UCLA

Journal of Scholarly Perspectives

Title

Understanding the Rand Commitment

Permalink

https://escholarship.org/uc/item/1jx6g49t

Journal

Journal of Scholarly Perspectives, 8(01)

Author

Lichtman, Douglas

Publication Date

2012

Copyright Information

Copyright 2012 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at https://escholarship.org/terms



Douglas Lichtman Professor of Law

Douglas Lichtman focuses his teaching and research on topics relating to law and technology. His areas of specialty include patent and copyright law, telecommunications regulation, and information strategy and economics.

A graduate of Yale Law School, Professor Lichtman joined the faculty of UCLA School of Law in 2007 after a tenured teaching career at the University of Chicago. His work has been featured in numerous journals, including the Journal of Law & Economics, the Journal of Legal Studies, the Yale Law Journal and the Harvard Business Review. He co-authored Telecommunications Law and Policy, a textbook that investigates the federal regulatory regime applicable to broadcast television, cable television, radio, telephony and the Internet. He also regularly writes in the popular press, with recent pieces appearing in the Los Angeles Times and the policy magazine, Regulation.

UNDERSTANDING THE RAND COMMITMENT*

Douglas Lichtman

In a typical agreement between a buyer and a seller, price is one of the central terms specified in the deal. Yet, in a surprisingly large number of technology agreements, patent holders today are choosing to leave out that critical detail. Instead, in these modern agreements, patent holders adopt as their pricing term only a commitment to later price at a "reasonable and nondiscriminatory" rate. This RAND commitment has been used in patent deals covering everything from 3G cellular communication to DVD video playback. But why are firms adopting it? And how should courts interpret its language? In this essay, I take up these questions, considering the purpose behind this type of price ambiguity and ultimately arguing that, at its core, the RAND commitment is most likely a pro-competitive mechanism primarily designed to guide courts away from patent law's conventional—and here largely inappropriate—damages regime.

ABSTRACT

Prior to adopting a technical standard, standard-setting organizations typically endeavor either to make sure that the standard does not infringe any patent rights or to clear the necessary permissions. The task is a difficult one. The protocol that governs how information is stored on DVD-R media, for example, is known to implicate at least 342 different patents. The encoding, decoding, and transmission protocols relevant to just one type of cellular telephony touch well over 1,000.

I. INTRODUCTION

Those large numbers are problematic because it takes substantial time and money to evaluate a patent. To do the job right, consensus would have to be achieved as to whether the patent is valid, whether it covers a truly essential aspect of the standard at issue, and exactly how much the patent contributes as compared to next-best alternatives. Worse, all of that would need to be done in a context where patent holders have strong incentives to exaggerate, where information about unpublished patent applications is understandably hard to come by, and where there will often rage an independently contentious debate over nonpatent issues like the specifics of what should and should not be included in the standard.

Thus enters the RAND commitment.² Instead of undertaking the difficult task of evaluating asserted patents, most standard-setting organizations simply keep a running list of patents that have been asserted to be relevant by one or another patent-holding participant. Those participants are then required to agree that ultimately, they will make available to the public, on "reasonable and nondiscriminatory terms," any truly essential patent. The need for careful patent analysis is thereby diminished. If a given patent turns out to be irrelevant, no one will need a license for its use anyway. But if a given patent turns out to be essential, at least the relevant patent holder has promised to license at a reasonable and nondiscriminatory rate.

Hidden in that simple solution, of course, is enormous complexity. Is the RAND commitment a license, such that firms can go ahead and implement the technology subject only to a later obligation to negotiate the price? Is it a promise to license, which would mean that implementing firms in fact have no right to use the patented technology until they cut a specific deal? And what happens if, as seems enormously likely, an essential patent holder ultimately thinks one price is reasonable, whereas the implementing firms think a much lower number is appropriate? Is that dispute a contract dispute, litigated using traditional contract damages measures, or a patent dispute, meaning that the patent system's damages regime controls?

In this excerpt, I set out to answer some of these fundamental questions. I begin in Part II by articulating four reasons why firms involved in the standard-setting process use RAND rather than explicitly negotiating price. My main point is that participating firms are attempting to delay price negotiation, but in a way that does not distort that negotiation when it ultimately does take place. In Part III, I build on that insight to advance one primary contention. I argue that triple damages and injunctive relief are both inconsistent with the purpose of RAND, and thus patent holders should not be allowed to invoke those traditional patent remedies in the context of a RAND dispute. In Part IV, I consider alternative interpretations of RAND that would leave traditional patent law remedies more fully intact. Part V then briefly concludes.

II. WHY RAND?

want to start by thinking about RAND from a purely business perspective. That is, for the moment I want to put aside patent, contract, and antitrust law, and I want to focus instead on the business question of why firms might prefer the ambiguous RAND commitment over a more conventional, explicit pricing term. The answer is not immediately obvious. After all, in most business settings, buyers very much want to know the prices associated with competing options so that they can ultimately make tradeoffs between price and quality. Yet, in standard setting, that norm has been largely abandoned. Why?

One reason is that intricate negotiations over patent validity and patent value would take an enormous amount of time. To work through a process where dozens of companies would debate the merits and worth of hundreds of patents would take years. Worse, were consensus not achieved, litigation would run yet more time off the clock, with substantial time lost first at the district court and then on appeal. One charm of the RAND commitment for participants and the public alike, then, is that RAND allows technological implementation to move forward while the parties in parallel work out legal and financial details.

A second and related reason that firms opt for the RAND commitment is that standard setting is a process run by engineers, not lawyers. A technology firm like Microsoft or Dolby can easily be involved in dozens of standard-setting processes at the same time. To send to each of those bodies not only the obviously necessary engineers but also an army of lawyers, business executives, and pricing specialists would be enormously expensive. The RAND commitment thus simplifies the conversation, allowing the engineers alone to run the show until the technical details are fully selected and documented.

A third reason that firms choose RAND is that many new technologies flop. Digital Audio Tape (DAT) technology for a time looked like it was going to be so important that Congress passed a set of laws specifically regulating its sale and use.³ Oops. Similarly, from 2002 through 2008, the HD-DVD standard was backed by industry heavyweights including Toshiba, Sanyo and NEC. Today, HD-DVD technology, too, is just a footnote in history. Thank goodness, then, that EMI, Sony BMG, Universal Music Group, Warner Music, Sony, Toshiba, Sanyo, NEC, Paramount, Hewlett Packard, Microsoft, Apple and their peers did not each invest a fortune vetting those patent situations. They would have negotiated detailed terms for a group of patents that turned out to have little actual commercial value.

A fourth reason that firms opt for RAND—and this is in essence a more general version of reason three—is that RAND allows implementing firms to wait for additional information before they commit to a specific royalty structure. When Al Gore invented the Internet,⁴ no one really understood the impact those protocols would have on commerce, culture, and communication. Much the same, when the now-familiar 2G wireless standard was first promulgated, even that technology's strongest proponents could not have foreseen the degree to which cell phone usage would permeate both work and play. Financial arrangements will often be more efficient in the long run if their details can be negotiated after the negotiating parties more fully understand how the technology at issue is going to be used and by whom. The RAND commitment delays pricing negotiations and thereby allows at least some of that information to be included in the ultimate royalty negotiation.

None of this is meant to imply that a RAND-like approach is inevitable, or even that RAND is clearly the right way to go. My points about delay, failure, and the desirable absence of lawyers are all general arguments that could apply with comparable force in other settings. Businesses are routinely forced to delay the launch of products and services while they lawyer up their relationships and negotiate elaborate deals. And yes, many of those complicated deals ultimately prove worthless because consumers reject the resultant offering. Just the same, in many settings, delay would allow beneficial information to come to light-for instance, information about consumer preferences and the pace of market adoption. But businesses all the time enter into contracts anyway, allocating risk without knowing exactly what will happen next and sometimes making their various obligations contingent on future events. So, while these are all real problems to be sure, RAND is neither the only nor a necessary way to overcome them.

Moreover, RAND has some real drawbacks. Consider, for instance, the fact that the RAND commitment separates the negotiation over the details of a technology from the negotiation over its cost. At my house, that would be an obvious and unacceptable blunder. I can only imagine what my wife would say were I to choose an expensive piece of home electronic equipment-say, a new flat-screen television-without having an estimate of what that hardware and its accessories would ultimately cost. Yet sophisticated companies like Nokia, Ericsson, Nortel, Sony, InterDigital, Texas Instruments, Alcatel, DirecTV, and NEC did exactly that when they hammered out the details of the recently launched Long Term Evolution (LTE) telecommunications standard. They made hundreds of nuanced choices about how LTE-compliant devices would decode, encode, and transmit data, but they did so without any real understanding of what the various options would cost in terms of patent fees. That sort of economic blindness is par for the course in the standard-setting process. But it is still jarring, and it still represents a real downside to the RAND approach.

As I will discuss more fully later in the essay, RAND has another significant drawback as well: It forces courts to take a more active role when it comes to pricing patents. ludges and juries are unlikely to be very good at valuing patented inventions. This would be true in even a simple case where a single patent was at play, but it is all the more true in the context of standard setting, where the value of any one patent has to be judged in light of hundreds or even thousands of other necessary patent rights. An explicit pricing regime would address this difficulty: Standard-setting participants would negotiate each patent's appropriate price, and courts would be asked only to enforce the agreed-upon deals. The RAND commitment, by contrast, puts courts center stage. If the parties cannot agree as to what "reasonable" means, a judge or a jury will ultimately have to wade through the evidence and pick a

number. Moreover, even if the parties in the end agree on what "reasonable" means, their agreement will unavoidably have been influenced by what each party expected a court would do if agreement had not been reached. RAND, then, takes a task that courts perform poorly and makes that task a central driver in the ultimate economic interaction.

All that said, however, the RAND commitment is, as of this writing, widely used in settings where a large number of patents are plausibly implicated by a given technological standard. It might be a good idea. It might be a terrible one. But RAND is today pervasive, and as such it is inevitable that courts will at some point have to interpret its meaning. It is to that topic that I now turn.

t is something of an outrage that the language of the RAND commitment offers so little guidance as to its proper interpretation. What is "reasonable," and how does use of that word compare to patent law's use in the context of "reasonable" royalties? The standard RAND clause does not say. Does "nondiscriminatory" mean that prices must be the same across the board, or does it mean that some degree of price differentiation is fine, but differences keyed to certain distasteful characteristics—discrimination—are verboten? I suspect the latter, but again, the standard clause does not elaborate. Bad enough if this sort of ambiguity had shown up in some private contract governing an interaction of modest economic and cultural import. But the RAND commitment governs patent rights in a breathtaking array of familiar industries and technologies, and in the end it will serve to allocate multiple billions of dollars between and among major firms.

Courts might be tempted to punish this ambiguity by interpreting the commitment to be meaningless, nonbinding, or otherwise ineffective. Such an approach would pressure firms in the future to draft contract language with more precision, in essence implementing the Ayres/Gertner "penalty default" concept. That, however, would be a mistake. Yes, looking forward, standard-setting organizations ought to supplement the traditional RAND language with more specific information about exactly what the clause means. And one can easily imagine a future RAND clause that reads, say, "reasonable and nondiscriminatory, by which we mean that the patent holder has no right to an injunction" or "reasonable and nondiscriminatory, by which we mean to endorse patent law's traditional *Georgia Pacific* factors." But for the RAND commitments already in place, courts are stuck with only two choices: interpret the clause in light of its likely purpose, or strip it of meaning and in that way throw into turmoil the economics that undergird countless important consumer technologies. I myself favor the former approach, and so here I consider how RAND likely ought to be read from both an economic and a patent law perspective.

III. INTERPRETING RAND

A. The Economic Perspective

From an economic perspective, the purpose of the RAND commitment is to ensure that patent holders are not able to earn exaggerated royalties merely because price negotiations have been delayed. Without some sort of pricing commitment, this is exactly what would happen. The price for any technology included in the standard would go up simply because it was chosen. That is emphatically not the point of RAND. Standard-setting participants defer pricing negotiations because they want more information, or because they want to implement the relevant standard more quickly, or because they want to minimize upfront costs. But it seems implausible to think that standard-setting participants opt for RAND in order to randomly and artificially increase each patent holder's ultimate leverage.

To see this point more fully, consider a situation in which two comparable technologies are vying for inclusion in a given standard: Dolby's high-fidelity audio compression codec on the one hand and DTS's rival audio compression technology on the other. Were prices being negotiated at the time of the selection, participants in the standard-setting process would compare the Dolby and DTS approaches. They would identify advantages and disadvantages, and they would ultimately offer the winner a price that reflected its marginal value as compared to the unsuccessful alternative. If the winning patent holder were to hold out for more, standard-setting participants would presumably threaten to switch to the second-best technology. Ultimately, a competitive bidding process would typically yield something close to the efficient price.7

Now consider what would happen if, instead of negotiating at the time of selection, standard-setting participants were to wait and negotiate a few years later. Two important considerations would by then have changed. First, a given licensee would by that point likely have made some technology-specific investments. The firm would have designed its products. It would have built manufacturing facilities. It would have made commitments to buy components from its suppliers. And it would have promised relevant functionality to downstream customers. A patent holder would be able to take advantage of all of those commitments, demanding a royalty that reflected not only the value of the patented technology as compared to next-best alternatives, but also the value that this licensee would place on avoiding disruptions to its already-made investments.

Second, even if a particular would-be licensee had not made patent-specific investments, its peers would have—and that triggers a similar dynamic. Consider standards with respect to driving. Before driving norms were established, the value of "driving on the left" was roughly equal to the value of "driving on the right." Everyone surely agreed that all the drivers in any particular region ought to adopt the same default rule, but the choice between the two was likely a draw, and thus

patents related to either one would have been of similar value. Once a great deal of traffic had opted for the right, however, the economics changed. A patent related to the idea of driving on the left was worth very little. A patent related to the idea of driving on the right was worth a fortune. The change had nothing to do with the relative merits of these two technologies. It was just an example of a more general phenomenon associated with standardization: Patents related to a chosen standard increase in value as more people adopt the standard. This is then another problem with delayed patent negotiations. Patent holders who negotiate after standardization are able to charge prices that reflect the now-realized network value, in essence charging licensees for the fact that other licensees are already committed.

From an economic perspective, then, the important work of the RAND commitment is to minimize these economic distortions. Participants in the standard-setting process might well intend to pay patent holders the royalties they would have gotten had sufficient time, cash, and predictive information been available so as to enable complete negotiation *ex ante*. And participants in the standard-setting process might also intend to pay each patent holder a bit extra as thanks for that patent holder's willingness to delay the price negotiation and in that way reduce the costs associated with the standard-setting process. But there is no reason to believe that standard-setting participants also mean to allow patent holders to hold hostage each participant's standard-specific investments, or to allow patent holders to arrogate to themselves the value created from the group's standardization effort.

From a patent perspective, the purpose of the RAND commitment is to reject patent law's default damages regime. Patent law, it turns out, does not award "reasonable" royalties. Quite the opposite: When a court decides that a valid patent has been infringed, the court typically imposes a remedy the net value of which clearly exceeds the value of any deal the parties would have made had they negotiated a license prior to the infringement. This exaggeration is explicit and intentional. But, with just one exception, the reasons for it do not apply in the RAND context.

One reason patent law intentionally exaggerates is that exaggeration encourages private parties to negotiate rather than litigate. The mechanism here is obvious: An infringer who knows that litigation will yield exaggerated liability has strong incentives to avoid litigation. This is good public policy primarily because judges and juries are not well equipped to value patented inventions. True, they might be able to make educated guesses based on the evidence presented, and they might even be as likely to overestimate as they are to underestimate. But in any specific dispute, there is little reason to believe that judges and juries will come up with even a remotely accurate estimate for the value of the patent at issue.

B. The Patent Law Perspective

1. The General Case for Exaggeration

Private negotiation, by contrast, can be reliable so long as private negotiation takes place before the would-be infringer has made any investments that are specifically tied to the patented technology.⁸ In those circumstances, the negotiation between the patent holder and a potential infringer resembles a competitive interaction. The patent holder can ask for a high starting price; the potential infringer can counter by pointing to potential substitute technologies; and ultimately the process should yield a price that accurately reflects the marginal advantages of the patented technology.

Exaggeration thus can serve a useful purpose. Whenever infringers are able to negotiate prior to making any patent-specific investments, exaggeration helpfully increases their desire to do so. The net result is a patent system where patents are more likely to be priced in the private market, and courts can therefore avoid the difficult task of valuing patented inventions themselves.

The second justification for patent law exaggeration derives from the concern that without exaggeration, infringers would have a strong incentive to hide their illegal activity instead of addressing it. My remarks thus far already speak to this concern in part. My first justification for exaggeration was that it creates an incentive for an infringer to negotiate prior to making patent-specific investments. Obviously, to negotiate, an infringer will have to identify himself to the patent holder, and thus an incentive to negotiate is simultaneously a disincentive to hide. But hiding is a bigger issue than just that. Consider, for instance, an infringer who neither knew nor could have known about a patent prior to making patent-specific investments. If this infringer later discovers the patent, he will be reluctant at that point to contact the patent holder and negotiate because then the patent holder will hold hostage the infringer's already-made investments. Worse, this infringer will have an affirmative incentive to keep quiet. After all, the patent holder might never even notice the infringement, and hence, if the infringer keeps his head down, he might never have to pay. The patent system on these facts faces a real challenge: The system needs to create an incentive for the infringer to identify himself, but at the same time it needs to protect him from an undesirable hostage situation.9

Exaggerated damages can solve this problem. Where there is evidence that the licensee reasonably could have stepped forward but chose not to, patent law can punish that choice by exaggerating. The infringer would suffer because of his decision to hide, and in the long run that would encourage infringers in similar situations to step forward. By contrast, in cases where the licensee does step forward, patent law can promise to take its thumb off the scale, calculating royalties with an eye toward the royalty the parties would have struck had they been able to strike a deal before the infringer first invested. The parties would then hopefully foresee that evenhanded result and negotiate in its shadow. But the key point is that the backstop to their negotiation would be the threat of a truly reasonable

royalty and not the threat of either a hostage-taking situation or exaggerated court remedies. ¹⁰

The third justification for patent law exaggeration is simply this: Exaggeration is the way the patent system accounts for changes in patent uncertainty. Prior to litigation, there is almost always some uncertainty as to whether the patent at issue is valid, whether the patent at issue actually has been infringed, or both. That is, the accused infringer might plausibly argue that the patent should never have been issued, and the accused infringer might similarly argue that its technology is not covered by the patent's claims. Litigation resolves the uncertainty. Thus, when a patent holder prevails, the damages awarded naturally are higher than the royalties the parties would have negotiated prior to verdict. Negotiated royalties reflect uncertainty; court-determined royalties do not. Think of it this way: If prior to litigation a patent holder and a would-be licensee both agree that there is a 50 percent chance that the asserted patent is invalid, their private deal would reflect those doubts. The licensee would demand a discount as compared to a sure-thing royalty, and the patent holder would accept that discount in order to avoid the risk of a bad outcome. If that patent holder ends up successfully litigating the issue, however, the resulting courtordered royalty should no longer reflect that 50 percent discount. Had the patent holder lost the case, he would have earned nothing. Given that he won, he should correspondingly earn the undiscounted award. Intuitively, that's what it means to take the risk of actually litigating the issues.

There are many patent doctrines that implement patent law's exaggeration approach. These doctrines largely track the policy intuitions sketched above. An obvious example is the rule with respect to willful infringement. Under current law, if an infringer knew or should have known about a patent, and if that patent's validity and relevance is objectively clear, then the court can use its discretion to award up to triple damages. The logic is that, on those facts, the infringer was presumably in a great position to seek out the patent holder and negotiate a license prior to the infringement. The infringer knew or should have known about the patent, and the infringer should have paid up because the patent was so clearly valid and infringed. Courts therefore are empowered to triple the damages, thereby encouraging negotiation in similar future situations.

Another way patent law implements its exaggerated damages regime is through the system's willingness to issue injunctions against future infringement. When a patent holder wins an infringement case, the patent holder typically requests not only cash for infringement that has already occurred, but also an injunction barring future infringement. The idea is that the injunction will force the infringer to negotiate with the patent holder, and thus the private parties will set their own forward-looking

2. How Patent Law Exaggerates

royalty rather than relying on the judge or the jury to do so.13 That negotiated royalty will be exaggerated, however, because of the sunk-cost problem discussed earlier. A firm that has already begun to use what turns out to be an infringing technology will typically also already have made investments specific to that technology. The firm's manufacturing facilities will already be tailored to produce the infringing component. The firm's contracts with its suppliers and its customers will already be tethered to that and not some other technical approach. As a result, the infringer will be willing to overpay for the technology, paying the intrinsic value of the technology as compared to its next-best substitute plus a kicker that reflects the savings associated with not having to change its production facilities or in other ways disrupt existing business relationships and practices.14

A third way patent law exaggerates is through a false assumption that is nevertheless routinely employed in damages analysis. When a patent holder sues for damages, he can request that a "reasonable royalty" be determined through what is known as a "hypothetical negotiation" framework. As explained by the courts, the hypothetical negotiation simulates the conversation that the infringer and the patent holder would have had if they had negotiated prior to the first act of infringement.¹⁵ The courts endeavor to run the simulation accurately, even going so far as to consider only information that was actually available at the time the negotiation would have occurred. But courts then make one initially surprising move: They assume that both parties involved in the negotiation believe the patent to be valid and infringed.¹⁶ In reality, of course, there would almost always have been doubt. But this false assumption is made for the reason I discussed above: A patent holder whose patent survives litigation must be compensated for having incurred that risk, and so the royalty calculation made after verdict must build patent validity and infringement into the math.

3. Exaggeration and RAND

Reasonable minds can disagree over whether these various exaggeration techniques are in the end an effective way to address the public policy concerns that justify them. My own view is that these doctrines need to be more explicitly tied to their underlying policy goals because today patent holders seem to abuse these rules by invoking them in situations where they ought not apply. For the purposes of this essay, however, my point is more narrow. Whatever its merits in general, exaggeration like this is for the most part inappropriate as applied to patents covered by the RAND commitment.

The first policy consideration, the idea of encouraging negotiation prior to investment, is clearly inapt. The whole purpose of the RAND commitment is to allow patent holders and would-be infringers to delay negotiation. Yes, one consequence of that delay is that infringers and patent holders both miss out on

the chance to negotiate prior to investment. And that is a real cost to the system: Private negotiation prior to investment is surely a more accurate means by which to establish patent value than are alternatives like private negotiation after investment or explicit court determination. However, that is the choice RAND embodies. Thus, to the extent the RAND commitment is going to be enforced—and I have argued that it should be, at least with respect to deals already in place—it makes no sense to impose exaggerated damages to punish the very delay RAND set out to accomplish.

The second policy consideration—the concern about undetected infringement—also resonates poorly in the RAND context. Patent holders in conventional settings find it difficult to identify infringers because infringers tend not to speak up. Moreover, infringing products and processes can be hard to reverse-engineer, and that too makes detection by the patent holder difficult at best. In the RAND context, however, these problems are either fully eliminated or substantially reduced. For one thing, participants in the standard-setting process identify themselves publicly. No hiding there. Similarly, firms that produce products or implement processes consistent with a standard also typically self-identify. They label their products as standard-compliant, or the fact of standard compliance is obvious upon even casual inspection. Admittedly, that still leaves some special cases where the infringer's economic footprint might be so small that it goes unnoticed, or where the use of a particular standard is not evident on the face of the relevant product or process. Still, for the most part, detection is not a significant problem in the typical RAND setting, and hence, when interpreting RAND, damages exaggeration cannot be readily justified on that ground.

That leaves only the third policy consideration, the one keyed to patent uncertainty—and good thing. Patent uncertainty in the context of the RAND commitment plays out exactly the same way as it plays out in conventional patent settings. Prior to verdict, a potential licensee will offer a royalty that discounts for the fact that the patent rights are uncertain. After verdict, however, that uncertainty is resolved, and the royalty should adjust accordingly. Indeed, the system would not work otherwise. Suppose that a patent holder and a would-be licensee both thought that there was a 25 percent chance that the patent at issue was valid. If at the end of litigation the court awarded only 25 percent of the sure-thing royalty, the entire negotiation dynamic would unravel. Prior to verdict, the would-be licensee would argue that the patent holder had only a 25 percent chance of winning and, at that, would win only 25 percent of the sure-thing royalty. Thus the licensee would rationally offer a paltry 6.25 percent of patent value, in essence wrongly double-counting the 25 percent discount. Exaggeration is thus still necessary with respect to patent uncertainty, even under RAND.

Where does all that leave us? Injunctive relief primarily serves the first policy consideration, and willful damages primarily serve the second. Both of these measures of patent damages should therefore be off the table in the RAND context. The exaggeration inherent in the reasonable royalty framework, by contrast, primarily serves the third policy consideration, and hence that exaggeration ought to survive.

There are several plausible ways to achieve these outcomes. Courts could interpret RAND as a public commitment that creates a defense of equitable estoppel. Under that estoppel, the patent holder would be deemed to have permanently waived his right to seek triple damages or to ask for injunctive relief, but would otherwise be allowed to invoke patent law's damages regime. Courts could just as well interpret RAND as creating an implied license, with the license rendering moot any claim to injunctive relief or triple damages, but leaving the court with the power to determine the royalty due. I do not mean to choose between these and other options here. I only want to emphasize that no matter what doctrinal lens courts apply, the goal should be to trim patent law's damages regime such that the damages awarded ultimately approximate the royalty the parties would have negotiated prior to standardization plus a kicker for the now-resolved uncertainty.

IV. OTHER **VIEWS**

f my analysis thus far is correct, the RAND commitment is, at its heart, a mechanism by which private parties can delay pricing negotiations without inadvertently skewing the outcome of those negotiations. It is an implicit rejection of the standard patent damages regime (which would very much skew the outcome), and it is less problematic on antitrust grounds than the only obvious alternative: a group-wide, ex ante, explicit conversation about price.

Where, then, might other voices disagree? One possible competing interpretation would read the RAND commitment as simply a promise to make a reasonable offer. In this view, a patent holder subject to the RAND commitment must offer a reasonable royalty to each interested licensee; however, if a licensee rejects that offer, all bets are off, and the patent holder is at that point free to exercise its patent rights as if there had been no RAND commitment. I reject this interpretation because its predictable implication is to overcompensate patent holders. After all, there will always be enormous uncertainty over precisely what is and is not a reasonable royalty. Yet if the RAND commitment were read this way, a licensee who in good faith disagreed with a patent holder could pursue that disagreement only by taking the risk of paying double, triple, or more, depending on the details of patent law's exaggeration regime. As a result, licensees would rationally accept high royalties because the certainty of overpaying slightly would be more attractive than the distinct possibility of overpaying by a multiple.

A variant on this theme would be an interpretation that protects licensees, but only so long as they engage in good faith negotiation. That approach has some charm, but it puts enormous pressure on courts to determine whether a licensee is acting in good faith. I would not object to that if the test were a conservative one, such as a rule that imposed exaggerated damages only in instances where some smoking-gun email made bad faith plain. But I worry about less reliable tests in that they would create the same uncertainty that I sketched above: A licensee acting in good faith would worry that a court might later misconstrue those intentions, and because of that the licensee would knowingly accept a moderately high royalty in order to avoid the risk of an astronomical one.

Another interpretation that would leave the door open to triple damages and injunctive relief is an interpretation under which the patent holder would be required to continually extend a reasonable offer, even after a licensee had previously turned down that offer. The idea here is that the would-be licensee's risk would be capped: The licensee would be exposed to exaggerated damages for as long as the dispute raged, but the licensee could end that exposure at any time by accepting the patent holder's always-open offer. The problem this time is that the period of exaggerated damages could still be significant because patent litigation and its reasonable appeals can easily last years. This would again put an enormous thumb on the scale, pressuring licensees to accept a royalty that is higher than reasonable but not so high so as to warrant the risks of litigation.

In resisting these alternative views, I do not mean to ignore the opposite problem: Under my interpretation, RAND does little to encourage standard-setting participants to negotiate rather than litigate. Remember, patent law solves this problem by threatening to impose exaggerated damages on any infringer who could have negotiated, and should have negotiated, but in fact did not. RAND dismantles that exaggerated remedy regime (for good reason) but then offers nothing to replace it. The upshot might be that patent holders who agree to the RAND commitment will in the end be undercompensated. They will have to either discount their rates in order to lure licensees to the table or incur the costs, risks, and delay of litigation in order to ultimately be paid their due. I favor this distortion over the opposing one, however, because it should be much smaller. The cost of litigation can be large, but it will almost always be rounding error when compared in size to the exaggeration built into patent law's damages regime. Besides, courts in fact offset much of this distortion by requiring adjudged infringers to pay expenses, attorney's fees, interest, and the like.

V. CONCLUSION

y ambition in this essay was to articulate the reasons why firms in the standard-setting context opt for the RAND commitment rather than explicitly negotiating price, and relatedly to explain what the RAND commitment as a result likely means. My answers are hopefully by this point evident. Firms choose RAND because they want to delay pricing negotiations without inadvertently skewing the outcome of those later deals. As a result, RAND must be interpreted to reject much of the conventional exaggerated patent damages regime. The result is not a perfect framework for patent licensing. However, the possibility of voluntary delay does open the door to significant efficiencies, and surprising as it might be, firms involved in standard-setting obviously believe that those efficiencies outweigh the associated costs.

Am I therefore a fan of the current RAND approach? Hardly. The success of the RAND commitment in the end turns on the ability of a court to calculate a nonexaggerated reasonable royalty. If courts tend to pick royalties that are too high, then private parties negotiating in the shadow of litigation will also choose too-high rates. If courts tend to pick royalties that are too low, then private parties will similarly strike inefficiently modest deals. The only plausible happy story is a story where courts have no predictable or systematic bias. Of that I am enormously skeptical.

More broadly, though, I dislike RAND as it exists today because it could easily be so much more. This is a clause invoked by a veritable who's who of technology and electronics companies. One would think that when firms of that caliber gather together to establish an elaborate agreement about the future of some promising new technology, they would at the same time opt out of the default legal regime and establish their own expert arbitration process to resolve future disputes accurately and at an appropriate pace. But no. That frankly boggles the mind. Where conflicts are a surprise-for instance, any classic tort-the default legal regime is the only option. Prior to a car crash, I cannot by contract agree with the other driver that we will use a more efficient mechanism for allocating fault. But here, sophisticated private parties can foresee conflict, they know that the subject matter of that conflict will be enormously difficult for a lay judge or lay jury to evaluate, and they are already in contact with one another through the standard-setting process. Private dispute resolution should naturally follow.

So, yes, because billions of dollars are today at stake across a host of important industries, courts should interpret RAND with an eye toward the purposes and policies articulated here. And yes, as new RAND commitments are written, standard-setting participants ought to make explicit their repudiation of patent law's exaggerated damages regime. But just as important, standard-setting organizations in the future need to invest in alternative dispute resolution. RAND as it exists today can only be as good as the courts that will enforce it. And with so much inventive activity on the line, that seems hardly good enough.

ENDNOTES

- * This is a shortened version of an article originally published as Doug Lichtman, *Understanding the RAND Commitment*, 47 Hous. L. Rev. 1023 (2010). It is excerpted here by permission.
- a. Although RAND is the common acronym used in the United States, in Europe the relevant acronym is FRAND, which stands for "fair, reasonable and nondiscriminatory."
 For purposes of this Essay, I use the RAND formulation, but everything I say here is equally applicable to the FRAND variation.
- 2. I refer here to the now largely irrelevant Audio Home Recording Act of 1992, 17 U.S.C. §§ 1001–1010 (2006).
- Just teasing. See Richard S. Whitt, Adaptive Policymaking: Evolving and Applying Emergent Solutions for U.S. Communications Policy, 61 Fed. Comm. L.J. 483, 548 (2009) (discussing how Vice President Al Gore was wrongly accused of having himself claimed to "invent" the Internet).
- 4. Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87, 97 (1989).
- 5. See Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (articulating the now-famous list of considerations relevant to the calculation of a reasonable patent royalty).
- 6. None of this is to rule out the possibility that some technologies are unique and thus would not be substantially constrained by *ex ante* competition. If there were only one way to encrypt data for cellular transmission, for instance, the patent covering that technology would be worth a fortune no matter when its value was determined. Thus, when I refer to a competitive price, I mean only to refer to the price that would be assigned at a time prior to standardization. That price might be low. It might be high. But it would reflect the value inherent in the technology rather than the value created by the decision to standardize.
- negotiation is reliable so long as the negotiation takes place before the would-be infringer has made any patent-specific investments"—are simply not true. Recall, for instance, my example about the norms related to driving on the right side of the street. In that context, even if an accused infringer had not invested prior to negotiation, the negotiation would still be skewed if a substantial number of other firms had already invested. This is increasingly a problem for the patent system. The patent system's core assumption about the efficiency of private market transactions might have been valid in a world where products were typically covered by one and only one relevant patent, or a world where network externalities were not of significant economic import. But the modern world does not remotely meet either of those conditions, and that is one of many reasons why the patent system today is troublingly out of kilter.
- 8. Although this essay is not the place to explore the issue fully, I cannot help but point out another possible solution to this problem: Deem the infringer's use of the invention perfectly legal. On the facts I sketch above, the accused infringer independently

invented the patented invention. He did not copy it from the patent holder, he did not know about the patent itself, and he could not have discovered the patent had he engaged in reasonable efforts to find it. In that situation, patent law could in theory declare independent invention to be a complete defense to patent infringement. The patent system exists to reward patent holders for bringing inventions into meaningful public use, either through their own efforts or through proactive licensing. Here, the patent holder did no such thing, and the patent system could take that into account by refusing to recognize infringement.

- 9. Exaggeration and hostage-taking are different, in that one is calibrated by legal doctrines while the other is random. That is, when patent law is the source of the exaggeration, courts are in theory actively choosing the degree of exaggeration by (say) calibrating the relevant injunction or specifying whether damages ought to be doubled or tripled. In hostage-taking, by contrast, the extent of any overpayment turns on a number of arbitrary factors, including the amount the infringer has already invested in the patented technology and the number of other patent holders who are able to hold hostage that same sunk investment.
- 10. See In re Seagate Tech., LLC, 497 F.3d 1360 (Fed. Cir. 2007) (articulating the modern willfulness doctrine).
- 11. Discretion is an important part of the doctrine because willful damages are inappropriate in some instances where the formal test is nonetheless met. For instance, sometimes an infringer will hear of an obviously valid patent only after the infringer has made patent-specific investments. If the infringer were at that point to reach out to the patent holder, the patent holder would attempt to hold those investments hostage. Willful damages ought not punish the infringer for turning down that distorted deal. Quite the opposite, when faced with that situation, it is reasonable for an infringer to ask the court for an impartial valuation, rather than simply paying a clearly exaggerated royalty.
- 12. Sometimes, of course, the patent holder is not interested in negotiating at all, preferring instead to bar infringement and thus limit the number of firms using the invention.
- 13. The Supreme Court's recent decision in eBay Inc. v. MercExchange, L.L.C. helps to check this form of exaggeration because a defendant in this position could convince the court that, under the eBay test, an injunction ought not issue. The court would then itself impose a forward-looking royalty that would not take into account patentspecific sunk costs. The law here is not sufficiently developed to know for sure whether that sort of argument will carry the day, but eBay at least opens the door. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006).
- 14. See, e.g., Radio Steel & Mfg. Co. v. MTD Prods., Inc., 788 F.2d 1554, 1557 (Fed. Cir. 1986) (explaining the hypothetical negotiation framework). Note that this approach inherently exaggerates, in that the value of the technology would be more accurately represented by the royalty the parties would have chosen had they been able to

- negotiate before the infringer made any patent-specific investments. Courts, however, mistakenly run the analysis at the time of the first infringement.
- 15. See Robert Goldscheider, The Employment of Licensing Expertise in the Arena of Intellectual Property Litigation, 36 IDEA 159, 174 (1996).