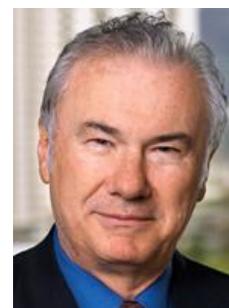


An Overdue Re-Examination Of Antitrust Policy Toward SEPs

By **David Teece and Edward Sherry** (February 1, 2018, 1:07 PM EST)

In November 2017, Assistant Attorney General Makan Delrahim, head of the U.S. Department of Justice’s Antitrust Division and a patent lawyer, gave a speech at the University of Southern California Gould School of Law titled "Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law." [1] In that speech, Delrahim gave what we believe to be a salutary reappraisal of antitrust issues regarding standards development and patents implicating standards.



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The issue of standard-essential patents, commitments to make licenses to such patents available on “fair, reasonable and nondiscriminatory” terms, and the proper treatment of these issues under the antitrust law has attracted both a voluminous literature and a wealth of case law in recent years. Delrahim said, “Fresh thinking about the implications of SSOs [standards setting organizations] and the proper role of antitrust law is long overdue.” [2] We agree.

Delrahim acknowledged that, in addition to concerns about “patent hold-up,” in which the owner of an SEP seeks to charge standards implementers excessive royalties for their use of its patented technology, there are concerns about what has been termed “patent hold-out,” sometimes referred to as “reverse hold-up,” in which implementers seek to pay insufficiently low royalties for their use of standardized technology. Delrahim (in our view correctly) noted, “Too often lost in the debate over the hold-up problem is recognition of a more serious risk: the hold-out problem. ... The hold-out problem arises when implementers threaten to under-invest in the implementation of a standard, or threaten not to take a license at all, until their royalty demands are met.” [3]

It is important to note that patents are not self-enforcing, and that patent holders, unlike suppliers of tangible inputs into the production process, cannot physically withhold their patented technology from implementers who do not pay for it. Instead, they have little choice but to resort to costly, time-consuming, and risky patent infringement litigation to enforce their rights. We agree that the potential for hold-out (also known as “reverse hold up”) is significant — indeed, unauthorized unpaid use of patented technology is rampant in many industries, and such widespread infringement can adversely affect patent holders’ abilities to receive adequate compensation for their contributions [4] — and welcome Delrahim’s acknowledgement that it may be “a more serious risk” than the risk of hold-up — a position that, until now, has generally not been acknowledged by the competition authorities. It is worth noting that implementers have not made anything similar to a FRAND commitment to take licenses, to pay for their use of others’ patented technology. While patent holders have made FRAND commitments

to standards-development organizations and courts have applied traditional contract law principles to enforce them on behalf of implementers who are seen as third-party beneficiaries of such commitments, implementers have made no similar contractual commitments.

Delrahim said, “I view the collective hold-out problem as a more serious impediment to innovation,”[5] though he did not define what he means by “collective hold-out” or give an example. He acknowledged that “the hold-up and hold-out problems are not symmetric,”[6] correctly pointing out that “innovators make an investment before they know whether that investment will ever pay off,” while “the implementer has some buffer against the risk of hold-up because at least some of its investments occur after royalty rates for new technology could have been determined.”[7] So-called ex ante licensing — by which is typically meant licensing that occurs after the technology developer has made the sunk cost investment to develop its technology (at least to the point where it can be considered for incorporation into the standard), but before implementers make their investments in developing and making standards-compliant products, and in some cases before the technology has been chosen for incorporation into the standard — is better thought of as “interim” licensing, after one party has made its investment but before the other party has.[8] We applaud Delrahim’s acknowledgement of this fundamental temporal asymmetry and its public policy implications.

Delrahim acknowledged, “Unfortunately, in recent years, competition policy has focused too heavily on the so-called unilateral hold-up problem, often ignoring what fuels dynamic innovation and efficiency. ... Every incremental shift in bargaining leverage toward implementers of new technologies acting in concert can undermine incentives to innovate.”[9] There is a large, well-established empirical literature in economics on the private versus social rates of return to innovation, which demonstrates that even successful innovators capture only a small fraction of the social benefits arising from their innovations. Firms contemplating investing in research and development run the risk that they will encounter “dry holes” or will be beaten to the finish line by others; ex ante, the rewards from successful innovation have to compensate for the risks associated with unsuccessful innovation. Anything that reduces the returns to innovation can significantly reduce the incentives to innovate. Since innovation is a key driver of economic growth, we are concerned that misguided efforts to curtail hold-up run the risk of encouraging hold-out/reverse hold-up and thus derailing economic growth. Given the importance of standards in encouraging interoperability and compatibility between the offerings of various firms and facilitating competition, we believe that the competition authorities should tread warily before intervening. We believe Delrahim’s recent speech reflects a long-overdue reappraisal of the issues associated with patents and standards.

Delrahim also proposed that “antitrust law should not police FRAND commitments to SDOs.”[10] We agree that FRAND commitments made to standards-development organizations are contractual, that implementers are third-party beneficiaries of such commitments, and that implementers can and do use the legal process to enforce contractual FRAND commitments. We see no reason to believe that the courts are either unable or unwilling to enforce such commitments, nor that the courts systematically misinterpret them, and thus we too see little need for antitrust intervention in what is fundamentally a contractual matter. We note that implementers have made no comparable contractual commitments to take licenses, to pay royalties to those whose technology they use to make standards-compliant products. This asymmetry is another reason why we believe that the antitrust authorities should tread warily in this area.

Delrahim said, “The Antitrust Division will therefore be skeptical of rules that SSOs impose that appear designed specifically to shift bargaining leverage from IP creators to implementers.”[11] We concur with such a policy. Unfortunately, in 2015 the DOJ gave a favorable business review letter to the Institute of

Electrical and Electronics Engineers' controversial changes in its intellectual property rights policy, which one of us has previously criticized as favoring implementers at the expense of innovators.[12] We believe that, had Delrahim's views been in place at the time, it is less likely that the DOJ would have approved the new IEEE policy.

Both courts and antitrust authorities can make both what statisticians call "Type I" or "false positive" errors (condemning legitimate conduct, finding a violation where none exists) and "Type II" or "false negative" errors (failing to condemn improper conduct, finding no violation when one exists). We believe that Delrahim's focus on the perils of hold-out, of reverse hold-up, is a salutary counterweight to the prospect of Type I errors in analyzing licensing in the context of SEPs.

It is worth noting that, while implementers treat royalty payments as a private cost, from a societal perspective it is better to think of royalty payments as transfer payments (while, which are, admittedly, compensatory payment for the use of real, albeit intangible, resources) from implementers to patent holders.[13] The implementer has less money, but the patent holder has more money. They are a private cost to implementers, but not a societal cost.[14] This implies that royalty payments should not be seen as real resource costs, while the R&D effort to develop standardized technology clearly does involve real resource costs. In particular, this implies that SDOs, when acting pursuant to the interests of implementers (who tend to be the majority of SDO participants), have a societally inefficient incentive to avoid incorporating royalty-bearing technology into standards. Delrahim did not address this issue. This is another reason to be wary of antitrust intervention on the side of collective buyer-side action by SDO implementer members. As Delrahim put it, "Antitrust enforcers should scrutinize concerted action within SSOs that causes competitive harm to the dynamic innovation process." [15] In our view, this issue has received inadequate attention in the existing literature.

Antitrust agencies routinely claim to favor both innovation and competition. However, they have always seen a tension between short-term (static) competitive analysis, with its emphasis on achieving low prices, and the dynamic issues raised by intellectual property (and associated royalty payments, which in the short run raise prices of licensed goods) that supports innovation by helping innovators achieve the economic returns necessary to draw forth the critical investment dollars needed to support R&D and continuing innovation. Of course, as economist Joseph Schumpeter reminded us almost a century ago, "this kind of competition is as much more effective than the other as a bombardment is in comparison with forcing a door." [16]

Schumpeter spoke of "creative destruction"; today we talk of "disruption" to markets and incumbents, which is the elixir of competition. Notwithstanding this well-accepted perspective, our antitrust agencies, and sometimes the courts, have been innovation unfriendly, and recently they have sometimes been patent unfriendly. In the 1980s, they gave virtually no consideration to how the breakup of AT&T would likely destroy Bell Labs, western civilization's greatest scientific and commercial research lab, which had invented the transistor and electronic switching. In the 1960s, the courts forced Xerox to license its xerography patents and opened up the market to new entrants from Japan. And in 2015, the courts gave a favorable business review letter to the IEEE approving the IEEE's controversial changes to its intellectual property rights policy, essentially inviting a monopsony cabal by implementers against inventors involved in the standard-setting process at the IEEE. It's hard to find circumstances where the DOJ or the Federal Trade Commission took up the cudgel for innovators and patent owners.

The agencies worry about patent thickets but rarely if ever about patents that might be curtailed or weakened because of overreach by the U.S. Patent and Trademark Office or the Patent Trial and Appeal

Board. They worry about the impact of royalties on prices today, but rarely about a whittled-down panoply of consumer choice and benefits in the future. Delrahim's speech is promising in that, for the first time in a while, we might have an authentic innovation champion at the DOJ's Antitrust Division. If so, he will need to work hard with staff to break free of the "static model" that the economics profession has frequently advanced, often without full awareness that there are alternative (Schumpeterian) perspectives and a robust literature on innovation and strategic management that will greatly ease the agency's pathway into an antitrust pro-competition posture.

One topic that is currently being hotly debated is whether SEP holders who have made FRAND commitments should be allowed to seek and/or obtain injunctive relief against unlicensed implementers (or whether the fact that the patent holder has agreed to accept royalty payments means that the patent holder will not suffer "irremediable harm" if an injunction is not issued). Delrahim correctly noted that "[p]atents are a form of property, and the right to exclude is one of the most fundamental bargaining rights a property owner possesses. Rules that deprive a patent holder from exercising this right — whether imposed by an SSO or by a court — undermine the incentive to innovate and worsen the problem of hold-out." [17] He argues (we believe correctly) that "[w]e should not transform commitments to license on FRAND terms into a compulsory licensing scheme," though we acknowledge that the courts will have to determine what FRAND licensing terms are should the parties be unable to reach agreement. Again, we wish that Delrahim's position had been adopted by the DOJ at the time it approved the change in the IEEE's IP policy, which explicitly provided that a patent holder that had made a FRAND commitment should not be allowed to even seek (much less receive) injunctive relief against unlicensed infringers.

Other topics currently being hotly debated include (1) what the appropriate royalty base and/or damages base is for SEPs, and in particular whether the royalty/damages base should be the "smallest saleable patent practicing unit" or "SSPPU," a recent court-developed doctrine, and (2) whether and to what extent courts need to consider issues such as "patent thickets" and/or "royalty stacking" in determining patent infringement damages. With respect to the former, Delrahim said that "its use as a requirement by a concerted agreement of implementers as the exclusive determinant of patent royalties may very well warrant antitrust scrutiny." [18]

We do not know if other antitrust agencies — the Federal Trade Commission in the U.S., directorate-general for competition in Europe, or other similar agencies around the globe — will follow in the path laid out in Delrahim's speech. We hope so, but we are not confident that they will.

Nor is it clear that the courts, in the U.S. or elsewhere, will follow Delrahim's lead. They clearly have their own views about antitrust issues raised by SEPs. Jurisprudence in this area is evolving over time, in unpredictable directions.

Makan Delrahim appears to be willing to break the mold and put innovation first. In doing so, he also puts America first, because we remain, by a modest margin, the world's greatest innovator. We have a chance of doing better and holding our own if our antitrust agencies change gears and become champions of innovation-enabled competition.

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[1] Makan Delrahim, Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law, Assistant Attorney General, Antitrust Division, US Department of Justice, remarks as prepared for delivery at USC Gould School of Law - Application of Competition Policy to Technology and IP Licensing, Los Angeles, California (November 10, 2017), available at <https://www.justice.gov/opa/speech/file/1010746/download> (hereafter "Delrahim, Limit").

[2] Delrahim, Limit, p. 14.

[3] Delrahim, Limit, p. 5.

[4] Firms are reluctant to pay royalties if they see rivals apparently getting away with not paying, even if they know that the other firm may ultimately face liability for patent infringement. Since patent infringement litigation is costly and time consuming, this adversely affects patent holders' abilities to license their technologies.

[5] Delrahim, Limit, p. 5.

[6] Delrahim, Limit, p. 5.

[7] Delrahim, Limit, p. 6 (footnote omitted).

[8] David Teece and Edward Sherry, "Standards Setting and Antitrust," 87 Minn. L. Rev. 1913–1994 (2003).

[9] Delrahim, Limit, p. 6.

[10] Delrahim, Limit, p. 7.

[11] Delrahim, Limit, p. 11.

[12] See Teece, "Are the IEEE Proposed Changes to the IPR Innovation Friendly?," Working Paper No. 2, Tusher Center for the Management of Intellectual Capital, available at <http://innovation-archives.berkeley.edu/businessinnovation/documents/Teece-Paper-IEEE-Changes-to-IPR-February-2015.pdf>

[13] See Teece and Sherry (2003), p. 1913.

[14] That said, the obligation to pay royalties can affect real resource uses by deterring some customers from buying royalty-bearing products that they would have bought absent the royalties, leading to a

degree of dead-weight loss. Teece and Sherry (2003), supra note 11.

[15] Delrahim, Limit, p. 9.

[16] J.A. Schumpeter, *Capitalism, Socialism, and Democracy*, 13th ed. (London: Unwin University Books [1942] 1974), p. 84.

[17] Delrahim, Limit, p. 12.

[18] Delrahim, Limit, p. 11.