STANDARD SETTING AND ANTITRUST:

SSOs, SEPs, F/RAND AND THE PATENT HOLDUP

By

Jeffery M. Cross
Freeborn & Peters LLP

Standards and standard setting have been thrust recently to the forefront of antitrust and intellectual property news. This notoriety is in part because of highly publicized patent litigation involving smartphones, which the press has dubbed the "Smartphone Wars." These cases frequently involve competing cell phone manufacturers seeking injunctive relief in court for patent infringement against a competitor or an exclusion order from the International Trade Commission to bar the importation of allegedly infringing goods. The Department of Justice Antitrust Division and the Federal Trade Commission have made standard setting a priority. Even the White House has weighed into the fray.

At the heart of the issue is standard setting by private standard setting organizations (SSOs) and patent holders whose technology is included in the standard. Such technology is often referred to as a standard essential patent (SEP).

The fact that patented technology has been included in a standard can create market power that did not exist before the standard. This market power flows from the fact that, as more and more manufacturers create products that are compliant with the standard, the cost of switching to alternative technology becomes greater and greater and ultimately too prohibitive to justify a switch to alternatives. This "lock-in" to the patented technology creates market power because of the fact that the technology was included in the standard. Attempts by the holder of an SEP to obtain from the implementers of the standard higher royalty rates than the patent holder would have been able to obtain prior to the creation of the standard is often referred to as "patent holdup." Such patent holdup has a number of anticompetitive effects, including to cause consumers to pay more for products where the products' manufacturers paid higher royalties for technology used in the products than they would have but for the technology's inclusion in the standard.

Standard setting organizations seek to counter the patent holdup problem by establishing rules that require the holders of patented technology that might be essential to the standard to disclose the technology prior to the creation of the standard and to commit *ex ante* to license the SEP under reasonable and nondiscriminatory terms (RAND), sometimes also referred to as "fair, reasonable and nondiscriminatory" terms (F/RAND).

Despite the numerous competitive benefits of standard setting, there are several antitrust risks. These include the risk of antitrust liability to patent holders who fail to inform the SSO of their potentially essential technology or who make a F/RAND commitment and then back out of it. It also includes the antitrust risk of members of SSOs who abuse the standard setting process by conspiring among themselves to establish a favored technology as part of the standard. This latter risk extends to the SSO itself, which can be held liable for the conduct of its members. The antitrust risk to the SSO could also result from a too active role in setting royalty rates between competitors.

This paper explores some of the antitrust risks facing an SSO and its members. It also explores the steps that an SSO can take to achieve its goals while reducing the risk of liability.

Background of Standard Setting

Standard setting can occur naturally in the marketplace. An example was the competition in the market between Betamax and VHS to determine the standard for video players. Most standard setting as we know it, however, occurs through organizations of scientists, engineers, manufacturers, and inventors that determine the technology that would be best for all concerned to enable interoperability between products complying with the standards. Some standard setting organizations, like the American Society of Mechanical Engineers (ASME), have been in existence since 1880 and are not-for-profit membership organizations with a wide-ranging mission that includes continuing education, training, and research, as well as standard setting. The standards developed by ASME equally are wide-ranging, from boiler water level detectors to cast copper alloy threaded fittings to nuclear air and gas treatments. Others include the 3rd Generation Partnership Project (3GPP) that began in 1998 to unite six telecommunications standard development organizations focused almost exclusively on a global system for mobile communications and the technology standards to make cell phones, cell phone terminals, and cell phone operators compatible. Standard setting is ubiquitous. One study cited by the U.S. Department of Justice and the U.S. Patent and Trademark Office in a Joint Policy Statement found that, in the United States alone, there are approximately 50,000 private sector voluntary standards developed by more than 600 organizations.

There are many procompetitive benefits to standard setting. The interoperability of products made by different manufacturers generally results in lower prices as competitors are competing on price, rather than unique features. Prices are also reduced as customers have small switching costs to move from one product to another. In addition, interoperability generally causes the production of compliant products to increase, reducing production costs.

On the other hand, standard setting, by its nature, is susceptible to antitrust violations, especially when the standard is jointly developed by competitors. In addition, because of the market power conferred on technology incorporated into a standard, it is susceptible to anticompetitive conduct by patent holders seeking to take advantage of such market power.

Potential Antitrust Liability of Patent Holders

Several cases have held that a patent holder participating in standard setting that fails to disclose to the SSO that it has intellectual property rights that are, or may be, essential to a standard being developed by the SSO may violate Section 2 of the Sherman Act. Other cases appear to hold that an SSO participant who commits to license an SEP under F/RAND terms also violates Section 2 if it later reneges on this commitment and seeks to license its intellectual property on non-F/RAND terms.

Section 2 of the Sherman Act prohibits monopolization, attempts to monopolize, and conspiracy to monopolize. The elements of a Section 2 monopolization claim are (1) the existence of a monopoly, and (2) an anticompetitive act to create, effect, or maintain that monopoly power.

A leading case in this area is *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297 (3d Cir. 2007). The issue before the Third Circuit was whether a patent holder's deceptive conduct before a

private standard-setting organization could be condemned as monopolization under Section 2 of the Sherman Act. Reviewing a motion to dismiss, the court of appeals held that the plaintiff had stated a claim for monopolization. The complaint had alleged that Qualcomm had induced the SSO to include its proprietary technology in the standard by falsely agreeing to abide by the SSO's policy that the owner of intellectual property rights must agree to license on F/RAND terms, and then breached that agreement by licensing its technology on non-F/RAND terms. The court held that the relevant market was the patented technology incorporated into the standard. The court also held that it was the incorporation of the patent into the standard – not the mere issuance of a patent – that made the relevant market congruent with the patent. The court found that, in this regard, the complaint adequately alleged that Qualcomm possessed market power in the relevant market. The court then held that the anticompetitive conduct was the intentional false promise that Qualcomm would license the technology using F/RAND.

The decision by the Circuit Court for the District of Columbia in *Rambus Incorporated v. Federal Trade Commission*, 522 F.3d 456 (D.C. Cir. 2008), appears to back away from the principles established by the Third Circuit in *Broadcom*. However, a closer analysis suggests that *Rambus* must be limited to its unique facts.

Rambus involved a standard setting organization developing a standard for computer memory devices. Rambus, which had invented a higher-performance dynamic access memory architecture for computer processing units, had been a member of the SSO developing standards for computer memory but publicly withdrew, asserting in a letter to the SSO that the terms on which it proposed to license its technology might not be consistent with the terms set by the SSO.

Almost two years after Rambus' withdrawal from the SSO, the SSO approved the standard. Rambus then informed implementers that it would seek to license its patented technologies, but not at F/RAND terms.

The FTC filed suit, alleging that Rambus had violated Section 5 of the FTC Act, which the FTC and the court of appeals treated for purposes of the case to be the equivalent of a claim of monopolization under Section 2. The FTC alleged that Rambus had breached the SSO's policies requiring it to disclose its patent interests and the disclosures it made were misleading.

The case was tried to an Administrative Law Judge, who dismissed the complaint. The Commission reversed, holding that Rambus had willfully and intentionally engaged in misrepresentations and omissions, as well as other practices that misled the SSO. The FTC focused on the allegations of monopolization. In particular, the FTC held that, but for Rambus' conduct, the SSO would either have excluded Rambus' patented technologies from the standard or would have obtained F/RAND assurances.

Rambus appealed. The Court of Appeals for the District of Columbia assumed without deciding that Rambus' conduct that avoided the SSO choosing alternative technology for the standard was, indeed, anticompetitive. In other words, if Rambus' more complete disclosure would have caused the SSO to adopt a different standard, then Rambus' failure to disclose harmed competition and would support a monopolization claim.

However, the D.C. Court of Appeals relied upon the Supreme Court's decision in *NYNEX Corp. v. Discon, Inc.*, 525 U.S. 128 (1998), for the proposition that an otherwise lawful monopolist's use of deception simply to obtain higher prices does not exclude competitors and thus does not diminish competition. The appellate court held that any claim of monopolization must establish

an anticompetitive impact on competition. It found that because the FTC could not establish which of two alternatives would have occurred – either the SSO would have picked an alternative technology or obtained a F/RAND commitment – the FTC failed to establish an anticompetitive effect in that the latter event under *NYNEX* was not anticompetitive. The court distinguished *Broadcom* by holding that, to the extent the Third Circuit's decision in *Broadcom* rested on a supposition that there was a cognizable violation of the Sherman Act when a lawful monopolist's deceit has the effect of raising prices without an effect on the competitive structure, it conflicted with *NYNEX*.

Some courts have broadly interpreted *Rambus*. For example, the court in *Vizio v. Funai Electric Co.*, slip op. No. CV 09-0174, 2010 WL 7762624 (C.D. Calif. February 3, 2010), interpreted *Rambus* as holding that deceiving a standard setting organization and thereby avoiding a F/RAND commitment, does not constitute harm to competition under Section 2 of the Sherman Act.

Other courts appear to have limited *Rambus* to its facts and treated its holding as being based on a failure of proof by the FTC in establishing that, but for the SEP holder's conduct, the SSO would have chosen alternative technology. For example, in *Apple Inc. v. Samsung Electronics Co.*, slip op. No. 11-cv-01846, 2011 WL 4948567 (N.D. Calif. October 18, 2011), the court held that Apple in theory had a valid claim by alleging that Samsung violated Section 2 because it had failed to disclose its intellectual property rights to the SSO. The court characterized *Rambus* as identifying a failure of proof on the part of the FTC as opposed to a failure of pleading. The FTC had failed to establish that, but for *Rambus'* deceit, the SSO would have chosen other technology. The court did hold that, at the pleadings stage, the plaintiff must allege that the SSO would have adopted a different technology had the patent holder's rights been known at the time of the standard setting.

One significant difference between the facts in *Rambus* and the facts in a case such as *Apple v. Samsung*, is the SSO rules. In *Rambus*, the FTC had found that the SSO's rules were "not a model of clarity." On the other hand, the rules of the SSO at issue in *Apple v. Samsung*, the European Telecommunications Standards Institute (ETSI), could not have been clearer. These rules stated that, when essential patents are brought to the attention of the SSO, the SSO will immediately request that the owner of a potential SEP commit to license the patent under F/RAND. If the owner of the potential standard essential patent refuses, the SSO will seek alternative technology to incorporate into the standard. If there is no acceptable alternative technology, the SSO will stop work on the standard. If an owner of an SEP refuses to provide a F/RAND commitment after publication of the standard, the SSO will try to modify the standard so that the technology is no longer essential. Under such a rule, there can be no question that but for a patent holder's failure to disclose or a deceptive commitment to F/RAND, the SSO would have selected another alternative.

Potential Antitrust Liability of SSO Participants

Participants in SSOs may face antitrust liability for attempts to manipulate the standard setting process to favor a particular technology. One of the seminal Supreme Court cases in this regard is *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988). This case involved the standard setting organization that established national electrical codes. Although the standard setting body was a private association and not a government agency, its recommendations were adopted as official government electrical codes by many cities, towns and villages. The makers of PVC pipe were seeking to have their products approved by the association as acceptable for

use as electrical conduits. The makers of steel conduits opposed the acceptance of PVC conduit. The steel conduit makers conspired to pack the annual meeting with their supporters to vote down the PVC proposal. In this regard, the steel companies recruited 230 persons to join the association and to attend the annual meeting to vote against the proposal. The steel companies paid the membership dues and meeting attendance fees for those they recruited. At the annual meeting, the steel group voters were instructed where to sit and how and when to vote by group leaders that carried walkie-talkies and used hand signals to facilitate communications. The recruited voters did not have the technical documentation necessary to follow the meeting. Nevertheless, their combined voting strength enabled the steel group to cause the PVC proposal to be rejected.

Although the issue before the Supreme Court was whether the conduct by the steel companies was immune from antitrust liability under the *Noerr-Pennington* doctrine that protects collective efforts to petition government, it was clear from the decision denying such immunity that the conduct would violate Section 1 of the Sherman Act.

The existence of an antitrust violation for such conduct is clear from another seminal Supreme Court case, *American Society of Mechanical Engineers, Inc. v. Hydrolevel Corp.*, 456 U.S. 556 (1982). At issue was the standard for low-water fuel cutoff valves, part of the ASME's Boiler and Pressure Vessel Code. For decades, McDonalds & Miller, Inc. (M&M) dominated the market for low-water fuel cutoff devices. Hydrolevel entered the market with a new type of device that had a time-delay. An executive of M&M was vice-chairman of the subcommittee that was writing the segment of the Boiler and Pressure Vessel Code for low-water cut-off devices. He and other M&M executives met with the chairman of the committee and devised a scheme to stifle the competitive threat from Hydrolevel. The M&M vice-chairman wrote a letter to the ASME committee carefully crafted to elicit a negative response regarding time-delay features in a low-water fuel cut-off valve. It was addressed to the secretary of the committee, a full-time employee of ASME. Pursuant to ASME procedures, however, the secretary passed the inquiry on to the chairman who in turn provided it to the vice-chairman of the committee, the M&M executive who had drafted the original inquiry letter, to prepare the response. The chairman and vice-chairman of the committee were able to keep control of the response letter without the involvement of the entire committee by deeming the response as "unofficial." The response was predictably negative regarding time-delay valves. The response was sent out over the name of the committee secretary on ASME stationery. M&M then used this ASME response to convince Hydrolevel's customers not to do business with Hydrolevel. After a jury trial, ASME was found liable under Section 1 of the Sherman Act.

The conduct is fairly egregious in *Allied Tube* and *Hydrolevel*. A recent decision by a Pennsylvania trial court, however, establishes that more nuanced conduct by participants in standard setting could sustain an antitrust allegation. In *TruePosition, Inc. v. LM Ericsson Telephone Co.*, slip op. No. 2:11-cv-4574-RK, 2012 WL 3584626 (E.D. Pa. August 21, 2012), the complaint alleged that the defendants used their positions as chairmen of various SSO committees to develop a standard favorable to their technology and unfavorable to competing technology. In this regard, the complaint alleged a violation of Section 1 of the Sherman Act in that the defendants conspired to exclude the plaintiff's technology from the standard.

The defendants in *TruePosition* moved to dismiss the complaint, arguing that there was no direct evidence of a conspiracy and the alleged circumstantial evidence fell short of sufficient facts to plausibly allege an agreement as required by *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007) and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), and the cases interpreting the *Twombly*/*Iqbal*

standard for pleading. The trial court agreed that there was no direct evidence but found that the circumstantial evidence pled was sufficient to plausibly suggest a collusive agreement in violation of Section 1.

The trial court examined the totality of the facts pled to conclude that the allegations were plausible that the corporate defendants agreed on a common plan to prevent or delay the standardization of plaintiff's technology. The facts included allegations that defendants consistently provided late submissions to SSO plenary sessions or working groups in violation of the SSO's rules, only to have the chairman of the plenary meetings or working groups, who were also representatives of one or more of the corporate defendants, overrule any objections to the late submissions. Other facts alleged that the corporate defendants used their positions as chairmen of key committees to impose unreasonable and questionable preconditions, as well as testing and simulation parameters on the standardization of the plaintiff's technology that were not imposed on the technology favored by the defendants. An example of the facts alleged illustrates some of the conduct charged. At a meeting of an SSO working group, the plaintiff alleged that the corporate defendants submitted simulation data that was skewed against plaintiff's technology using sham assumptions of extreme conditions far more extreme than those applied to the defendants' favored technology. The simulation data was submitted late in violation of the SSO's rules, but the late submission justified a decision by the committee chairman, a representative of one of the corporate defendants, to defer working on plaintiff's technology until a later release of the standards, enabling defendants' favored technology to get a three-year jump on plaintiff's technology.

Antitrust Liability of the SSO

The Supreme Court made it very clear in *American Society of Mechanical Engineers, Inc. v. Hydrolevel Corp.*, 456 U.S. 556 (1982), that the standard setting organization itself could be found liable under the antitrust laws for the conduct of its members acting within their apparent authority. The Court held that such vicarious liability was consistent with the intent of the antitrust laws. Relying on *Hydrolevel*, the district court in a later opinion in the *TruePosition* litigation, *TruePosition, Inc. v. LM Ericsson Telephone Co.*, 899 F. Supp. 2d 356 (E.D. Pa. 2012), concluded that the SSO could be held liable for the conduct of the corporate defendants. The court found that the corporate defendants in their role as chairmen of various key standard-setting committees acted as agents of the SSO under the apparent authority granted the corporate defendants by the SSO. In denying the SSO's motion to dismiss, the district court rejected the SSO's argument that the plaintiff's assertion that the corporate defendants violated the SSO's rules rendered *Hydrolevel* inapposite. The court found that it was the apparent authority of the SSO that allowed the corporate defendants to consistently abuse and violate the SSO's rules in order to manipulate the SSO's standardization process.

The district court also rejected the argument by the SSO that *Hydrolevel* did not relieve the plaintiff of alleging that the SSO itself engaged in concerted action in connection with the alleged conspiracy by the corporate defendants. The court held that the SSO was charged with acting through agents whom it had imbued with apparent authority. The SSO could not consider itself separate from the corporate defendants when the latter were acting with the SSO's apparent authority. It was the conduct of the corporate defendants acting under apparent authority from the SSO as committee chairmen that was the concerted action for which the SSO was being charged.

Finally, the court rejected an argument by the SSO that it merely provided a structure for its members to develop standards. The court held that a rational jury could conclude that the SSO did more than serve as a mere structure for its members. It stated that, by cloaking the corporate defendants with its apparent authority as its agents through leadership positions on important committees within the standardization process, the SSO could be held liable for the actions of its agents committed with that apparent authority. The district judge pointed out that the Supreme Court in *Hydrolevel* stressed that an SSO cannot avoid liability by ensuring that it remains ignorant of its agents' conduct because it would encourage an SSO to do as little as possible to oversee its agents. The result would be an increased likelihood that an SSO's reputation would be used for anticompetitive ends.

How Can SSOs Avoid Antitrust Liability and Still Achieve Their Goals?

The foregoing analysis of standard setting and the antitrust laws raises the question of what can SSOs do to protect their members and themselves while at the same time achieving their goals. To answer this question, it would be valuable to first establish the goals of most SSOs.

The Goals of SSOs

Standard setting organizations must walk a fine line between encouraging patent holders with the best technology to participate in the process and yet at the same time making the standard attractive to implementers. SSOs want widespread adoption of their standards because the benefits of interoperability depend on such widespread use. Widespread adoption of a standard lowers costs by increasing product manufacturing volume. This in turn provides benefits to holders of patented technology incorporated into the standard because of royalties gained from widespread licensing.

To attract the best technology, the SSO must insure patent holders that they will be fairly compensated for their inventions. At the same time, however, the SSO must guard against inventors trying to manipulate the process to take advantage of the market power granted the technology by being included in the standard. This is important because it addresses the equally important goal of enticing implementers to use the standard to produce products in the market. An excessively high royalty will stymie broad implementation. Allowing a holder of an SEP to take advantage of the market power conferred on technology by the standard is exacerbated by the so-called "stacking" problem where multiple holders of SEPs attempt to "stack" excessive royalties on implementing products.

As the SSO is trying to balance the conflicting goals of insuring royalty rates that attract both patent holders as well as implementers, it has to consider antitrust issues. Too active a role in setting royalty rates may expose the SSO to antitrust liability as facilitating a cartel. On the other hand, a too hands-off approach could also invite antitrust scrutiny.

Steps The SSO Could Take

First and foremost, the SSO should adopt rules similar to ETSI's rules that make it clear that the standard will not enable patent holdup. Such rules should clearly state that, if the SSO becomes aware of intellectual property rights that might be included in the standard, whether owned by a participant in the SSO or not, the SSO will seek a F/RAND commitment. If no F/RAND commitment is made, alternative technologies will be used in the standard. If there are no viable alternative technologies, then the SSO will not establish a standard. After a standard is written, if

the SSO learns of intellectual property rights that may be essential to the patent, the SSO will attempt to obtain a F/RAND commitment from the holder of the patent and if none is forthcoming, re-write the standard if possible.

Rules like the foregoing should make it clear to all owners of intellectual property rights that the SSO will not confer market power on patent owners through the standardization process.

Once it has obtained a F/RAND commitment, the SSO does not want to engage in, or facilitate, negotiations between holders of standard essential patents and implementer as to what is a F/RAND license. However, the SSO can undertake some steps to make the process less costly and more efficient. First, it can require arbitration as part of the F/RAND commitment. Second, it can document what alternative technologies were available to the SSO at the time it adopted the standard and what was the incremental value over these alternatives that the technology adopted in the standard. Courts and parties have focused on this incremental value as part of the F/RAND determination. *See, e.g., Microsoft Corp. v. Motorola, Inc.*, slip op. No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. April 25, 2013) at *46-47.

In October 2012, Renata Hesse, Deputy Assistant Attorney General of the Antitrust Division of the U.S. Department of Justice, made several additional proposals for SSOs. One of these proposals is that the SSO in obtaining a F/RAND commitment prohibit mandatory cross-licensing of patents that are not essential to the standard or a related family of standards, while permitting voluntary cross-licensing. Another suggestion made by Deputy Assistant Attorney General Hesse was that the SSO require a party making a F/RAND commitment to limit injunctive relief to situations where the standards implementer is not willing to have a neutral third-party determine the appropriate F/RAND terms or is unwilling to accept the F/RAND terms approved by such a third-party. Such a prohibition should also extend to exclusion orders sought from the International Trade Commission.

In terms of governance, SSOs should institute a vigorous antitrust compliance program and provide antitrust compliance training to all SSO participants. The compliance program should include an antitrust hotline where participants can anonymously submit tips regarding potentially abusive behavior.

In addition, the SSO should insure that critical committees are made up of equal numbers of patent holders and implementers. In addition, there must be a mechanism for SSO staff to review decisions made by committee chairs in contravention of the rules to insure that the conduct is not potentially anticompetitive.

Conclusion

As standard setting becomes more and more common in our economy, it behooves participants in the process to become aware of the antitrust risks and take steps to insure that the process does not result in antitrust liability.

Jeffery M. Cross is a Partner in the Litigation Practice Group and a member of the Antitrust and Trade Regulation Group at Freeborn & Peters LLP in Chicago. He has nearly 39 years of experience litigating antitrust cases and counseling antitrust issues. He also has taught antitrust law for the last 12 years as an adjunct professor at John Marshall Law School in Chicago. He can be reached at jcross@freeborn.com or 312-360-6430.