfolio. We did not believe that transferring ownership of the patents from Motorola to Google would substantially change this licensing program or the scope of these disputes.

While we were investigating these transactions, Apple publicly stated that the company would not use RAND-encumbered standard-essential patents to exclude rivals from the wireless market by seeking injunctions for infringement. Similarly, Microsoft posted a public statement on its website explaining that it would not seek injunctions or exclusion orders based on RAND-encumbered standard-essential patents. Google also publicly revealed its licensing policy, stating that it would not seek injunctive relief in disputes involving future license revenues provided that the potential licensee (a) forgoes certain defenses such as challenging the validity of the patent; (b) pays the full disputed licensing amount into escrow; and (c) agrees to a reciprocal process regarding injunctions.

The commitments made by Apple and Microsoft substantially lessened the Antitrust Division's concerns about potential anticompetitive use of RAND-encumbered standard-essential patents. The Antitrust Division observed that Google's commitments did not provide the same direct confirmation of its RAND-encumbered standard-essential patent licensing policies.

Although we concluded that the acquisitions of these patent portfolios were not likely to substantially lessen competition, the Antitrust Division noted its concerns about the potential inappropriate use of RAND-encumbered standard-essential patents to disrupt competition and specifically limited our conclusion to the transfer of ownership rights and not to the exercise of those transferred rights.

Since we closed these investigations, the division has continued closely to monitor the use of RAND-encumbered standard-essential patents in the wireless device industry, particularly



as they relate to smartphones and computer tablets, to ensure that they do not stifle competition and innovation in this important industry. Some have raised concerns about business entities that do not develop patented technologies or incorporate them into their products, but purchase and assert patents, through licensing or litigation, against firms who manufacture products using the patented technologies and thus may be locked into that technology. These firms often accumulate a large number of patents, making an assessment of validity and infringement difficult for an alleged infringer which may enhance the patent acquirer's bargaining leverage in licensing negotiations. Patent acquisitions by these types of companies are not uncommon in the wireless device industry. While being respectful of the benefits of business models that facilitate the transfer of patent rights, we continue to monitor these activities and their effects on innovation and competition. We plan to hold a workshop later this year to explore these issues in depth.

### **The Role of Standard Setting Organizations**

In our experience, the Antitrust Division has found that determining which intellectual property policies to adopt is primarily a private matter for standards bodies, so that industry can benefit from experimentation with different costs and benefits. However, the division is ready to enforce the antitrust laws against standard-setting activities that harm competition. One way for standards bodies to help their members avoid running afoul of antitrust laws is to set forth well-defined patent policy rules that minimize ambiguity. In 2006 and 2007, we issued two business review letters advising two standards-setting organizations, IEEE and VITA, that they could preserve competition and avoid unreasonable licensing terms that might harm the successful adoption and implementation of the standard by requiring or permitting patent holders participating in a standard-setting process to disclose the most restrictive terms on which they

were willing to license their essential patents.<sup>7</sup> IEEE and VITA incorporated this element into their patent policies.

There are other potential changes to the patent policies of standard-setting organizations would that could benefit competition by decreasing opportunities to exploit the ambiguities of a RAND licensing commitment. The division has recommended that standards bodies consider the following:

- Identifying, in advance, if any proposed technology path involves IP which the patent holder has not agreed to license on RAND terms;
- Making it clear that licensing commitments bind both the current patent holder and subsequent purchasers of the patents;
- Permitting the option to license RAND-encumbered patents declared essential to a standard on a cash-only basis and allowing voluntary cross-licensing;
- Placing some limitations on the right to exclude a willing and able licensee by, for example, requiring a commitment that a RAND-encumbered patent declared essential to a standard may be used to exclude only after litigation/arbitration of disputed issues is concluded; and
- Making improvements to lower the transactions cost of determining RAND licensing terms. Currently, expensive litigation is the only dispute resolution method. Standards bodies might want to explore setting guidelines for what constitutes a RAND rate, or devising arbitration requirements to reduce the cost of lack of clarity in RAND commitments.

Standard setting bodies which take these steps will aid in the efficient functioning of the market, lower costs, increase transparency and reduce uncertainty – all of which are good for innovation and competition.

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<sup>7</sup> Letter from Thomas O. Barnett, Assistant Attorney Gen., U.S. Dep't of Justice, to Michael A. Lindsey, Esq. (April 30, 2007), *available at* [www.justice.gov/atr/public/busreview/222978.pdf](http://www.justice.gov/atr/public/busreview/222978.pdf); Letter from Thomas O. Barnett, Assistant Attorney Gen., U.S. Dep't of Justice, to Robert A. Skitol, Esq. (Oct. 30, 2006), *available at* [www.justice.gov/atr/public/usreview/219380.pdf](http://www.justice.gov/atr/public/usreview/219380.pdf).

I want to be clear that implementation of these proposals has not been mandated by any of the division's enforcement actions and that we continue to engage in dialogue with standards bodies and their members to further refine our thinking about which practices would be most beneficial to competition. I encourage standards bodies that want to revise their patent policies to seek ex ante review of them through our business review procedures, as VITA and IEEE did, if the proposed revisions could impact competition.

### **Impact on Competition of ITC Exclusion Orders to Enforce Standards Essential Patents**

Our competition advocacy efforts have also involved the International Trade Commission (ITC) which plays a vital role in protecting U.S. industries from imports that infringe U.S. patent rights.

Recently some ITC investigations involving mobile devices have brought a new issue to the ITC: under what circumstances should the ITC issue an exclusion order if it determines that the defendant has infringed a valid patent necessary to comply with the standard which the patent owner (or a previous owner) has voluntarily agreed to license on RAND terms for such uses. The department believes that the ITC may tailor its relief in a manner that protects patent holders' rights in individual cases while taking into consideration the impact on consumers and on the competitive conditions in the United States economy. There may be a variety of circumstances in which a patent holder who has made a RAND licensing commitment may be justified in seeking an exclusion order from the ITC including, "where a licensee or someone using a technology refuses to participate in a reasonable negotiation or may not be subject to the

jurisdiction of the U.S. courts.”<sup>8</sup> There may also be circumstances in which making a RAND commitment under a standards body’s policies would appear to be at odds with seeking an ITC exclusion order against a licensee willing and able to take a license on RAND terms. Thus, the appropriate steps for determining whether the ITC should issue such an exclusion order will depend on the facts of each specific case.

## **Conclusion**

The outcomes of private patent enforcement litigation currently taking place in courts across the United States and at the ITC, as well as many jurisdictions around the world will, no doubt, change the landscape of this market in significant ways. The same may prove to be true for activities already underway at certain standards bodies that are working to clarify or to modify existing intellectual property policies. It is an interesting time, and the Antitrust Division is fully engaged in promoting competition in industries where standards and patents overlap so that we all benefit from innovation.

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<sup>8</sup> *Oversight of the Impact on Competition of Exclusion Orders to Enforce Standards-Essential Patents* Before S. Comm. on the Judiciary, 112<sup>th</sup> Cong. (2012) Webcast at 56:18 (testimony of Joseph F. Wayland, Acting Assistant Attorney Gen., U.S. Dep’t of Justice), <http://www.judiciary.senate.gov/hearings/hearing.cfm?id=45dca2a38e7309da19dce3a4cc06b817>.