THE
CRITERION
JOURNAL ON INNOVATION

VOL. 3 2018

The FRAND Contract

J. Gregory Sidak[*]

Government agencies in various countries have issued guidelines to facilitate private negotiation to license the use of standard-essential patents (SEPs) that a patent holder has voluntarily committed to a standard-setting organization (SSO) to offer to license on fair, reasonable, and nondiscriminatory (FRAND) terms (or on reasonable and nondiscriminatory (RAND) terms, as the case may be) to a third-party seeking to implement the standard. In effect, these jurisdictions are competing in a tournament of sorts to identify the best legal framework for resolving FRAND licensing disputes. A leading candidate is the existing body of U.S. contract law.

In this article, I examine the FRAND licensing of SEPs through the lens of U.S. contract law.[1] I will eschew the phrase "FRAND commitment" in favor of the bulkier but more precise phrase "the FRAND contract between the SEP holder and the SSO." That terminology helps to clarify that the license agreement potentially formed between the SEP holder and the implementer on FRAND terms is a separate, subsequent contract that is entirely distinct from the preexisting contract into which the SEP holder and the SSO have entered.

I begin by asking in Part I whether the FRAND contract is enforceable. U.S. courts have found that it is, yet commentators, courts, and other

* Chairman, Criterion Economics, Washington, D.C. Email: jgsidak@criterioneconomics.com. I thank Kelsey Hopkins, Jihyuon Park, Urška Petrovčič, Marc Richardson, Jeremy Skog, Blount Stewart, Han Tran, and Andrew Vassallo for helpful comments. I have served as a consulting or testifying economic expert for Ericsson, Netlist, and Qualcomm (as well as many other firms on a nonpublic basis) in disputes or negotiations concerning the licensing of SEPs on FRAND or RAND terms. No third party has commissioned or funded this article. The views expressed here are solely my own.

1 Much of the discussion in this article updates and expands the comments that I submitted to the Japanese Patent Office (JPO) on November 1, 2017. *See* J. Gregory Sidak, Comments on the Japan Guidelines for Licensing Negotiations Involving Standard-Essential Patents, Japan Patent Office (Nov. 1, 2017); *see also Invitation to Contribute to Guidelines for Licensing Negotiations Involving Standard Essential Patents (SEPs)*, JAPAN PATENT OFFICE (Sept. 29, 2017), https://www.jpo.go.jp/iken_e/170929_hyojun_e.htm. Unless otherwise noted, my remarks in this article apply with equal force to an SEP holder's obligation to offer to license its SEPs on RAND terms.

tribunals have flagged various theories of unenforceability when analyzing a FRAND commitment as a contract.

In Part II, I analyze the anatomy of the FRAND contract, as informed by first principles of U.S. contract law. Whether, with respect to a given implementer, a given SEP holder has discharged its FRAND duty to the SSO turns on whether the SEP holder has offered to license its SEPs to that implementer on FRAND terms. An implementer loses its rights as a third-party beneficiary of the SEP holder's FRAND contract with the SSO if the third-party beneficiary rejects a FRAND offer or if it fails to accept that offer within a reasonable time. By underscoring the applicability of these fundamental principles of U.S. contract law, judges, arbitrators, and other decision makers would encourage both the SEP holder and the implementer to avoid dilatory tactics and orthogonal bargaining positions when negotiating license terms for the use of SEPs.

In Part III, I examine some of the frameworks that other countries have recently proposed for guiding negotiations for SEPs. Although these frameworks supposedly identify principles that would facilitate the license negotiation between an SEP holder and an implementer of an industry standard, they ignore the relevance of first principles of contract law. Instead, they try to reinvent the wheel—by fashioning a *sui generis* bargaining protocol for SEP license negotiations that ignores the transactional efficiency of preexisting contract principles of offer and acceptance. These proposals are unlikely to be more efficacious than U.S. contract jurisprudence in defining a clear protocol that encourages the expeditious execution of bilaterally negotiated FRAND licenses.

In Part IV, I offer preliminary observations on how a given SEP holder and a given implementer might agree to opt out of the FRAND contract so as to create a superior structure for concluding their bilateral negotiation of a license or, in the event of an impasse, for achieving a more expeditious and cost-effective resolution of their dispute.

I. Is the FRAND Contract Enforceable?

The first question in any given case is whether the SEP holder's licensing commitment to the SSO in question constitutes an enforceable contract. In the United States, the Restatement (Second) of Contracts defines a contract as "a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty."[2] Although contract law can vary by state, the formation of a contract in the United States generally "requires a bargain in which there is a

[2] Restatement (Second) of Contracts § 1 (Am. Law Inst. 1981); *see also* J. Gregory Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, 1 Criterion J. on Innovation 1001, 1003 (2016).

manifestation of mutual assent to the exchange and a consideration."[3] The Restatement (Second) specifies that the parties to a contract have manifested mutual assent when "each party either [has made] a promise or [has begun] or [has] render[ed] a performance."[4] For a bargain to produce an enforceable contract, both parties must exchange some kind of consideration, in addition to their mutual assent—that is, both parties must give something of value to induce the other to enter into the contract.[5]

Whether an SEP holder's FRAND commitment to an SSO results in a binding contract between them depends on the language of the SEP holder's specific licensing declarations, the language of the SSO's bylaws and patent policies, and the applicable law governing the relationship between the SEP holder and the SSO.[6] Several U.S. courts—applying contract law of different jurisdictions (including Wisconsin state law, Washington state law, and French law)—have found that the SEP holder's FRAND commitment constitutes a binding contract with the SSO, and that an implementer of the standard is a third-party beneficiary of that FRAND contract, entitled to enforce the SEP holder's obligations arising from that contract.[7]

Some commentators have argued, and one U.S. administrative court has found, that the FRAND contract between an SEP holder and an SSO is *not* enforceable. For example, law professor Jorge Contreras, writing in 2015, has argued that "FRAND and other commitments embodied in SDO [standards development organization] policies could suffer too much indeterminacy to be found enforceable."[8] In 2017, Chief Administrate Law Judge (ALJ) Charles Bullock of the U.S. International Trade Commission (ITC) found, in the 1023 Investigation, *Certain Memory Modules and Components Thereof, and Products Containing Same*, that the RAND contract between the complainant and its SSO, the Joint Electron Device Engineering Council (JEDEC), was unenforceable because of indefiniteness.[9]

3 Restatement (Second) of Contracts § 17(1) (Am. Law Inst. 1981).

4 *Id.* § 18.

5 *Id.* § 71 ("To constitute consideration, a performance or a return promise must be bargained for.").

6 *See* Apple, Inc. v. Motorola Mobility, Inc., 886 F. Supp. 2d 1061, 1083 (W.D. Wis. 2012) (Crabb, J.) ("In this case, the combination of the policies and bylaws of the standards-setting organizations, Motorola's membership in those organizations and Motorola's assurances that it would license its essential patents on fair, reasonable and nondiscriminatory terms constitute contractual arrangements.").

7 *See, e.g.*, *id.* at 1085 (applying Wisconsin state law); TCL Commc'ns Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, No. 14-341, 2017 WL 6611635, slip op. at *5 (C.D. Cal. Dec. 17, 2017) (Selna, J.) (applying French contract law), *appeal docketed*, No. 18-1363 (Fed. Cir. Jan. 2, 2018); Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 878 (9th Cir. 2012) (applying Washington state law). The UK Patents Court has also found that an SEP holder's FRAND commitment to the European Telecommunications Standards Institute (ETSI) constitutes a binding contract with that SSO, pursuant to French law. *See* Apple Retail UK Ltd. v. Qualcomm (UK) Ltd. [2018] EWHC (Pat) 1188 (Eng.); Unwired Planet Int'l Ltd. v. Huawei Techs. Co. [2017] EWHC (Pat) 1304 (Eng.).

8 Jorge L. Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, 2015 Utah L. Rev. 479, 515.

9 Certain Memory Modules and Components Thereof, and Products Containing Same, Inv. No. 337-TA-1023, at 195 (USITC Nov. 14, 2017) (Final Initial Determination) [hereinafter

It is enlightening to study Chief Judge Bullock's reasoning regarding the unenforceability of this particular RAND contract. Pursuant to the patent policy embedded in JEDEC's Manual of Organization and Procedure, if an SEP holder owns patents that it believes are essential to a JEDEC standard, and if that SEP holder wishes to participate in the development of that standard, it must declare that "[a] license will be offered[] to applicants desiring to utilize the license for the purpose of implementing the JEDEC Standard under reasonable terms and conditions that are demonstrably free of any unfair discrimination."[10] Chief Judge Bullock observed that JEDEC's Manual provides that JEDEC's patent policy shall be interpreted and governed under New York law.[11] However, he added that, "under New York law, '[a] court cannot enforce a contract unless it is able to determine what in fact the parties have agreed to,' . . . and '[i]f an agreement is not reasonably certain in its material terms, there can be no legally enforceable contract.'"[12]

Chief Judge Bullock observed that JEDEC gives no guidance on how to determine whether a member's offer to license its SEPs to an implementer of a JEDEC standard is RAND.[13] He further noted that section 8.2.1 of JEDEC's Manual of Organization and Procedure, which provides "Terms and definitions" for JEDEC's patent policy, neglects to define both "reasonable" and "unfair discrimination."[14] Chief Judge Bullock concluded that "the obligation to license on RAND terms, which appears to be a material term of the JEDEC Patent Policy, is anything but 'reasonably certain,'" and thus he found, in November 2017, that "New York law appears to require that the agreement be considered unenforceable."[15]

As of May 2018, no state or federal court in the United States has found the FRAND contract to be unenforceable.[16] However, if a court does find an SEP holder's FRAND commitment to be unenforceable, the upshot would

USITC Inv. No. 337-TA-1023, Final Initial Determination]. I submitted expert economic testimony to the ITC in the 1023 Investigation on behalf of the complainant, Netlist, Inc.

In an earlier ITC investigation, Administrative Law Judge Theodore Essex examined the complainant's FRAND commitment to, and the underlying intellectual property rights (IPR) policy of, ETSI and found that its Rules of Procedure were not a contract, but merely rules to "guide [ETSI and its members] in their interactions with the organization, other members and third parties." Certain Wireless Devices with 3G and/or 4G Capabilities & Components Thereof, Inv. No. 337-TA-868, Pub. 2929, 2014 WL 2965327, at *75 (USITC June 13, 2014) (Initial Determination).

10 JEDEC, JEDEC Manual of Organization and Procedure § 8.2.5(ii) (Nov. 2017), https://www.jedec.org/sites/default/files/JM21S.pdf; *see also* JEDEC, License Assurance/Disclosure Form, https://www.jedec.org/sites/default/files/License_Assurance-Disclosure_Form_20150710.pdf. For further analysis of JEDEC's RAND contract, see J. Gregory Sidak & Jeremy O. Skog, *Hedonic Prices and Patent Royalties*, 2 Criterion J. on Innovation 601, 604–08 (2017).

11 USITC Inv. No. 337-TA-1023, Final Initial Determination, *supra* note 9, at 194.

12 *Id.* (quoting Carione v. Hickey, 133 A.D.3d 811, 811 (N.Y. App. Div. 2015)).

13 *Id.*

14 *Id.*

15 *Id.* at 195 (quoting *Carione*, 133 A.D.3d at 811).

16 I am also not aware that, as of May 2018, any court outside the United States has found a FRAND contract to be unenforceable. However, as I stated in the introduction, my focus in this article is U.S. law, and thus I have not undertaken an exhaustive survey of court decisions in other jurisdictions.

be that the SEP holder never had a *contractual* duty to offer to license its SEPs to any implementer of the standard, let alone to offer to license those SEPs on FRAND terms. The implementer would thus be precluded from bringing a claim for breach of contract against the SEP holder for allegedly failing to offer to license its SEPs to the implementer on FRAND terms. Any ongoing dispute between the SEP holder and the implementer after such a finding of lack of contract formation would be governed by U.S. patent law (assuming that the patents in suit are U.S. patents), in which section 284 of the Patent Act provides that damages for patent infringement shall be of an amount "adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer."[17] If the SEP holder has no enforceable obligation to the implementer pursuant to the FRAND contract, and if the Patent Act (along with section 337 of the Tariff Act of 1930[18]) is instead the controlling law, then the SEP holder may, among other things, (1) seek an injunction against the implementer, (2) seek an exclusion order against the implementer's infringing articles, (3) charge the implementer a royalty that exceeds the FRAND range,[19] (4) decline to license its SEPs to the implementer in question altogether, and (5) seek enhanced damages for the implementer's willful infringement of those SEPs.[20]

Contreras has suggested legal rationales beyond contract law—including promissory estoppel, equitable estoppel, and antitrust law—by which implementers could enforce an SEP holder's FRAND commitment.[21] The finding that a FRAND contract is unenforceable might not foreclose those other theories of enforcement. It exceeds the scope of this paper to address the merits of such theories, although I have done so to a limited extent elsewhere.[22] It nonetheless should be briefly noted that, under those alternative

[17] 35 U.S.C. § 284.

[18] 19 U.S.C. § 1337.

[19] *See* J. Gregory Sidak, *Is a FRAND Royalty a Point or a Range?*, 2 Criterion J. on Innovation 401 (2016).

[20] *See, e.g.*, Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc., No. 2:14-cv-911, 2016 WL 4596118, at *2 (E.D. Tex. Sept. 3, 2016) (Gilstrap, C.J.); *see also* J. Gregory Sidak, *Enhanced Damages for Infringement of Standard-Essential Patents*, 1 Criterion J. on Innovation 1101 (2016).

[21] *See, e.g.*, Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, *supra* note 8, at 500 ("Most commentators today would probably agree that patent pledges, or at least some significant percentage of them, ought to be enforced. However, there is a wide divergence of views regarding the most suitable theory to support such enforcement. [I] review[] the primary enforcement theories that have been advanced to date and assess[] their strengths and weaknesses."); *see also id.* at 538 (proposing "a new 'market reliance' theory that looks to securities regulation and the doctrine of fraud-on-the-market to adapt the doctrine of promissory estoppel for the enforcement of FRAND commitments and other patent pledges"). It is striking that, unlike Contreras, other commentators who subscribe to the patent-holdup conjecture concerning SEPs seem not to recognize the obvious legal and economic implications of the contractual nature of the FRAND commitment. *See, e.g.*, Letter from 77 Former Government Enforcement Officials and Professors of Law, Economics, and Business to Assistant Attorney General Makan Delrahim, U.S. Department of Justice, Antitrust Division (May 17, 2018).

[22] I have previously explained how a court's finding that a FRAND commitment is unenforceable in contract for lack of formation would prompt the court's analysis in equity of unjust enrichment and

legal rationales, the implementer's remedies would differ from those available for a breach-of-contract claim. That difference in the character of available remedies underscores why it is important for a judge or arbitrator to determine at the outset of a dispute over FRAND terms whether the FRAND commitment in question constitutes an enforceable contract.

II. The Anatomy of the FRAND Contract

When a tribunal deems a particular FRAND commitment to be an enforceable contract between the SEP holder and the SSO, first principles of contract law identify the permissible conduct of both the SEP holder and the implementer in their subsequent bilateral negotiation for a license. Under U.S. law, contract principles identify the SEP holder's precise obligations and, correspondingly, the implementer's precise rights as a third-party beneficiary of the FRAND contract between the SEP holder and the SSO; contract principles also determine whether the implementer, in negotiating FRAND terms, loses its rights as a third-party beneficiary.[23] When U.S. contract law governs the obligations arising from the SEP holder's FRAND commitment to the SSO, the tribunal's explicit recognition of the controlling authority of those contractual principles will induce the parties not only to avoid practices that prolong the negotiation, but also to work toward the prompt execution of a license agreement, which will hasten the standard's implementation and thus advance the public interest.

A. The SEP Holder's Obligations Arising from Its FRAND Contract

A commitment to offer to license one's SEPs on FRAND terms imposes specific contractual obligations on the SEP holder. Because the SEP holder's precise obligations can vary across SSOs, it is necessary to examine the precise language of the FRAND contract between the SEP holder and the SSO (and perhaps also the SSO's bylaws) to identify the scope of the SEP holder's contractual duties. Despite this variation across SSOs, some kinds of obligations do commonly arise from an SEP holder's FRAND contract with the SSO, presumably because those common provisions serve some animating purpose of the FRAND contract. For example, a typical FRAND contract between the SEP holder and the SSO imposes on the SEP holder a duty to *offer* to license its SEPs to implementers of the standard on FRAND

restitution. *See* J. Gregory Sidak, *The Meaning of FRAND, Part I: Royalties*, 9 J. Competition L. & Econ. 931, 1032–33 (2013). I have also explained why it is unlikely that an alleged infringer of SEPs could prove the three necessary elements of an equitable estoppel defense. *See* J. Gregory Sidak, *The Meaning of FRAND, Part II: Injunctions*, 11 J. Competition L. & Econ. 201, 223–24 (2015).

[23] *See* Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 2, at 1002–14.

terms.[24] The SEP holder's offer needs to be sufficiently specific to permit an implementer to accept the offer and to enter into a binding license agreement.[25] An SEP holder that has not extended a FRAND offer to a given implementer has not discharged its contractual obligations to the SSO.[26] For example, in *Realtek v. LSI*, Judge Ronald Whyte found in 2013 that an SEP holder that had merely contacted an implementer and shown its willingness to negotiate had not made a RAND offer, and that the SEP holder therefore had not discharged its duty under its RAND contract with the SSO in question, the Institute of Electrical and Electronics Engineers (IEEE).[27] An SEP holder that fails to discharge its FRAND duties to the SSO might be liable for damages or other remedies for breach of contract.

B. The Elemental Difference Between a Contract Offer and Contract Formation

The SEP holder's duty to make a FRAND offer does not and cannot ensure that a license will eventuate with each prospective implementer.[28] Even if the SEP holder makes a FRAND offer, the ensuing bilateral negotiation with a given implementer might fail. For example, the implementer might ignore or reject the SEP holder's FRAND offer.[29] Consequently, it must be the case that an SEP holder discharges its contractual obligations with respect to a specific implementer to whom the SEP holder has made a FRAND offer, pursuant to the SEP holder's FRAND contract with the SSO, even if the SEP holder and the implementer in question ultimately fail to execute a license agreement for the SEPs in question.

Federal courts in the United States have admitted expert economic testimony addressing the meaning of a FRAND contract to help the court identify the SEP holder's precise contractual duties and determine whether the

24 *See, e.g.*, Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 884 (9th Cir. 2012) ("[I]mplicit in [Motorola's RAND commitment to the International Telecommunication Union] is, at least arguably, a guarantee that the patent-holder will not take steps to keep would-be users from using the patented material, such as seeking an injunction, but will instead proffer licenses consistent with the commitment made."); *see also* J. Gregory Sidak, *Injunctive Relief and the FRAND Commitment in the United States*, *in* 1 The Cambridge Handbook of Technical Standardization Law 389, 394 (Jorge L. Contreras ed., Cambridge Univ. Press 2018); Sidak, *The Meaning of FRAND, Part II: Injunctions*, *supra* note 22, at 214–16.

25 Restatement (Second) of Contracts § 24 (Am. Law Inst. 1981) (defining an offer as "the manifestation of willingness to enter into a bargain, so made as to justify another person in understanding that his assent to that bargain is invited and will conclude it").

26 As I explain in greater detail below, this understanding of the SEP holder's duties under the FRAND contract is subject to the caveat that the SEP holder has not already (1) offered to license its SEPs at a different level in the vertical chain of production and (2) assured the implementer in question that the SEP holder will not assert its SEPs against that implementer. If the SEP has taken both steps, the implementer in question will not be denied the ability to practice the SEPs in question if the SEP holder chooses to offer to license its SEPs at a different level in the vertical chain of production.

27 Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013).

28 *See* Sidak, *The Meaning of FRAND, Part II: Injunctions*, *supra* note 22, at 206 n.19.

29 *See Realtek*, 946 F. Supp. 2d at 1007 ("[A]n injunction may be warranted where an accused infringer of a standard-essential patent outright *refuses* to accept a RAND license." (emphasis in original)).

SEP holder has discharged those duties.[30] Courts in other jurisdictions (such as the UK Patents Court in *Unwired Planet*) have similarly relied on expert economic opinion when interpreting the possible meanings of specific components of the FRAND contract.[31] Given this receptivity of judges to hear expert economic testimony that might assist the court's legal interpretation of the FRAND contract and the fact finder's weighing of the evidence, it is disappointing to observe, in my experience, that some highly credentialed scholars who appear as expert economic witnesses in FRAND litigations or arbitrations misunderstand (or feign ignorance of) the elementary distinction between a contract offer and contract formation.

The most charitable interpretation of this phenomenon is that the prestigious law firm that has retained such a scholar has negligently failed to give rudimentary instructions on the applicable legal principles within which the expert witness must frame an economic opinion if it is to be relevant in an evidentiary sense to the question that the finder of fact must decide[32]—as well as being not prejudicial, confusing, or misleading.[33] Once counsel have incorrectly instructed—or once counsel have failed to instruct or correct—the expert witness on the relevant law, the expert economic witness blithely ignores, or feigns ignorance of, the fundamental distinction between contract formation and a mere offer to enter into a contract. One might then observe the spectacle of the holder of an endowed professorship at a major research university opining under oath that no difference exists between a FRAND offer and an executed FRAND contract—such that a tribunal really should construe the SEP holder's duty to the SSO under the FRAND contract as a duty to ensure successful contract formation in the subsequent bilateral negotiation between the SEP holder and the implementer.

---

30 *See, e.g.*, TCL Commc'ns Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, No. 14-341, 2017 WL 6611635, slip op. at *55 (C.D. Cal. Dec. 17, 2017) (Selna, J.) ("Testifying as an economics expert rather than an expert on French law, Dr. [David] Teece testified that FRAND is not violated if there is a 'smidgen' of a difference in rates between similarly-situated companies."), *appeal docketed*, No. 18-1363 (Fed. Cir. Jan. 2, 2018); Microsoft Corp. v. Motorola, Inc., No. C10-1823, 2013 WL 2111217, at *12 (W.D. Wash. Apr. 15, 2013) (Robart, J.) ("From an economic perspective, a RAND commitment should be interpreted to limit a patent holder to a reasonable royalty on the economic value of its patented technology itself, apart from the value associated with incorporation of the patented technology into the standard. Motorola's expert, Dr. [Richard] Schmalensee, agreed that if a company makes a RAND commitment, it is entitled only 'to some ill-defined measure [of] return on the value of the [patented] property, but you are not entitled to the incremental value that you get because you are part of the standard.'" (internal citations omitted)); *see also* Metaswitch Networks Ltd. v. Genband U.S. LLC, No. 2:14-CV-00744, 2016 WL 874775, at *2 (E.D. Tex. Mar. 7, 2016) (Payne, M.J.) (denying the defendant's motion to strike certain opinions regarding FRAND as "improper legal testimony by an economic expert 'as to the metes and bounds of the contracts at issue,'" reasoning that it was proper for the expert to "analyze the scope and nature of the alleged FRAND commitment and to give his opinions about its economic effect").

31 *See* Unwired Planet Int'l Ltd. v. Huawei Techs. Co., [2017] EWHC (Pat) 711 [496] (Birss, J.) (Eng.) (relying on the testimony of economic experts to determine the meaning of the nondiscrimination component of the FRAND contract between an SEP holder and ETSI).

32 *See* Fed. R. Evid. 402.

33 *See id.* 403.

Of course, the falsity of that conclusion would be obvious to any first-year law student, as well as any economist who studies contract theory or bargaining. This kind of sophistry invites an experienced judge to ask several questions. Is the expert economic witness who espouses this opinion too lazy to invest the time to discern, at a novice's level of sophistication, the legal principles relevant to answering the pertinent factual question actually presented, so that the expert witness can frame his or her economic opinions in the manner that most helps the finder of fact discern the truth? Or does the expert economic witness tacitly hold the condescending view that legal distinctions are insignificant details that do not rise to being relevant considerations that properly inform an intellectually rigorous economic analysis, even when that analysis has been undertaken specifically for the purpose of assisting the court's resolution of a consequential legal dispute? Or is the expert economic witness simply trifling with the court, playing dumb so as to abet a trial strategy of obfuscation? Regardless of whether the expert economic witness can genuinely profess ignorance of the elements of U.S. contract law, plainly the eminent law firm that retained him or her cannot. A law firm that cannot see clear to instruct its expert economic witness to avoid conflating contract formation and a mere contract offer proffers, at least negligently, testimony that is fallacious, specious, and mendacious.[34]

[34] One encounters patronizing economic opinions of this kind in high-stakes disputes, often propelled by disruptive technological change, that present courts with questions of first impression. For example, soon after Congress enacted the Telecommunications Act of 1996, the chief economist of the Federal Communications Commission (FCC) convened a public conference to invite comment on the FCC's proposed economic methodology for setting regulated prices for mandatory access to the unbundled network elements of incumbent local exchange carriers. *See* Transcript of Videotaped Presentation on Economic Costs for Interconnection, Economics of Interconnection Panel Discussion Forum, Federal Communications Commission, CC Dkt. No. 96-98 (May 20, 1996), http://www.fcc.gov/Reports/intercon_forum.wp [hereinafter FCC Economics of Interconnection Panel Discussion Forum]. From the audience, I asked how the Takings Clause of the Fifth Amendment to the Constitution, which requires the payment of just compensation for the government's confiscation of private property for a public purpose, might constrain the FCC's proposed economic model, as both lawyers and economists at the time were already actively studying this question on behalf of the companies that would be subject to whatever rule the FCC ultimately promulgated. *See id.* at 152–58; *see also* J. Gregory Sidak & Daniel F. Spulber, Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States (Cambridge Univ. Press 1997); Jerry A. Hausman & J. Gregory Sidak, *A Consumer-Welfare Approach to Mandatory Unbundling of Telecommunications Networks*, 109 Yale L.J. 417 (1999). The moderator (a distinguished economic theorist on leave from a major research university) answered that my question was a legal one and therefore outside the scope of the discussion. *See* FCC Economics of Interconnection Panel Discussion Forum, *supra*, at 153. Three months later, the FCC released its pricing regulations, which the FCC's chairman later admitted in his memoir intentionally favored access seekers. *See* Reed E. Hundt, You Say You Want a Revolution: A Study of Information Age Politics 154 (Yale Univ. Press 2000). Soon, the incumbent carriers challenged the pricing rules as an unconstitutional taking of their private property without just compensation. Years of litigation followed, including multiple decisions by the Supreme Court, which the incumbents generally lost. *See* J. Gregory Sidak, *The Failure of Good Intentions: The WorldCom Fraud and the Collapse of American Telecommunications After Deregulation*, 20 Yale J. on Reg. 207, 215, 217 (2003) (discussing, seven years into the process, the repeated Supreme Court decisions on takings and other grounds concerning the FCC's 1996 pricing regulations for unbundled network elements). By 2007, the same economic theorist had moved on to becoming a seminal contributor to the literature on the patent-holdup conjecture.

Let us return from this digression on expert economic witnesses to the larger question at hand—the legal and economic analysis of the FRAND contract and of the subsequent formation of a separate bilateral contract, between a specific implementer and the SEP holder, to license its SEPs to that particular implementer on FRAND terms. If the SEP holder has made a legitimately FRAND offer to that particular implementer, then the SEP holder has fully discharged its duty to that implementer *arising from the SEP holder's FRAND contract with the SSO*. In particular, if the implementer has rejected a legitimately FRAND offer, then the SEP holder has no duty to continue negotiating license terms with that implementer; it necessarily follows that the SEP holder has no duty to make additional offers *on FRAND terms*.[35] As I will explain in greater detail in Part III, herein lies a fundamental difference between the understanding of the FRAND contract under U.S. law (and presumably also English common law) and the understanding in other jurisdictions that the FRAND negotiation between the SEP holder and a given implementer is or should be a multi-round tennis match of offers and counteroffers.

Under U.S. contract law, of course, the SEP holder is still free as a commercial matter to continue negotiating a license for its SEPs after having discharged its contractual obligation to the SSO under the FRAND contract. The SEP holder will typically do so if its objective is indeed to profit by licensing its SEPs. (And that objective of the SEP holder is plainly the more reasonable presumption for the finder of fact to hold in any industry—including smartphones and other mobile electronic devices—in which there is asymmetry among firms in the extent of vertical integration between research and licensing on the one hand and implementation and fabrication on the other.) Nonetheless, after the presentation of a legitimately FRAND offer, any further bilateral negotiation occurs at the SEP holder's discretion and is no longer compelled by the FRAND contract into which the SEP holder entered with the SSO. After the SEP holder has discharged its obligations under the FRAND contract, it reacquires, with respect to the specific implementer in question, the right to exclude and hence "the option to say no."[36]

[35] *See* Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 23, at 1008 ("The primary way in which an implementer can terminate its power of acceptance is by explicitly rejecting a FRAND offer.").

[36] For an explanation of the economic value of the SEP holder's option to exclude use by unauthorized implementers, see F. Scott Kieff & Anne Layne-Farrar, *Incentive Effects from Different Approaches to Holdup Mitigation Surrounding Patent Remedies and Standard-Setting Organizations*, 9 J. Competition L. & Econ. 1091, 1122 (2013).

C. *The SEP Holder's Freedom to Choose Where, Within the Vertical Chain of Production, to Offer to License Its SEPs*

Despite having a duty to offer to license its SEPs on FRAND terms, an SEP holder may refuse to extend an offer to an upstream implementer (for example, to a chip manufacturer) if the SEP holder instead offers to license its SEPs at the downstream level (for example, to a mobile device manufacturer or even a network operator).[37] This distinction fuels the current "license to all" debate occurring in connection with the development of the 5G standard and the Internet of Things.[38]

As a general rule under U.S. patent law, a patent holder has the statutory right to decide at which level to license its patents. The patent holder possesses the absolute right to refuse to license;[39] consequently, if he chooses to license his patents at all, the patent holder has complete discretion to decide where within the vertical chain of production he will so license.[40] A typical FRAND contract between the SEP holder and the SSO says nothing about constraining that right granted the SEP holder by the Patent Act.

At the same time, the SEP holder has compelling reasons for choosing to license its SEPs at a particular level within the supply chain, for that choice

---

[37] *See* Sidak, *The Meaning of FRAND, Part II: Injunctions*, *supra* note 22, at 214–15.

[38] *See, e.g.*, Bertram Huber, Why the ETSI IPR Policy Does Not and Has Never Required Compulsory "License to All": A Rebuttal to Karl Heinz Rosenbrock 2 (Sept. 20, 2017) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3038447 ("ETSI has never compelled essential IPR owners to grant licenses to any company that requests one, or to grant licenses at the component level of the mobile telecommunications ecosystem.").

[39] See 35 U.S.C. § 271(a) ("Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent."); id. § 271(d) ("No patent owner otherwise entitled to relief for infringement . . . of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having . . . refused to license or use any rights to the patent."); *see also* Intergraph Corp. v. Intel Corp., 195 F.3d 1346, 1363 (Fed. Cir. 1999) ("[T]he owner of proprietary information has no obligation to provide it, whether to a competitor, customer, or supplier."); United States v. Studiengesellschaft Kohle, m.b.H., 670 F.2d 1122, 1127 (D.C. Cir. 1981) ("The essential rights of a patentee may be briefly summarized. A patentee has the right to exclude others from profiting from the patented invention. This includes the right to suppress the invention while continuing to prevent all others from using it, to license others, or to refuse to license, and to charge such royalty as the leverage of the patent monopoly permits." (internal citations omitted)).

[40] One finds a similar syllogism concerning the absence of a monopolist's duty to deal (and the price that a monopolist may charge if it voluntarily chooses to deal) in the Supreme Court's decision in *linkLine*:

> [A] firm with no duty to deal in the wholesale market has no obligation to deal under terms and conditions favorable to its competitors. If AT&T had simply stopped providing DSL transport service to the plaintiffs, it would not have run afoul of the Sherman Act. Under these circumstances, AT&T was not required to offer this service at the wholesale prices the plaintiffs would have preferred.

Pacific Bell Tel. Co. v. linkLine Commc'ns, Inc., 555 U.S. 438, 450–51 (2009). The Court further held: "If there is no duty to deal at the wholesale level and no predatory pricing at the retail level, then a firm is certainly not required to price *both* of these services in a manner that preserves its rivals' profit margins." *Id.* at 452 (emphasis in original).

can significantly reduce the transaction costs of patent licensing.[41] In turn, the SEP holder's use of the most efficient method of structuring licensing transactions can hasten the standard's successful implementation in products sold to end consumers, which benefits the public interest. Suppose that the SEP holder holds a large portfolio of SEPs for the 4G cellular communications standard. Suppose further that the portfolio might cover standardized technologies practiced outside the particular component that enables 4G cellular connectivity in a mobile electronic device (a component called a baseband processor modem). In that case, the SEP holder's decision to license its portfolio of SEPs at the device level obviates the SEP holder's execution of license agreements with multiple component manufacturers at multiple levels in the supply chain. That reduction in the number and scope of necessary negotiations reduces the SEP holder's overall transaction costs of licensing its portfolio of SEPs.

In contrast, licensing at multiple levels in the supply chain would increase the SEP holder's monitoring costs, because royalties might vary on the basis of whether a manufacturer included in its mobile devices inputs from a licensed supplier or an unlicensed supplier.[42] Forcing the SEP holder to offer to license at a particular level of the supply chain (for example, at the component level of a mobile device) would inject into the licensing process unnecessary and costly calculations that are irrelevant to the successful implementation of the standard, particularly for SEP holders that are vertically integrated into the manufacturing of components for standard-compliant products. For example, if the SEP holder were compelled to offer to license its SEPs to component manufacturers, the SEP holder would need to determine separately the value of its SEPs practiced *inside* the component being licensed and the value of its SEPs practiced *outside* that specific component. That valuation exercise would be costly because the SEP holder would need to find a way to segregate the patents in its SEP portfolio (and even the individual claims in each patent in its SEP portfolio) according to where they are practiced in the supply chain; then, the SEP holder would need to

[41] A similar efficiency rationale explains the SEP holder's choice of a royalty base, if it chooses to structure the FRAND royalty on an *ad valorem* basis, rather than a lump-sum or per-unit basis. *See* J. Gregory Sidak, *The Proper Royalty Base for Patent Damages*, 10 J. Competition L. & Econ. 989 (2014). The industry norm in the licensing of SEPs for mobile communication technology is to use the value of the downstream product (the smartphone or other mobile electronic device) as the royalty base, because, from an economic perspective, this norm "most plausibly has evolved and persisted not by happenstance, but because it embodies more efficient aspects of contracting than any other alternative that informed parties have considered." *Id.* at 997.

[42] Anne Layne-Farrar defines an SEP holder's monitoring costs as its "costs to ensure that licensees report sales properly for royalty payment calculations." Anne Layne-Farrar, *Nondiscriminatory Pricing: Is Standard Setting Different?*, 6 J. Competition L. & Econ. 811, 815 (2010); *see also id.* at 831 ("To the extent that licensing costs differ across licensees, say, because one entity's use of the IP is more difficult to monitor, the IP holder would also be well suited to describe those as justifying the different licensing terms.").

calculate the value of each subcategory of patents separately. However, that exercise is unnecessary: the SEP holder's offer to license its SEPs at the device level (and simultaneously its representation that it will not assert its patents against component suppliers) entails lower transaction costs because it obviates those costly and data-intensive calculations.

D. Must the SEP Holder's Initial Offer to License an SEP Be FRAND?

A difference of opinion exists over whether the SEP holder's initial offer to an implementer must be FRAND. To date, this question has focused solely on the level of the royalty that the SEP holder asks (as opposed to non-price terms or conditions of the FRAND offer). Consequently, for purposes of this article, I focus solely on the level of the royalty when discussing whether an initial offer is FRAND.

Judge James Robart said in 2012 in *Microsoft v. Motorola* that the SEP holder's initial offer need not be RAND; it is only necessary, in his view, that the negotiation result in the SEP holder's eventually making a legitimately RAND offer.[43] In *TCL v. Ericsson*, Judge James Selna similarly said in 2017 that "[t]he FRAND commitment does not require each offer and counter-offer exchanged during the course of negotiations to be FRAND."[44] Rather, he said, the SEP holder "need only be prepared to offer FRAND terms."[45] Therefore, evidence that the SEP holder's initial offer exceeds the range of legitimately FRAND (or RAND) royalties is insufficient in the view of both Judge Robart and Judge Selna to establish that the SEP holder has breached its FRAND (or RAND) contract.

In prior writings, I have disagreed with this interpretation of the SEP holder's FRAND obligation.[46] After further thought, I continue to disagree. This interpretation invites the SEP holder and the implementer to waste time for strategic bargaining reasons, without regard to how their dilatory behavior might harm the public interest. I have argued instead that time is of the essence in the implementation of a standard. The SSO should be far from agnostic as to how long the SEP holder and the implementer take to achieve contract formation in the licensing of SEPs. Consequently, I have argued, the SEP holder should not make an opening offer that is not legitimately FRAND. To do so is to waste time, and to waste time in the introduction of an entirely new generation of products featuring standard-dependent technological

[43] Microsoft Corp. v. Motorola, Inc., 864 F. Supp. 2d 1023, 1038 (W.D. Wash. 2012) ("[U]nder Motorola's agreements with the IEEE and the ITU, Motorola need not make initial offers on RAND terms.").

[44] TCL Commc'ns Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson, No. 14-341, 2017 WL 6611635, slip op. at *56 (C.D. Cal. Dec. 17, 2017) (Selna, J.), *appeal docketed*, No. 18-1363 (Fed. Cir. Jan. 2, 2018).

[45] *Id.*

[46] *See, e.g.*, Sidak, *The Meaning of FRAND, Part II: Injunctions*, *supra* note 22, at 243.

innovations is to harm the public interest by sacrificing consumer surplus irreparably.[47] Put differently, the SEP holder's FRAND contract with the SSO obliges the SEP holder to make only a single offer to the implementer, but that first and only required offer must be legitimately FRAND. If the SEP holder fails to do so, it breaches its FRAND contract with the SSO; if the SEP holder does make a legitimately FRAND offer, then the SEP holder has discharged its duty under its FRAND contract with the SSO; if the implementer does not accept that legitimately FRAND offer, the FRAND contract does not control any further bilateral negotiations that might transpire between the SEP holder and the implementer.

A second rationale reinforces my opinion that an SEP holder's initial offer should be legitimately FRAND. Unlike the first reason, which is normative and principally economic, the second rationale has the advantage of being rooted in positive legal principles of contract law. If the SEP holder does not have a duty to offer the implementer a legitimately FRAND offer from the outset, the respective rights and obligations of the SEP holder and the implementer become murky. For example, if courts permit the SEP holder to make an initial offer that exceeds the legitimately FRAND range, it is unclear whether those two parties are still governed by the contractual provisions and implications of the SEP holder's FRAND contract with the SSO; it is also uncertain when the SEP holder and the implementer would revert in their negotiation to the statutory default rules of the Patent Act (and other relevant statutes, including section 337 of the Tariff Act of 1930). This uncertainty generates cost and delay in the licensing of SEPs. That uncertainty compromises the objectives of the SSO and diminishes the present value of the consumer surplus and the producer surplus that the standard can create. In these respects, this second rationale for requiring the SEP holder to make an initial offer that is legitimately FRAND also advances economic efficiency, even though it rests on the legal rationale of construing a legal text in a manner to avoid ambiguity.

In particular, if the SEP holder does not make an initial offer that is legitimately FRAND, it invites the response that it has not discharged its contractual obligation to the SSO to offer to license its SEPs on FRAND terms, such that a counteroffer made by the implementer will not constitute rejection of a legitimately FRAND offer and therefore will not terminate the implementer's power to accept a legitimately FRAND offer as a third-party beneficiary of the SEP holder's FRAND contract with the SSO.

Of course, one can expect the implementer in this situation always to argue that *its* counteroffer to the SEP holder's initial offer is legitimately FRAND and must be accepted by the SEP holder so as to form the terms

[47] *See* J. Gregory Sidak, *Irreparable Harm from Patent Infringement*, 2 Criterion J. on Innovation 1 (2017); J. Gregory Sidak, *Is Harm Ever Irreparable?*, 2 Criterion J. on Innovation 7 (2017).

of an executed FRAND license. However, as construed under U.S. contract law principles, the SEP holder's FRAND contract with the SSO does not address counteroffers by an implementer—and for good reason. The FRAND contract between the SEP holder and its SSO is distinctly *not* a framework for refereeing a multi-round bilateral negotiation between the SEP holder and a particular implementer. To the contrary, the SEP holder's FRAND contract with the SSO serves only to catalyze the formation of a subsequent license contract between the SEP holder and an intended third-party beneficiary of the preexisting contract between the SEP holder and the SSO. The FRAND contract does so by ensuring, subject to the caveat noted above in Part I.C regarding the SEP holder's right to choose where to license within the vertical chain of production, that a willing implementer will receive from the SEP holder an offer to license its SEPs that is legitimately FRAND.

E. How an Implementer Can Lose Its Rights as a Third-Party Beneficiary Under the FRAND Contract

I explain here how U.S. contract law defines the scope of the implementer's rights as an intended third-party beneficiary of the SEP holder's FRAND contract with the SSO.[48] The laws of some countries might differ from U.S. contract law with respect to the rights of a third-party beneficiary.[49] I do not address those differences in this article, in part because I am not undertaking a comparative-law analysis, and in part because, given the mature state of American contract law relative to the contract law of other jurisdictions that are especially affected by disputes over the FRAND licensing of SEPs, I consider it likely that an SEP holder will address any substantive differences in contract law across jurisdictions by announcing a choice-of-law election to its SSO as a standard nonprice term of its FRAND offer.

Pursuant to the SEP holder's duty to offer to license its SEPs on FRAND terms, the implementer is entitled under U.S. contract law to receive a legitimately FRAND offer from the SEP holder. An implementer that requests but does not receive a FRAND offer may enforce the SEP holder's contractual

[48] *See* Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 23, at 1007–14; *see also* Alan Schwartz & Robert E. Scott, *Third-Party Beneficiaries and Contractual Networks*, 7 J. Legal Analysis 325, 330–34 (2015) (examining the development of contract doctrine concerning the recognition of third-party beneficiaries under U.S. law).

[49] *See, e.g.,* Jan Hallebeek & Harry Dondorp, Contracts for a Third-Party Beneficiary: A Historical and Comparative Account 137–58 (2008) (examining the rights of third-party beneficiaries under the contract-law regimes of France, Germany, and The Netherlands); Formation and Third Party Beneficiaries (Mindy Chen-Wishart, Alexander Loke & Stefan Vogenauer eds., Oxford Univ. Press 2018) (analyzing the rights of third-party beneficiaries in several Asian jurisdictions, including China, India, and Japan); *see also* Jan Hallebeek, *Contracts for a Third-Party Beneficiary: A Brief Sketch from the* Corpus Iuris *to Present-Day Civil Law*, 13 Fundamina 11, 31 (2017).

obligations in court.[50] Yet, an implementer may not claim rights under the SEP holder's FRAND contract with the SSO that the SEP holder never agreed to grant to the implementer.

1. First Principles of Contract Law

Under U.S. contract law, the intended third-party beneficiary of a contract has no greater bundle of rights than what the parties to the contract agreed to convey to the third party.[51] Hence, the implementer may claim, under the SEP holder's FRAND contract with the SSO, only the rights that the SEP holder promised to the SSO to convey to an intended third-party beneficiary of the FRAND contract. For example, an implementer that claims that it has a right to obtain a license to the SEP holder's portfolio in exchange for a lump-sum royalty (rather than a running royalty) must show that the SEP holder and the SSO expressly agreed that the former would offer to license its SEPs to intended third parties in exchange for a lump-sum payment.

Because an implementer of an industry standard is not a party to the SEP holder's FRAND contract with the SSO, the implementer has no contractual duties arising from that contract. In particular, the implementer has no contractual duty to reply to the SEP holder's offer, to accept the offer within a reasonable time, or even to negotiate the terms of the license (let alone to negotiate license terms in good faith).[52] However, the absence of any such duty does not mean that legal consequences fail to attach to the implementer's action or inaction once it has received a legitimately FRAND offer. To the contrary, an implementer that fails to take specific steps in negotiating a FRAND license for a portfolio of SEPs can lose its power of acceptance as an intended third-party beneficiary of the SEP holder's FRAND contract with the SSO. Thereafter, the implementer may claim no further rights under that contract. One can describe this contractual principle as "extinguishment" or "repudiation" or "exhaustion" or simply "loss" of the rights of the third-party beneficiary of the SEP holder's FRAND contract with the SSO. (It bears emphasis, however, that, if one chooses to call this contractual principle "exhaustion," the concept should not be confused with the doctrine of patent exhaustion, to which it has no connection.)

[50] *See, e.g.*, Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013) (Whyte, J.).

[51] *See* Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 23, at 1014 ("It is basic contract law that the promisor and the promisee define the scope of the rights of a third-party beneficiary." (citing Restatement (Second) of Contracts § 309 cmt. b (Am. Law Inst. 1981); 9 Joseph M. Corbin, Corbin on Contracts § 44.7 (Matthew Bender & Co. rev. ed. 2013))).

[52] *See, e.g.*, Apple, Inc. v. Motorola Mobility, Inc., No. 11-CV-00178, 2012 WL 5416941, at *11 (W.D. Wis. Oct. 29, 2012) (Crabb, J.) ("Motorola points to nothing in either the ETSI or IEEE policies to support its argument that potential licensees must negotiate for a license and make counteroffers before Motorola's obligations are triggered, and my review of the contracts reveals no provisions supporting such a requirement.").

According to first principles of U.S. contract law, an implementer will lose its power of acceptance if it rejects the SEP holder's legitimately FRAND offer, either explicitly or by making a counteroffer.[53] In addition, an implementer will lose its power of acceptance by operation of law if it fails to reply to the SEP holder's offer within a commercially reasonable period of time.[54] What constitutes a commercially reasonable time within which to communicate acceptance of an offer depends on industry practice,[55] as well as other case-specific factors, which, in an SEP licensing negotiation, could include the number of SEPs in the portfolio, the potential licensee's familiarity with the licensed technology, and the prior business relationship between the SEP holder and the potential licensee. It seems beyond debate that time is of the essence in communicating one's acceptance of a legitimately FRAND offer.[56]

Nonetheless, the implementer may request a revision of the offer without rejecting the SEP holder's offer and thus losing the power of acceptance. The Restatement (Second) of Contracts states that "[a] mere inquiry regarding the possibility of different terms, a request for a better offer, or a comment upon the terms of the offer, is ordinarily not a counter-offer,"[57] and thus the inquiry does not constitute a rejection of the offer. Therefore, the implementer may negotiate with the SEP holder in the sense that the implementer may request better terms without terminating its power to accept the original FRAND offer. A potential licensee that presents valid arguments during the negotiation might persuade the SEP holder to revise its offer. Furthermore, there is no reason that the SEP holder and the implementer cannot negotiate licensing terms *before* the SEP holder has extended an offer to license. However, if the SEP holder has already extended an offer to license a given implementer on legitimately FRAND terms, the SEP holder has no duty to accept the implementer's request for different terms or to sweeten the outstanding FRAND offer. Nothing in a typical FRAND contract between the SEP holder and the SSO obliges the SEP holder under U.S. contract law to make multiple offers within the FRAND range to a given implementer.[58]

In sum, although the implementer has no duties under the SEP holder's FRAND contract with the SSO, the implementer must take care to preserve

[53] Restatement (Second) of Contracts § 36(1)(a) (Am. Law Inst. 1981); *see also* Great Lakes Commc'n Corp. v. AT&T Corp., 124 F. Supp. 3d 824, 835–37 (N.D. Iowa 2015); Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 23, at 1008–09.

[54] Restatement (Second) of Contracts § 41(1)–(2); *cf.* Pepsi-Cola Bottling Co. v. N.L.R.B., 659 F.2d 87, 90 (8th Cir. 1981) (requiring that an offeree accept an offer "within a reasonable time").

[55] Restatement (Second) of Contracts § 41(1) cmt. b (Am. Law Inst. 1981); *see also* Bull Bag, LLC v. Remorques Savage, Inc., No. 3:16-CV-01735, 2017 WL 3763836, at *7 (D. Conn. Aug. 30, 2017) ("Indeed, whether this three-month delay was reasonable is a question of fact that would require consideration of standard industry practices.").

[56] *See* Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 23, at 1014.

[57] Restatement (Second) of Contracts § 39 cmt. b (Am. Law Inst. 1981); *see also* Carle v. Lebeau, No. CV990496801S, 2002 WL 1573417, at *2 (Conn. Super. Ct. June 13, 2002).

[58] *See* Sidak, *Is a FRAND Royalty a Point or a Range?*, *supra* note 19.

its power of acceptance as a third-party beneficiary of that contract. An implementer that rejects a legitimately FRAND offer ends its power of acceptance as an intended third-party beneficiary of the SEP holder's FRAND contract with the SSO. The implementer thereafter may claim no further rights under that contract. By rejecting the SEP holder's legitimately FRAND offer, the implementer may be made to face the full range of remedies that the SEP holder has under the Patent Act or other statutes, including section 337 of the Tariff Act. The recognition that an implementer can lose its power of acceptance as a third-party beneficiary of the FRAND contract by failing to accept the SEP holder's offer within a commercially reasonable time will discourage the implementer from employing delaying tactics and will hasten its prompt execution of a license agreement on FRAND terms.

2. *Nascent Judicial Interpretations*

The early decisions of U.S. federal courts indicate that, by its own action or inaction, an implementer can lose its rights as a third-party beneficiary of the SEP holder's FRAND contract with the SSO. In *Apple v. Qualcomm*, Judge Gonzalo Curiel ruled in September 2017 that, "if Apple wishes to enforce Qualcomm's commitment to ETSI it must demonstrate that it was a willing licensee and, therefore, a proper third-party beneficiary. . . . If Apple is not a willing licensee, it . . . loses the right to enforce Qualcomm's contract with ETSI."[59]

The Federal Circuit similarly said in 2014 in *Apple v. Motorola* that "an injunction may be justified where an infringer unilaterally refuses a FRAND royalty or unreasonably delays negotiations to the same effect."[60] The question that this passage from *Apple v. Motorola* invites is why the Federal Circuit chose to say "may" instead of "would." As I have explained above, first principles of U.S. contract law leave no doubt that an implementer's refusal (which is to say, its *rejection*) of a legitimately FRAND royalty offer ends the implementer's power to accept a FRAND offer from that SEP holder. Similarly, first principles of U.S. contract law dictate that the implementer's unreasonable delay of negotiations over a FRAND license constitutes by operation of law a rejection of the SEP holder's legitimately FRAND offer (or, to similar effect, the implementer's frustration, by virtue of its refusal to receive the tender of a legitimately FRAND offer, of the SEP holder's ability to perform

[59] Apple Inc. v. Qualcomm Inc., No. 3:17-CV-00108-GPC-MDD, 2017 WL 3966944, at *10 n.7 (S.D. Cal. Sept. 7, 2017). By necessity, my discussion here of U.S. federal court decisions is limited to orders that are in the public domain and are not (as many are) under seal.

[60] Apple Inc. v. Motorola Corp., 757 F.3d 1286, 1331–32 (Fed. Cir. 2014); *see also* Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998, 1007 (N.D. Cal. 2013) (Whyte, J.) ("[A]n injunction may be warranted where an accused infringer of a standard-essential patent outright *refuses* to accept a RAND license." (emphasis in original)).

under its contract with the SSO). Perhaps the mystery of the Federal Circuit's choice of "may" over "would" is completely unrelated to contract interpretation; perhaps it lies instead in the court's unstated caveat that, after *eBay*,[61] the implementer's actual or constructive rejection of the SEP holder's legitimately FRAND offer would be a necessary but not sufficient condition for a court's issuance, pursuant to the Patent Act, of an injunction, as opposed to the fact finder's award of some alternative statutory remedy not rooted in equity and thus not implicated by the reasoning that produced the Supreme Court's holding in *eBay*.[62]

Similarly, at least one U.S. court has linked the SEP holder's right to obtain an injunction against an unlicensed implementer to the SEP holder's compliance with its obligation to offer a license on FRAND terms. In *Huawei v. Samsung*, Judge William Orrick in April 2018 considered Samsung's motion to enjoin Huawei "from enforcing injunction orders issued by the Intermediate People's Court of Shenzhen" regarding Samsung's infringement of Huawei's SEPs.[63] In granting Samsung's antisuit injunction, Judge Orrick reasoned that "[n]either party disputes the other's right to enforce [the FRAND contract] as a third-party beneficiary" and that "the availability of injunctive relief for each party's SEPs depends on the breach of contract claims."[64] He explained that "the parties' contract claims are based on whether their respective licensing offers were FRAND."[65] Judge Orrick acknowledged that "[t]he appropriate remedy . . . may very well be the injunctive relief issued by the Shenzhen court," but he emphasized that he "must have the opportunity to adjudicate that claim without Samsung facing the threat of . . . [the] injunction[]."[66]

III. Rival Frameworks for Licensing SEPs

It is illuminating, after having analyzed the anatomy of the FRAND contract and after having studied how a proper understanding of the relevant principles of U.S. contract law can inform and facilitate bilateral negotiation for a FRAND license, to examine the various frameworks that government

61 eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006).

62 Under *eBay*, the patent holder must prove "(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." *Id.* at 391 (citing Weinberger v. Romero-Barcelo, 456 U.S. 305, 311–13 (1982); Amoco Prod. Co. v. Gambell, 480 U.S. 531, 542 (1987)). The Federal Circuit said in 2017 that, under *eBay*, the patent holder "must prove that it meets all four equitable factors." Nichia Corp. v. Everlight Ams., Inc., 855 F.3d 1328, 1341 (Fed. Cir. 2017). For a critique of *eBay* co-authored by the former chief judge of the Federal Circuit, see Paul R. Michel & Matthew J. Dowd, *Understanding the Errors of* eBay, 2 Criterion J. on Innovation 21 (2017).

63 Huawei Techs., Co. v. Samsung Elecs. Co., No. 3:16-cv-02787, 2018 WL 1784065, at *1 (N.D. Cal. Apr. 13, 2018) (granting Samsung's motion for antisuit injunction).

64 *Id.* at *8.

65 *Id.* at *9.

66 *Id.*

entities outside the United States have proposed for facilitating FRAND license negotiations. For example, in April 2018, China's Guangdong High People's Court promulgated guidelines for judges trying cases concerning SEPs.[67] Those guidelines, which are binding on the Guangdong High People's Court (an appellate court) and two lower courts, (1) specify when injunctive relief is available to the SEP holder, (2) declare that the Chinese court can set a global FRAND rate, and (3) clarify that any competition or antitrust analysis must be case-specific.[68] Similarly, in March 2018, the Japan Patent Office (JPO) invited public comments on its proposed draft guidelines for negotiations involving SEPs, which have as their purpose to "enhance transparency and predictability, facilitate negotiations between rights holders and implementers, and help prevent or quickly resolve disputes concerning the licensing of [SEPs]."[69] Europe is also active. A communiqué of the European Commission issued on November 29, 2017 stated that "there is an urgent need to set out key principles that foster a balanced, smooth and predictable framework for SEPs," and it outlined principles that, in the EC's view, should guide the negotiation between an SEP holder and an implementer.[70]

The commercial objective of such negotiation is usually the execution of a worldwide portfolio license to SEPs at a price mutually agreeable to the SEP holder and the implementer. If the adoption of a legal standard for negotiating patent licenses resembles the adoption of successful technical standards, then a single legal framework for FRAND licensing will likely emerge as the dominant transactional form on the basis of its superior efficiency.

Some of the proposed frameworks are unlikely to achieve their stated goal of reducing the volume or cost of disputes arising from unsuccessful negotiations to license SEPs. For example, the JPO's proposed draft guidelines for SEP negotiations endorse a five-step process (modeled after the framework that the Court of Justice of the European Union (CJEU)[71] created in *Huawei v. ZTE*[72]), pursuant to which: (1) the SEP holder notifies the implementer of its infringement, (2) the implementer expresses its willingness to obtain a license to the infringed SEPs ("if the implementer concludes that

67 Guanyu Shenli Biaozhun Biyao Zhuanli Jiufen Anjian De Gongzuo Zhiyin (Shixing) (关于审理标准必要专利纠纷案件的工作指引（试行）) [Working Guidelines on the Trial of Standard-Essential Patent Dispute Cases (for Trial Implementation)] (Apr. 26, 2018); *see also* Ben Ni, *The Guangdong High People's Court Guideline for SEP Disputes: A Primer*, Managing Intell. Prop. (May 18, 2018).

68 Ni, *supra* note 67.

69 Japan Patent Office, Guide to Licensing Negotiations Involving Standard Essential Patents (Draft) 1 (Mar. 9, 2018), https://www.jpo.go.jp/iken/pdf/180308_hyoujun/sep_guide_draft_en.pdf [hereinafter JPO Draft Guidelines].

70 *Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee*, at 2, COM (2017) 712 final (Nov. 29, 2017).

71 JPO Draft Guidelines, *supra* note 69, at 6 ("[T]his Guide, based on the framework presented by the CJEU and informed by court decisions in various countries and actual practices in SEP disputes, has listed more specific issues relating to actions that parties may take at each state of licensing negotiations.").

72 Case C-170/13, Huawei Techs. Co. v. ZTE Corp., ECLI:EU:C:2015:477 (July 16, 2016).

it needs to obtain a license for the SEPs"[73]), (3) the SEP holder extends the implementer an offer to license on FRAND terms, (4) "[i]f an implementer disagrees with the proposed FRAND terms presented by [an SEP] holder, the implementer may provide a FRAND counteroffer,"[74] and (5) the SEP holder and the implementer resort to litigation or arbitration to resolve the dispute.[75] The JPO says that "the framework is generally considered to be a useful approach to encourage good faith negotiations whereby rights holders may fulfill their FRAND obligations and implementers may minimize their risk of an injunction and continue using standard technologies."[76]

Despite its good intentions, the JPO's framework will more likely produce price regulation set by judges or arbitrators. Even if the SEP holder initially offers a license to the implementer on legitimately FRAND terms, the implementer will counteroffer at the bottom of the FRAND range (if not *below* the FRAND range, since there will be strong disagreement over the ceiling and floor of that range). The SEP holder will reject the implementer's counteroffer. Litigation or arbitration will commence and eventually generate a litigated or an arbitrated FRAND rate—not a bilaterally negotiated FRAND rate. This entirely predictable outcome will turn bilateral negotiation of SEP licenses on its head. The clear loser will be the SEP holder, which will achieve neither prompt contract execution nor mutually acceptable consideration for licensing its SEPs. The clear winner will be the implementer, which will postpone paying the SEP holder anything until the conclusion of the litigation or arbitration and, when that day does finally arrive, will pay a FRAND rate (or a lesser one, if the tribunal errs).

If war is the continuation of policy by other means, as von Clausewitz said,[77] then litigation is the continuation of commercial negotiation by other means.[78] Both being predicated on the absence of voluntary exchange, war and litigation are costly methods by which to allocate society's most precious resources. Consequently, the other clear winners from the JPO's proposed framework will be the law firms, expert witnesses, and arbitrators whose services will be heavily demanded to resolve FRAND licensing disputes through contentious proceedings.

This displacement of commercial negotiation is certainly the lesson that experience teaches regarding a regime of mandatory commercial negotiation that promises litigation or binding arbitration as its mechanism for dispute

73 JPO Draft Guidelines, *supra* note 69, at 9.
74 *Id.* at 14.
75 *Id.* at 16.
76 *Id.* at 5.
77 Carl von Clausewitz, On War 87 (Michael Howard & Peter Paret eds. & trans., Princeton Univ. Press 1976) (1832).
78 This insight surely has occurred to many lawyers over the years. I credit it to Sir Robin Jacob's essay, *Competition Authorities Support Grasshoppers: Competition Law as a Threat to Innovation*, *in* Robin Jacob, IP and Other Things: A Collection of Essays and Speeches 215, 227 (Hart Pub. 2015).

resolution if the access seeker is dissatisfied. Under the Telecommunications Act of 1996,[79] Congress directed that any impasse in the negotiation between an entrant and an incumbent local exchange carrier over the leasing of the incumbent's unbundled network elements (at prices severely constrained by a notoriously vague statutory framework) be resolved through binding arbitration conducted by the local state public utility commission (PUC).[80] Writing for the Supreme Court in 1999, the late Justice Antonin Scalia said of the regulated pricing of unbundled network elements:

> It would be gross understatement to say that the Telecommunications Act of 1996 is not a model of clarity. It is in many important respects a model of ambiguity or indeed even self-contradiction. That is most unfortunate for a piece of legislation that profoundly affects a crucial segment of the economy worth tens of billions of dollars.[81]

Given that lack of clarity, the ready availability of the PUCs to serve as binding arbitrators eliminated any incentive for entrants to negotiate mutually beneficial rates. Instead, it became the norm for entrants to demand pricing rules favoring their own interests, with which the incumbents naturally disagreed, and for entrants then to initiate arbitration. Consequently, the parties could not successfully conclude a single commercial negotiation for the leasing of access to unbundled network elements across the hundreds of bilateral negotiations undertaken.[82]

The complexity today of global licensing negotiations for SEPs for mobile communications surely exceeds, on both technical and economic grounds, the complexity two decades ago of negotiations to lease unbundled network elements of incumbent local exchange carriers in the United States. On the other hand, a strong case can be made that, once one properly understands the contractual nature of the FRAND obligation, there is actually less legal complexity in today's licensing of SEPs than there was in deciphering the unbundling provisions of the Telecommunications Act of 1996. That combination of greater technical and economic complexity and lesser legal complexity today counsels government agencies that have proposed or adopted FRAND-licensing guidelines to encourage, to the greatest extent possible, voluntary commercial negotiations to establish licensing terms for SEPs, and not to fuel the misplaced expectation that a judge or an arbitrator

[79] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).
[80] 47 U.S.C. § 252(b).
[81] AT&T Corp. v. Iowa Util. Bd., 525 U.S. 366, 397 (1999).
[82] *See* J. Gregory Sidak & Daniel F. Spulber, *The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements Under the Telecommunications Act of 1996*, 97 Colum. L. Rev. 1081, 1083 (1997).

can save the day by dictating prices with the grim determination of a public utility commission.

Recognizing that one should construe the FRAND contract using existing contract principles will clarify each party's respective legal obligations and rights when negotiating to license SEPs. Such clarification will incline the parties to avoid practices that unnecessarily delay the negotiation and instead to work toward promptly executing a license agreement, which will deliver the greatest possible benefit to the public interest.

IV. Opting Out of the FRAND Contract

Needless to say, the SEP holder and the implementer are free to execute a contract of their own that clarifies and modifies their rights and duties with respect to one another in a manner that departs from the default rules created by the SEP holder's FRAND contract with the SSO. It is important that the various guidelines that governments have proposed or adopted to facilitate the FRAND licensing of SEPs recognize the substantial benefits of that possibility and not throttle it in the cradle.

An *ad hoc* agreement between the SEP holder and the implementer might explicitly permit counteroffers and subsequent offers within a multi-round process that the parties define. As in sporting events (and in auction design), the *ad hoc* agreement might explicitly define when negotiations must conclude—such as after the passage of a specified amount of time or a specified number of rounds. At the end of the negotiation, either contract formation would occur, or the parties would refer the impasse to dispute resolution. Perhaps the controversy would go to a court, to be decided as a matter of contract law. Alternatively, the parties might choose to send the controversy to arbitration, with highly specific instructions for the arbitral panel (presumably designed to avoid the obvious pitfalls of failed arbitration experiments—including, notably, the one that the U.S. Congress specified in the Telecommunications Act of 1996).[83] Either way, the parties could specify the choice of law so that, for purposes of contract interpretation, the tribunal had at its disposal a robust jurisprudence that was up to the task, rather than an underdeveloped body of commercial law rife with its own doctrinal ambiguity and uncertainty.

As of May 2018, I am not aware of any instance in which an SEP holder and an implementer have agreed to opt out of the FRAND contract in the manner that I describe. However, it is not clear that such an *ad hoc* agreement would be publicly observed if it were made. Consequently, it is possible that

[83] On the pitfalls of one prominent proposal for arbitration of FRAND licensing disputes, see J. Gregory Sidak, *Mandating Final-Offer Arbitration of FRAND Royalties for Standard-Essential Patents*, 18 Stan. Tech. L. Rev. 1 (2015).

SEP holders and implementers have already been resorting to this bespoke method of bilateral license negotiation and dispute resolution. Indeed, any instance in which an SEP holder and an implementer have chosen arbitration to resolve a FRAND licensing dispute in the absence of a preexisting contractual obligation to submit to arbitration would exemplify at least some degree of contracting around the existing FRAND model.

In the absence of specific details for any given *ad hoc* agreement of this kind, it would appear that the only constraint that would generally survive the SEP holder's FRAND contract with its SSO is the obligation to offer to license the SEPs in question to other implementers on nondiscriminatory terms. That surviving constraint, however, should not be problematic. The SEP holder could simply offer to *every* implementer the option of bilaterally opting out of the preexisting FRAND model. In effect, the SEP holder would present the implementer with what economists call an optional tariff.[84] Doing so would enable the parties in any given bilateral negotiation to address contractually any provision in the preexisting FRAND model that one or both of them considered to be ambiguous or dysfunctional.

Conclusion

When an SEP holder's FRAND commitment is deemed to be an enforceable contract, and the implementer of an industry standard is consequently deemed to have the right, as an intended third-party beneficiary, to enforce the SEP holder's obligations to the SSO under that contract, no need exists to fashion new principles to enable the SEP holder and the implementer to resolve their disputes over FRAND terms promptly. Simply interpreting a FRAND contract according to first principles of U.S. contract law would encourage both the SEP holder and the implementer to engage in good-faith negotiations. Recognizing that certain kinds of negotiating conduct might result in a breach of contract, or the loss of a third-party beneficiary's right to enforce the FRAND contract, would encourage both the SEP holder and the implementer to avoid delaying tactics and instead to engage in conduct that facilitates the prompt execution of the license agreement. According to first principles of U.S. contract law, whether the SEP holder has discharged its obligations under its FRAND contract with the SSO with respect to a given implementer turns on whether the SEP holder has offered to license its SEPs to that implementer on legitimately FRAND terms. The recognition of comparable contractual principles in foreign jurisdictions—to the extent that such principles do not already exist under the contract law of

[84] With an optional tariff, "the licensee chooses between paying an established rate and negotiating an alternative rate." Sidak, *The Meaning of FRAND, Part I: Royalties*, *supra* note 22, at 998. "In effect, an SEP holder offers an optional tariff when it opens any licensing negotiation with standard 'reference rates.'" *Id.*

those jurisdictions—would stimulate the parties not only to avoid practices that needlessly delay negotiation and cause costly litigation, but also to work toward the prompt execution of a FRAND license agreement.