



DEPARTMENT OF JUSTICE

How to Address “Hold Up” in Standard Setting Without Deterring Innovation: Harness Innovation by SDOs

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Today's panel addresses the topic of so-called "hold up" by the owners of patents and other intellectual property.¹ The Department of Justice has recently made a number of detailed statements on this subject, including in speeches,² in business review letters, and in last year's "IP2 Report" issued jointly with the FTC.³ Those statements have done much to remove some of the unfounded "antitrust fear" – arising from such cases as *Allied Tube*⁴ and *Hydrolevel*⁵ – that may have led standards development organizations (SDOs) to shy away from experimenting with the full range of tools available to address the potential for standards to "lock in" a need for specific IP. Rather than repeat those statements, which I commend to you, I would like to amplify a few related points.

I'll begin by asking what hold up means and when, if ever, it is a problem. I'll then discuss the Antitrust Division's view as to the role of antitrust law and enforcement policy in addressing the "hold-up" issue. That approach can be summarized as follows: antitrust has a role to play but its principal objective should be to harness the ingenuity of participants in the standards development process to deal with hold up in a manner that is optimally effective, meaning that it facilitates efficient standards development *ex ante* –

¹ This paper is adapted from remarks made at the panel discussion on Standards Development Organizations at the American Bar Association Spring Meeting (Mar. 26, 2008).

² *E.g.*, Gerald F. Masoudi, Deputy Assistant Attorney Gen., U.S. Dep't of Justice, Objective Standards and the Antitrust Analysis of SDO and Patent Pool Conduct, address at the Law Seminars Int'l Annual Comprehensive Conference on Standards Bodies and Patent Pools (Oct. 11, 2007), <http://www.usdoj.gov/atr/public/speeches/227137.pdf>.

³ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 33-56 (Apr. 17, 2007), <http://www.usdoj.gov/atr/public/hearings/ip/222655.pdf>.

⁴ *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492 (1988).

⁵ *Am. Soc'y of Mech. Eng'rs v. Hydrolevel Corp.*, 456 U.S. 556 (1982).

including participation by holders of IP useful to implementation of the standard – rather than merely attempting to protect standards users *ex post*.

I. BACKGROUND: HOLD UP AND TRADEOFFS

To bound the discussion, let me explain what hold up means (or ought to mean). It is easiest to define hold up by first considering what it is not. Hold up should not be taken to refer merely to demands by holders of valuable intellectual property for a significant royalty fee in exchange for access to that property, even if the holder has market power (or even monopoly power) by virtue of the IP rights. Such market power may merely reflect the value inherent in intellectual property; for example, its value by virtue of providing a uniquely efficient solution to some real-world problem.

Hold up also should not be taken to refer to every situation in which the incorporation of IP into a standard enhances the value of the IP. Efficient standards typically expand output, unlocking new markets for the technologies used to implement them. This added value should not necessarily be attributed to the standard rather than the IP. If particular IP provides a uniquely efficient way to solve a problem that must be overcome in order for a standard to work, the IP holder's desire to earn a return reflecting the value of solving that problem is not hold up; it is better thought of as a reflection of the intrinsic value of the IP. This is so even if the standard unlocks value in IP for which there was no market until the standard was created.

Sometimes, however, intellectual property acquires value, or acquires significant additional value relative to other, alternative solutions, only because it becomes imbedded in a standard. Before the standard was adopted, there might have been many technological choices available, but after the standard the many alternatives may have

been reduced to one (assuming there are no alternative standards). In this setting, the standards development process can create market power on the part of an IP rights holder that would not have existed absent the standard, and this new market power can give the IP rights holder the ability to exact a price that need not have been paid to develop a useful standard.

Should the owner of such property be permitted to “hold up” those who become locked in by virtue of the standard? And, if we think this is a problem, when is it an *antitrust* problem?

SDOs have been grappling with these issues for a number of years. To reduce opportunities for hold up and to avoid the uncertainty that can slow down adoption and implementation of a standard, some SDOs have chosen to implement rules suggesting or mandating the disclosure of patent rights before the standard is designed. Others have sought to put limits on royalties by requiring *ex ante* commitments by holders to license any patents incorporated into standards on reasonable and non-discriminatory (RAND) terms after the standard is set. More recently, some SDOs have sought to have patent owners reveal their most restrictive licensing terms before the standard is set. By the way, as I will discuss in a moment, some SDOs have no doubt made the conscious choice not to implement any of these techniques.

In deciding how to approach the potential for IP hold up, SDOs and their participants must consider many issues: how serious a problem is hold up likely to be; how effective are the various measures for addressing it; and what is the impact of those measures on the underlying goals of the standards development process, perhaps principally the efficient development of effective standards. These goals can be in

tension with one another, requiring SDOs and their participants to consider, for example, the impact of the SDO's strategy (or the lack thereof) on:

- The incentives of IP holders to participate in the SDO process;
- The incentives of users of the standard (and thus of IP imbedded therein) to participate in the SDO process;
- The ability of the SDO to develop the appropriate technical solution so that the standard works and is adopted by the industry;
- The need to keep transactional costs low for the setting of the standard itself and, if needed, for the costs of licensing of IP (as is the case for other necessary inputs); and
- The need for speed, both in the creation and the adoption of the standard.

To illustrate the kinds of tradeoffs in play, a “perfect” technical standard may take twice the development time of a “pretty good” standard. Creating, implementing, and enforcing a licensing structure takes time and money and may deter some licensors from participating in the standard-setting process, so the cost-benefit equation may not be favorable for some SDOs. One cannot say as a general matter that slow-but-perfect is always better than fast-and-pretty-good. Or, requiring numerous licensing commitments might discourage participation by some patent holders, while the absence of such commitments might discourage adoption of the standard by its prospective users. Thus, for example, an SDO's decision to impose only vague RAND terms may be an implicit decision to get more patentee participation in the standard development on the front end, and accept more risk of high licensing fees in the implementation on the back end. Again, one cannot say as a general matter that either maximizing patent owner participation or maximizing user adoption is always the better policy choice.

II. THE ROLE FOR ANTITRUST – THE DIVISION’S PERSPECTIVE

So, where does antitrust come in? Antitrust has a role to play, but it should be a supporting player, not the main event. At the Antitrust Division, we think that innovation by standards setting organizations and their participants offers the most effective means of addressing the potential for IP hold up, uncertainty and inefficiency without undermining incentives to innovate on the part of patent holders or incentives to develop efficient standards that add value to the economy. The experts at standards development – which are SDOs and their participants, not antitrust enforcers or antitrust courts – are in the best position to determine whether and how to manage hold up.

How can antitrust help achieve this result? We see two overarching principles:

- (1) Antitrust law and enforcement policy should provide *freedom* for SDOs to work things out in the manner best suited to their standards development objectives, while staying conscious of the need for appropriate boundaries to prevent anticompetitive behavior by the participants; and
- (2) Antitrust law and enforcement policy should not interfere with the *incentives* of SDOs and their participants to engage in such innovation.

Applying these principles suggests at least three specific implications for antitrust policy.

A. Antitrust Should Tolerate a Wide Range of Approaches by SDOs to the Hold-Up Concern

In the wake of *Allied Tube* and *Hydrolevel*, SDOs often avoided all discussion of price and commercial terms, including *ex ante* discussion of licensing terms, fearing per

se liability. Therefore, when the Division issued business review letters to VITA⁶ and IEEE,⁷ one of our goals was to reduce unwarranted fear of per se antitrust liability. VITA sought to address hold up by requiring mandatory disclosure of most-restrictive terms, and by establishing specific contractual remedies. The IEEE later sought to address inefficiency in the standards development process by creating a regime of optional disclosure of most-restrictive terms, establishing a process allowing for some discussion of licensing terms when comparing the relative merits of technologies, and leaving remedies to the general law of contract. IEEE also sought to formalize contractual relationships among IP owners, IEEE members, and IEEE standard users, so as to improve the ability of individual users of the standard to seek remedies through contract actions.

We issued favorable business review letters to both organizations. We made clear that we would apply the rule of reason to efforts by SDOs to tackle the hold-up issue, because we recognized the potential competitive benefits of both the SDO activity itself and arrangements aimed at addressing hold up so as to foster efficient standards development. Like any rule-of-reason analysis, our approach will be flexible and tailored to the specific facts, including the particular parties and the problem they are attempting to solve.

⁶ Letter from Thomas O. Barnett, Assistant Attorney Gen., U.S. Dep't of Justice, to Robert A. Skitol, Esq. (Oct. 30, 2006), *available at* <http://www.usdoj.gov/atr/public/busreview/219380.pdf>.

⁷ Letter from Thomas O. Barnett, Assistant Attorney Gen., U.S. Dep't of Justice, to Michael A. Lindsay, Esq., *available at* (Apr. 30, 2007), <http://www.usdoj.gov/atr/public/busreview/222978.pdf>.

But remember, rule-of-reason treatment is not equivalent to *carte blanche* for participants in SDO activities. A legitimate desire to evaluate alternative technologies and avoid IP hold up will not sanction monopsonistic behavior that leads to allocative inefficiencies by unreasonably suppressing prices paid for IP used in standards. For example, although performing cost-benefits analyses on which technologies should be included in a standard may well require that users engage in some discussion of the likely costs of the technology (and perhaps also what level of cost would be supported by anticipated downstream demand), agreements among users as the royalties they would be willing to pay could have unreasonably anticompetitive effects. Such concerns would be particularly elevated if agreements or discussions spill over into uses of the technology outside the scope of the putative standard.

Antitrust law will be especially intolerant of agreements among standards users that are a guise for coordinating their downstream operations. It will be equally intolerant of naked agreements among owners of competing technologies to fix the price paid for technology to be used by users of a standard, to allocate markets, or otherwise to restrict competition. Such boundaries should surprise no one, and should not hamper efficient and procompetitive standard development.

B. Antitrust Should Not Provide an Omnipresent Safety Net for Standards Users

Just as antitrust should not be an unduly harsh sword that deters SDOs from experimenting with efficient mechanisms for developing standards free of the hold-up specter, standards users should not look to antitrust as an omnipresent shield against the desire of patent owners to collect royalties for technology imbedded in a standard. If

antitrust claims are too easy to assert, antitrust will threaten the efficiency of the standards development process.

First, if standards users see antitrust as a crutch that will protect them every time hold up occurs, they might refrain from taking steps to address the hold-up concern *ex ante*, via the SDO process, even though *ex ante* efforts likely provide a more effective way to deal with hold up than the threat of *ex post* antitrust liability. Again, antitrust has a role to play, but a sound approach to antitrust analysis should take into account the benefits of motivating all SDO participants to act efficiently. For SDOs and potential licensees, this means anticipating potential hold up problems and deciding whether they are significant enough to deal with up front, and devising the best means of dealing with the issue, whether via disclosure requirements or other contractual safeguards.

Second, when SDOs and their participants *do* recognize the potential for hold up, and do take steps to deal with it via the SDO process, unduly interventionist antitrust rules are even more dangerous. They almost inevitably would trample the delicate tradeoffs inherent in an efficiently functioning SDO process. In a world where the potential for hold up is well known,⁸ an SDO's failure to adopt *ex ante* safeguards that succeed in preventing hold up may well be a conscious choice rather than an accident or

⁸ In the wake of *Rambus* (see generally the FTC decisions that found liability and imposed a licensing remedy, *In re Rambus, Inc.*, No. 9302 (F.T.C. July 31, 2006), available at <http://ftc.gov/os/adjpro/d9302/060802commissionopinion.pdf>; Opinion of the Commission on Remedy at 17, *In re Rambus Inc.*, No. 9302 (F.T.C. Feb. 5, 2007), available at <http://www.ftc.gov/os/adjpro/d9302/070205opinion.pdf>, and the D.C. Circuit's recent opinion overturning those decisions, *Rambus, Inc. v. Fed. Trade Comm'n*, No. 07-1124, slip op. (Apr. 22, 2008), available at <http://pacer.cadc.uscourts.gov/docs/common/opinions/200804/07-1086-1112217.pdf>) and similar standards cases, which have publicized the hold up problem, it will be increasingly difficult for SDO participants to argue that they did not anticipate the difficulties that can arise from failing to spell out the obligations of patent holders in detail.

defect in the standards development process. An SDO might rationally choose to rely on non-contractual factors, such as reputation or the bargaining power of licensees, to rein in any market power created by the standard. Or an SDO may decide that the lack of *ex ante* safeguards is a reasonable price to pay in exchange for making the SDO process as fast as possible, or for making it as friendly to technology owners as possible.

It can be difficult in hindsight to determine exactly what tradeoffs were contemplated by an SDO, but that does not mean that we should ignore these tradeoffs out of zeal to ensure some relief just because *ex post* royalty rates are perceived to be high. If SDOs choose to impose less than what an antitrust court (or agency) might – based on its after-the-fact assessment once lock-in has occurred – think was ideal, antitrust should not step in and change the calculus. If it did, it would upset the judgment of the SDO – discouraging participation by IP owners, slowing down standards development or otherwise interfering with the standards development objectives of the SDO and its participants.

Third, but related to the points above, standards for antitrust liability that appear to provide insurance against hold-up may threaten IP owner participation despite SDO efforts to encourage it. If the goal is to foster the efficient adoption of standards that take advantage of the optimum technology (giving consideration to benefits and costs), participation by owners of technology is vital. We *want* to encourage not merely the development of new and better technological solutions (read, intellectual property), but also steps to make that technology available (willingly) for use in applications that would benefit from it and also require standardization. We do not want IP owners to take their ball and go home. Antitrust laws that impose liability too readily would seem to pose a

serious threat of chilling participation by technology owners in the standards setting process. Technology owners might withhold technology from standards development activities as to which the risks of liability exceeded the expected rewards, potentially depriving niche applications of the best available technical solutions. Or if they did make their technology available for use in the standard, they might do so in a way that entailed less interaction with the development activities, potentially undermining the most efficient adoption of the ideal standard.

C. Antitrust Law Should Seek to Avoid Chilling Efficient Standards Development Activity

In addition to allowing SDOs to experiment with alternative approaches for dealing with hold up, and being tolerant of the balance that SDOs strike when they exercise that freedom, antitrust law also should avoid chilling efficient standards development activity. This objective applies with special force to the antitrust analysis for judging the legality of unilateral decisions by IP holders regarding communications about their IP during the standards development process and the terms at which they subsequently make their IP available. The SDO setting is one where participation of IP holders has tremendous procompetitive potential. If antitrust law threatened IP holders with treble damages liability for conduct during or after the standards development process simply because – when viewed through the lens of hindsight once lock-in has already occurred – that conduct might subjectively appear as unfair or unjustified, the law would risk discouraging the very participation we value. For example, IP holders would have to think twice about participating in standards development activity if antitrust law established rules that would exact treble damages (or impose caps on royalty levels) for statements that were not objectively false, or omissions made absent any clear duty to

disclose, during a standard setting process just because a jury might later conclude that the firm's communications about its IP were less forthcoming than the jury thought was sufficient to avoid lock-in.⁹ Likewise, IP holders may choose not to participate at all in the standards development process if their participation created a risk of treble damages liability for royalty rates that a jury thought were "unfair" or "unreasonably high."¹⁰

III. CONCLUSION

In the past, the options available to SDOs to deal with the issue of hold up were unnecessarily constrained by fears of antitrust liability. As the tools available to SDOs expand, thanks to a more rational antitrust approach, it remains important for antitrust law and policy not to take back that flexibility by imposing liability every time the mechanism chosen by the SDO fails to avoid hold up, and a decision maker (judge, jury or Commission) believes the resulting price charged was excessive. Instead, antitrust should focus on the propriety of the SDO *process* itself, and with respect to claims that misbehavior led to hold up and "monopolistically" high prices, impose liability only where competition has been harmed.

⁹ This is not to say, however, that fraudulent activity within SDOs could never constitute monopolization in violation of Section 2 of the Sherman Act. *See, e.g.,* Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172 (1965).

¹⁰ The Supreme Court's decision in *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 127 S. Ct. 1069 (2007), suggests that the "fairness" of prices charged by an alleged monopolist, which is part of the definition of FRAND (fair, reasonable and non-discriminatory licensing), should play little or no role in antitrust analysis under Section 2 of the Sherman Act.