The policy of the IEEE has long been to avoid embodying patented technology in IEEE standards unless the technology would be made available to users of the standard on reasonable and non-discriminatory (RAND) royalty terms and conditions. But a recurrent problem has been that, once a standard was in place, the patentee and the standard users would have different ideas about what was RAND. (See, for example, “The Antitrust Ghost in the Standard-Setting Machine,” Micro Law, IEEE Micro, vol. 25, no. 3, May-June 2005, pp. 7-9; “Standardization Skulduggery Update: UMTS Standard,” Micro Law, IEEE Micro, vol. 25, no. 4, July-Aug. 2005, pp. 73-76; and J.B. Fromm and R.A. Skitol, “Update on the Antitrust Ghost in the Standard-Setting Machine,” Micro Law, IEEE Micro, Sept.-Oct. 2005, pp. 77-79.)

As explained in the background sidebar, the IEEE and other standard-setting organizations were afraid to demand advance notice from patentees of what the allegedly RAND terms would really be, lest the courts hold the organizations liable for engaging in a price-fixing cartel. This timorous policy met years of criticism, however, including a speech in which the Assistant Attorney General in charge of the Antitrust Division said, “It would be a strange result if antitrust policy is being used to prevent price competition,” and in which he praised the European Union’s intellectual property licensing guidelines for ruling that “firms normally should be allowed to negotiate royalty rates [during] a standard setting effort, as well as after a standard is set.” In 2005, Hewlett-Packard made a formal proposal to IEEE patent policy officials that IEEE should change its policy to require that owners of patents that a proposed standard would involve must give a binding commitment on what they would demand as a “reasonable” royalty.

**The IEEE’s business review letter**

Recently, the IEEE screwed up its courage and asked the government prosecutors for an advisory opinion on whether they would sue the IEEE if it started asking patentees what they really meant in their RAND offers. On 30 April 2007, the Antitrust Division replied with a business review clearance letter stating its enforcement (or, more specifically, its non-enforcement) policy on IEEE asking patentees how RAND they are.

The full text of the Antitrust Division’s business review letter to the IEEE is available at http://www.usdoj.gov/atr/public/busreview/222978.htm. The letter begins with the stated concerns of IEEE and IEEE Standards Association (IEEE-SA) about present indefinite RAND commitments:

IEEE’s new policy

These difficulties have led IEEE and IEEE-SA to propose a new policy “to give patent holders the option to publicly disclose and commit to the most restrictive licensing terms (which may include the maximum royalty rate)” for RAND licensing of patents. The policy is limited to “essential patents.” A patent claim is essential if its use is “necessary to create a compliant implementation” of the proposed standard when “there was
Background on RAND controversy and IEEE

It is the policy of the IEEE and many other standard-setting organizations to request that any patented technology incorporated into a technical standard be made available to all users of the standard on reasonable and nondiscriminatory (RAND) terms (see IEEE-SA Standards Board Bylaws, clause 6, available at http://standards.ieee.org/guides/bylaws/sec6-7.html#B). By the same token, such organizations typically require that participants engaged in formulating a standard disclose whether the proposed standard’s use would infringe patents that their companies own. They must also disclose whether such patents will be subject to RAND licensing. Ordinarily, if it appears that a necessary patent exists and will not be available on a RAND basis, the organization requires that the technical committee change or abandon the standard to prevent a patent from blocking its use. Consequently, the technology needed to practice all or most standards is, in principle, subject to RAND licensing.

The fly in the ointment becomes visible once an industry adopts a standard and uses it. The owner who promised to make the patent available on a RAND basis might have a different concept of what that means than prospective licensees. Recently, disgruntled standards users have complained that patent owners have unilaterally demanded excessive royalty rates on a “take it or leave it” basis. They have also complained of abusive and unreasonable negotiating tactics. One antitrust suit, for example, charged that the owner of a patent necessary for practicing an IEEE standard (802.11, in this case) offered to license the patent at an allegedly very high rate. Further, the offer would remain open for only 30 days, after which the royalty rate would double.

To prevent such conduct, some have suggested that standard-setting organizations should require not only an assurance of RAND terms, but also an advance disclosure of those supposedly RAND terms. Then, if the terms are excessive—for example, because of a royalty that is a large multiple of normal and customary rates in the industry—the organization can simply not adopt that technology as a standard, or at least consider other options.

The IEEE and other standard-setting organizations have firmly rejected all such proposals. Thus, the IEEE has stated: “You must not discuss subjects like the pricing for use of a patent, how a patent should be licensed, validity or interpretation of a patent claim, or any terms or conditions of use” (http://standards.ieee.org/board/pat/guide.html). ANSI has a similar policy (http://www.ftc.gov/opp/intelect/020418marasco.pdf). The main stated reason for the policy is fear that the organization will be liable as a tool for a price-fixing cartel or liable for some similar antitrust violation. The effect, however, is as if a prospective car buyer goes to the dealer, and the salesman says, “I have a deal for you!” The buyer asks about the price, and the salesman says, “Sign here and then I’ll tell you.”


no commercially or technically feasible non-infringing alternative.” The licensing commitment will apply to revisions of the standard and also to subsequent owners of the patent. As reasons why this policy will be beneficial, IEEE stated:

Creating greater clarity about a patent holder’s future licensing requirements may decrease the chances that litigation will delay the implementation of an IEEE standard and improve the ability of working groups to reach consensus, thus allowing standardized products to reach consumers more quickly. IEEE-SA states that these changes also may result in lower prices for consumers of standardized products.

The IEEE has now adopted new bylaws on standard-setting activity under which the working group, once it learns that access to a patent may be necessary to implement a given standard, will ask for a letter of assurance (LOA) from the relevant patent owner. The owner may then follow any of five courses:

1. The patentee may fail or decline to make any commitment (presumably, although this is unstated, this will likely result in the working group considering alternative technology).
2. The patentee may state that it is unaware of any patent rights after making a good-faith inquiry of those company personnel involved with the given standard.
3. The patentee may advise IEEE unconditionally that it will not assert any patents.
4. The patentee may state that it has patents that may be essential, and that it will offer their use either on RAND terms or without compensation.
5. In the event that the RAND option is stated, the patentee “may voluntarily augment the LOA by including details about” the RAND terms.

The LOA is irrevocable during the life of the standard.

By signing an LOA, the patentee “acknowledge[s] that users and implementers” of the proposed standard “are relying or will rely upon and may seek enforcement of the terms of th[e] LOA.” That means that the LOA is a binding contract under generally accepted principles of contract law. The IEEE-SA’s policy does not provide for any enforcement role for IEEE-SA or IEEE. That means that any enforcement procedure, if needed, would be by way of a private lawsuit between the standard user and the patentee. For example, if a patentee made a particular commitment to IEEE—say, a 3 percent royalty rate—but later demanded 5 percent of a given user, that user might take any of several actions:

1. It might bring an action for a declaratory judgment that it was entitled to use the technology for a 3 percent royalty rate.
2. It might simply use the technology and proffer a check for a 3 percent royalty to the patentee, and if the patentee refused it just let the
patentee sue, and defend the suit on the ground that it proffered all that it was obliged to.

3. If the patentee warned customers not to deal with the user because it was an unlicensed infringer, the user might sue the patentee for damages for tortious interference with the user’s business.

Given the existence of the LOA, it would probably not be possible for the patentee to counterclaim successfully for an injunction against the user’s use of the technology in standard-compliant products.

What’s not in the new IEEE policy

The Antitrust Division noted that the new IEEE policy did not address several points. First, it made the policy voluntary. There is no statement that IEEE simply will not consider use of any technology that does not specifically commit to RAND or royalty-free licensing. The Antitrust Division commented:

Although the proposed IEEE-SA policy does not require patent holders to publicly commit to their most restrictive licensing terms during the standard-setting process, the ability to make such commitments could generate similar benefits as patent holders may compete to offer the most attractive combination of technology and licensing terms.

Of course, then again, they may not compete that way without more of a nudge. Experience with the new IEEE policy will doubtless clarify that.

The Antitrust Division also noted that the proposed patent information policy prohibits discussion of specific licensing terms within IEEE-SA standards development meetings (presumably meaning no user-patentee back and forth on terms during meetings). This self-imposed IEEE prohibition extends to joint negotiations of licensing terms within standards development meetings, although it does not prohibit discussion of the relative cost of using different technologies, given their different royalty costs. However, the Antitrust Division added, “You have not requested, and we are not providing, the Department’s views on joint negotiations that might take place inside or outside such standards development meetings or IEEE sponsored meetings.” Despite this remark, the business review letter then dropped a footnote stating that its and the FTC’s policy is to “apply a rule-of-reason analysis to joint negotiations of licensing terms in the standard-setting context.” That means that the Antitrust Division and FTC do not consider it inherently objectionable for a standard-setting organization to engage in joint negotiation for a royalty rate on technology used in a standard, but they instead evaluate the facts and circumstances to ascertain whether any actual and substantial anticompetitive effect results from the conduct.

Finally, the Antitrust Division’s letter ends with the ritual finger wagging against cartel behavior that such business review clearance letters usually contain:

The Department likely would challenge under section 1 of the Sherman Act any activities that reduced competition by using IEEE-SA’s proposed patent policy as a cover to fix the prices of downstream standardized products. The Department would also be likely to challenge efforts by patent holders to rig their LOAs by agreeing on the licensing terms they will disclose to IEEE-SA. IEEE-SA should continue its efforts to educate those who set standards under its auspices about the consequences of such activities.

VITA’s approach

The new IEEE policy is such an advance over the old policy that it is perhaps churlish to criticize any details. That said, the deliberate omission of several elements is excessively cautious or even timorous. Other standard-setting organizations have been bolder. For example, the VMEbus International Trade Association (VITA), the VMEbus standardization organization, went farther than IEEE in two main respects: 1) the patent disclosure system (both existence of patents and maximum royalty rate) is mandatory, not voluntary; and 2) the RAND terms (which VITA calls FRAND, with the F standing for “fair”) are enforceable by arbitration.

More specifically, each member of the working group for a new standard must disclose all of his company’s and any third party’s patents and patent applications that may become essential to implementing the proposed standard (unless doing so would violate a trade secrecy agreement). This disclosure is based on the working group member’s good-faith and reasonable inquiry. Furthermore, each member must commit to FRAND licensing on disclosed maximum royalty terms as well as disclosure of the most restrictive nonprice licensing terms, for all essential patent claims. It is also agreed that a failure to disclose anything subject to mandatory disclosure constitutes a commitment to royalty-free licensing. (Given the limited “good faith” requirement, which is not a guarantee of perfection, this probably is limited to intentional or very negligent failure to disclose. There is no requirement for a special patent search, and excusable mistakes would not trigger royalty-free licensing.) If a member believes that a breach of these obligations has occurred, it may demand arbitration, and the chair of the working group must appoint a panel. Presumably, these commitments are worded in a manner that makes them contractually enforceable. (Policies following the VITA pattern are sometimes referred to as ex ante disclosure policies.)

In a business review letter of 30 October 2006, the Antitrust Division approved VITA’s policy (http://www.usdoj.gov/atr/public/busreview/219380.htm). In analyzing the proposed policy, the Antitrust Division explained the difficulty that a standard-setting organization has in re-treating from an already adopted standard after it learns that patents cover the technology:
Once a particular technology is chosen and the standard is developed, it can be extremely expensive or even impossible to substitute one technology for another. In most cases, the entire standard-setting process would have to be repeated to develop an alternative standard around a different technology. Thus, those seeking to implement a given standard may be willing to license a patented technology included in the standard on more onerous terms than they would have been prior to the standard’s adoption in order to avoid the expense and delay of developing a new standard around a different technology.

On the other hand, advance disclosure of patent information, “enforced by the requirement that non-disclosed patents be licensed royalty-free, permits the working group members to make more informed decisions when setting a standard.” The working group may choose “a cheaper, less technologically elegant solution” rather than pay royalties. Or, after evaluating the facts, the group might decide that the technology is so superior that it is worth paying the demanded price. In any event, the disclosure requirements decrease the chances that “unexpectedly high licensing demands from the patent holder” will retard or stymie the standard-setting efforts of the VITA working group. (This is called patent hold-up.) For these reasons, the Antitrust Division said, the proposed VITA policy is likely to have a beneficial competitive effect: “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.”

It therefore appears that, had it wanted to, the IEEE could have gone farther in instituting procedures to overcome the patent difficulties it has been facing. That is, the threat of antitrust prosecution would not have been an obstacle, given the VITA business review letter. There may, of course, be other reasons to lag behind VITA. What is true for VMEbus technology may not apply to other electronic technologies. But if the antitrust ghost in the standard-setting machine is the only reason to hang back, that is not a sound reason. However, as already said, the new IEEE policy is such an improvement over the old one that quibbling over the details seems harsh and inappropriate.

**Non-antitrust arguments against mandatory advance disclosure**

Moreover, there are non-antitrust arguments that have been advanced against requiring advance patent royalty disclosure on a mandatory basis. For example, doing so may impose costs that IEEE working groups may not wish to incur. It may require member companies to commit the time and effort of high-level marketing and legal personnel whose time is expensive, in addition to the technical personnel already involved. The royalty discussions may be time-consuming, and may delay finalizing the standard soon enough to satisfy time-to-market concerns for the underlying technology. Conceivably, such requirements might chill the process of developing a working group consensus for a standard, out of a fear of causing litigation or adverse competitive consequences.

Some patentees have argued to the Antitrust Division that RAND licensing rates used in standard setting can create problems for patentees engaged in unrelated patent infringement litigation. In establishing reasonable-royalty damage awards (now typical) in patent infringement litigation, courts consider as a relevant factor the royalty rate that the patentee charges on other licenses. Thus, some patentees argue that, if an owner licenses a patent royalty-free for use in a standard and later sues to enforce the same patent against an infringement not involving use of the standard, a naive court or jury might conclude that the owner is entitled to zero damages because the patentee has in effect established a “reasonable royalty rate” of zero.

Whether these arguments are sufficiently weighty to tip the balance against mandatory advance disclosure is another matter. For example, the argument against royalty-free licensing has not dissuaded the World Wide Web Consortium (W3C) from adopting a royalty-free licensing policy for its standards. At least some of the cost factors attributed to ex ante disclosure simply place at a different point in the timeline comparable costs associated with the difficulties that are recited in the IEEE business review letter as the reasons that led IEEE to reconsider its patent policy—so that no substantial net difference in total costs occurs.

One commentator has observed of this whole debate:

> For better or worse, lawyers are particularly well equipped to defend the status quo when innovative suggestions are made [as to] the evolution of intellectual property rights policies in standard setting organizations. After all, the stakes are high (e.g., gaining the maximum return on valuable patent rights). It is very easy to paint things in black and white, and to offer dire predictions based upon extreme cases rather than to dissect a situation or proposal, isolate the problematic elements, develop a prudent strategy to address each issue, and allow the innovation to be tested in the marketplace and succeed or fail. (A. Updegrove, “It’s Time to Get on the Ex Ante Bus,” Consortium Standards Bulletin, June 2006; http://consortiuminfo.org/bulletins/jun06.php#editorial.)

As one who never wants to pass up a good ad hominem argument, perhaps I have come to a good point to stop and leave it to all you others out there to continue the discussion.

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