

19-16122

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

FEDERAL TRADE COMMISSION,
Plaintiff-Appellee,

– v. –

QUALCOMM INCORPORATED,
Defendant-Appellant,

SAMSUNG ELECTRONICS COMPANY, LTD.;
SAMSUNG SEMICONDUCTOR INC.; INTEL CORPORATION; ERICSSON, INC.;
SAMSUNG ELECTRONICS AMERICA, INC.; MEDIATEK INC.,
Intervenors,

NOKIA TECHNOLOGIES OY,
Intervenor.

Appeal from the U.S. District Court
for the Northern District of California
The Honorable Lucy H. Koh (No. 5:17-cv-00220-LHK)

***AMICUS CURIAE* BRIEF OF
THE HONORABLE PAUL R. MICHEL (RET.)
IN SUPPORT OF APPELLANT QUALCOMM INCORPORATED**

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CERTIFICATE OF COMPLIANCE

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INTEREST OF AMICUS CURIAE

Judge Michel served on the Federal Circuit for over twenty-two years. From 2004 until his retirement in May 2010, he was the chief judge of the court. During his twenty-two years of judicial service, he heard thousands of appeals and authored over 800 opinions, touching on all aspects of the court's jurisdiction, including patent law.¹

While Judge Michel's work on the Federal Circuit is often linked to patent law, the Federal Circuit has regularly confronted complex antitrust issues. *See, e.g., In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 544 F.3d 1323 (Fed. Cir. 2008); *In re Indep. Serv. Orgs. Litig.*, 203 F.3d 1322 (Fed. Cir. 2000); *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059 (Fed. Cir. 1998). From its inception, the Federal Circuit has tackled issues at the interface between antitrust and patent law. *See, e.g., Am. Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350 (Fed. Cir. 1984).

¹ Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), no party's counsel authored this brief in whole or in part; no person or entity, other than Judge Michel and his counsel, contributed monetarily to this brief; and all parties have consented to its filing.

Since he retired from the Federal Circuit, Judge Michel has maintained an active role in the public dialogue about optimal policies governing intellectual property and U.S. innovation. *See, e.g.*, David Kappos & Hon. Paul R. Michel, *The Smallest Salable Patent-Practicing Unite: Observations on its Origins, Development, and Future*, 32 Berkeley Tech. L.J. 1433 (2018); Paul R. Michel & Matthew J. Dowd, *The Need for “Innovation Certainty” at the Crossroads of Patent and Antitrust Law*, CPI Antitrust Chronicle (Apr. 2017). Judge Michel has also been invited to testify before Congress on substantive patent law issues that are critical to the Nation’s economic health, most recently on June 4, 2019.

Judge Michel is one of the nation’s leading patent law experts, having a unique combination of judicial experience, legal expertise, and total absence of any financial conflicts of interest. His sole objective is to respectfully share his perspective as a true friend of the court to ensure that the U.S. patent system creates the optimal incentives for inventors, innovators, and investors—as it has traditionally done.

SUMMARY OF THE ARGUMENT

The FTC's theory of antitrust liability and the district court's opinion include several erroneous legal conclusions. These stem, in part, from incorrect applications of federal patent law. They have contributed to what is a deeply troubling holding that Qualcomm's licensing conduct was anticompetitive and in violation of the antitrust laws.

The decision imposes unprecedented antitrust liability on one of the Nation's most productive and innovative companies. The decision represents an unheralded use of antitrust law against a company that epitomizes the effective use of the exclusive right enshrined in Article I, Section 8, clause 8 of the U.S. Constitution. In fact, the innovation created and developed by Qualcomm and its researchers is precisely the type of innovation the U.S. patent system is designed to protect.

As for the court's decision itself, this brief focuses on several specific errors in the application of federal patent law. First, the court's decision incorrectly imposed a rigid application of the "smallest saleable patent-practicing unit," *i.e.*, the SSPPU concept. That concept was and has been used as a tool to avoid jury confusion and has no real applicability in the current case. Yet, based on a misreading of Federal Circuit law, the

district court applied the SSPPU concept to reach its conclusion that Qualcomm's established royalty rate was "unreasonably high."

Second, and more broadly, the district court misapplied established precedent on "reasonable royalty" in the context of patented inventions. The district court seemingly disregarded the evidence of Qualcomm's "established royalty" when concluding that the royalty was "unreasonably high." Both Supreme Court and Federal Circuit precedent have long instructed that an "established royalty" is generally the best evidence in assessing the economic value of the patented invention. The record appears to contain undisputed evidence that Qualcomm had an established royalty, long agreed to by sophisticated companies in the marketplace. But the district court did not address the precedent or justify why the established royalty should be disregarded.

Third, FRAND disputes are better resolved by contract and patent law than antitrust law. In this case, the FTC wields the antitrust hammer to punish Qualcomm in what is a dispute between fiercely competitive, very sophisticated companies at the leading edge of innovation. The scalpels of contract and patent law can better carve out

any remedies for a breach of the FRAND contractual obligations and can better assess the actual value of the patented technology.

Finally, as an overarching concern, the present unprecedented application of antitrust law risks a foundational abrogation of the U.S. patent system and its incentives to innovate. Those incentives are premised on a right to exclude, but the FTC's novel theory here threatens to undermine that exclusive right—a right that flows from the Constitution itself.

ARGUMENT

I. The District Court Did Not Correctly Apply The Concept Of The Smallest Salable Patent-Practicing Unit

A first concerning aspect of the district court's analysis is its reliance on the concept of the smallest salable patent-practicing unit. With no meaningful analysis, the district court incorrectly imposed the SSPPU concept as a bright-line rule. *See slip op.* at 172 (in applying the SSPPU concept, stating that “Qualcomm is not entitled to a royalty on the entire handset”). The district court's misunderstanding and misapplication of the SSPPU concept reflect a view that fundamentally conflicts with accepted patent damages law and the real-world valuation of patented inventions. These misunderstandings contributed to the

incorrect conclusion that Qualcomm’s licensing practices constitute anticompetitive behavior under the antitrust laws.

A. The Genesis of the SSPPU Concept as a Tool to Limit Jury Confusion

The term “smallest salable patent-practicing unit” first appeared in 2009, in an opinion by written then-Judge Rader sitting as a district court judge overseeing a jury patent trial. *See Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 283 (N.D.N.Y. 2009).

Since then, the SSPPU concept has been fashionably referred to as a substantive rule defining the appropriate royalty base for all purposes and in all contexts. Others have even suggested that the SSPPU concept should limit how patent holders value their patented inventions and should constrain how private parties conduct commercial negotiations. *See, e.g.*, IEEE, IEEE-SA Standards Board Bylaws 16 (2019).²

While the decision in *Cornell* criticized the plaintiff’s expert for not choosing the “smallest salable patent-practicing unit” as the royalty base, the opinion did not claim to be announcing a new substantive rule. *Id.* at 285–87 (explaining that the court was applying settled damages law).

² http://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf.

After the *Cornell* decision, the Federal Circuit provided important guidance, explaining in no uncertain terms that the SSPPU concept is not a mandatory, substantive requirement of damages law. In *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014), the court wrote that the SSPPU concept is an “evidentiary principle . . . assisting in reliably implementing the [apportionment] rule when—in a case involving a per-unit royalty—the jury is asked to choose a royalty base as the starting point for calculating a reasonable royalty award.” *Ericsson* thus confirms that the SSPPU concept is a flexible evidentiary tool, not an unyielding substantive element of patent damages law.

The focus on jury confusion continued in later cases. In *VirnetX, Inc. v. Cisco Systems, Inc.*, the court noted that the SSPPU concept is “simply a step toward meeting the requirement of apportionment.” 767 F.3d 1308, 1327–28 (Fed. Cir. 2014). In *LaserDynamics, Inc. v. Quanta Computer, Inc.*, the Federal Circuit construed the SSPPU concept as an evidentiary principle aimed to avoid jury confusion. 694 F.3d 51, 68 (Fed. Cir. 2012) (discussing SSPPU in the context of analyzing evidence that might “artificially inflate the jury’s damages calculation beyond that which is ‘adequate to compensate for the infringement’”). And in

Commonwealth Scientific & Industrial Research Organisation v. Cisco Systems, Inc., 809 F.3d 1295, 1303 (Fed. Cir. 2015) (“*CSIRO*”), the court flatly rejected Cisco’s argument that the SSPPU concept had to be used: “The rule Cisco advances—which would require all damages models to begin with the smallest salable patent-practicing unit—is untenable.”

Federal Circuit precedent makes clear that the SSPPU concept is a tool for minimizing potential jury confusion when the jury is weighing complex expert testimony about patent damages. In fact, as of 2018, “[i]n over seventy-five district court decisions that have considered the SSPPU concept, all but one have been in jury trials.” David Kappos & Paul R. Michel, *The Smallest Saleable Patent-Practicing Unit: Observations on Its Origins, Development, and Future*, 32 *Berkeley Tech. L.J.* 1433, 1444–45 (2018).

This concern of jury confusion is, of course, not present in a bench trial. We can expect district court judges to understand patent damages law, the general rule of apportionment, and the relationships between royalty base and royalty rate when assessing the reasonable royalty evidence. The trial judge will be equipped to analyze the reliability of the damages models offered by the parties—without reflexive resort to the

SSPPU concept. And where those models fail to follow the law and properly apportion between patented and unpatented values, judges do not hesitate to reject them.

B. The SSPPU Concept Cannot Be Used to Limit How Parties Negotiate a License Agreement

The district court concluded that “Qualcomm is not entitled to a royalty on the entire handset” because the SSPPU concept must be used in calculating the value of Qualcomm’s technology. *See* slip op. 172 (citing *Laser Dynamics*, 694 F.3d at 67). But that rigid application of the SSPPU concept ignores the business realities of licensing large patent portfolios covering complex technologies.

In the real world, parties negotiate license agreements based on whatever mutually agreeable terms make commercial sense for them. Private parties negotiating license agreements need not robotically go through all the patents in question and identify the SSPPU for each licensed patent and then calculate the individual value. In fact, to do so would be incredibly inefficient. Instead, parties tend to negotiate licenses that cover whole products, or classes of products, and whole portfolios of patents potentially applicable to those products. *See, e.g.,* David J. Teece, *The “Tragedy of the Anticommons” Fallacy: A Law and Economics*

Analysis of Patent Thickets and FRAND Licensing, 32 Berkeley Tech. L.J. 1489, 1507 (2017) (explaining that companies often make “blanket” commitments of their entire portfolios in FRAND agreements because of the inefficiency of individually examining patents).

As a result, rational market participants often use the completed end product as the base when calculating the royalty due in a license agreement. This sensible approach reduces the parties’ transaction costs, particularly when the deal involves hundreds or thousands of patents. Many times, using the retail product—here, the cell phones—allows the innovator to capture the full economic value of the patented inventions.

The business people on both sides of these transactions are familiar with the revenues and profits (or potential revenues and profits where new products are concerned) associated with the products in question. They cannot be screened from this information as a practical matter, nor could anyone seriously suggest they should be. Thus, in the context of private license negotiations, even more than in bench trials, while the SSPPU approach is available to negotiators who wish to refer to it, it has no necessary bearing on how parties negotiate or upon what terms they agree.

Indeed, an attempt to dictate that businesses must negotiate patent licenses based on the SSPPU concept for each licensed patent and each licensed product would be highly counterproductive and infeasible. Such a rule would force parties to engage in patent-by-patent and component-by-component negotiations, greatly magnifying transaction costs. Instead, licensing parties should remain free to use all the valuation and efficiency tools available to them, as would any rational, competitive firm. This will most efficiently lead to effective negotiations and equitable agreements for all.

C. The SSPPU Concept is Not Useful in Estimating the Value of a Large, Diverse Patent Portfolio

Another mistaken view about the SSPPU concept is that it applies when determining the monetary value of a large, diverse patent portfolio. This is incorrect, as shown by the case law.

In the cases applying the SSPPU concept, nearly all involve only a few patents. *See Cornell Univ.*, 609 F. Supp. 2d at 282 (single patent); *Ericsson*, 773 F.3d at 1209–11 (three patents); *VirnetX*, 767 F.3d at 1315 (two patents); *LaserDynamics*, 694 F.3d at 56 (single patent). In over seventy–five district court cases that have considered the SSPPU concept, all but one involved fewer than eight patents, with over eighty

percent of the cases entailing three or fewer patents. *See* Kappos & Michel, *supra*, at 1447 n.66.³

Beyond the case law, it should be apparent that applying the SSPPU concept is simply not feasible when licensing large patent portfolios. The precise SSPPU would certainly be different for different patents in a large portfolio covering technologically complex products, such as cell phones. It would likely be different for different claims within a single patent. Identifying and valuing the SSPPU within each infringing product and for each infringed patent or claim—which one would have to do when applying the SSPPU concept—then applying an appropriate royalty rate to each patent-and-component combination to calculate the total amount owed would be overwhelming.

In the litigation context, if a case arose requiring a judge or a jury to determine a royalty for a large portfolio of patents, it would be unworkable, for the reasons stated above, to force a patent-by-patent assessment for thousands of patents. The sensible approach would be to

³ One exception is *In re Innovatio IP Ventures*, No. 11 C 9308, 2013 WL 5593609, at *3 (N.D. Ill. Oct. 3, 2013), a case involving nineteen patents, which is nowhere near the size or complexity of Qualcomm's patent portfolio.

proceed as knowledgeable business people do, using the commercial products as the royalty bases and assessing an appropriate royalty rate. The concern that jurors might be misled by large revenue or profit figures would have considerably less force in a case involving hundreds or thousands of patents covering different aspects of the accused products. In that circumstance, a court could rationally adopt the simplifying assumption that the royalty base is the entire product and then let the parties litigate over the royalty rate.

Rather than implement a SSPPU-based approach, rational market participants do what Qualcomm has done for years—license the entire portfolio and base the royalty as a percentage of the product sold in the marketplace. The court offered no justifying reason to rigidly apply the SSPPU concept given this accepted market practice.

D. The SSPPU Concept is Not Necessarily Relevant to the FRAND Context

Another mistaken impression is that the SSPPU concept must be applied in the FRAND context. No case has so held, and there is no rational basis for doing so.

Policy and practical reasons caution against engrafting the SSPPU concept onto the FRAND setting. A FRAND licensing commitment is a

contractual arrangement designed to ensure implementers' access to standardized technologies while also giving innovators a sufficient return on their R&D investment, so that they will continue to offer technologies to standards setting organizations ("SSOs") for standardization.⁴ In almost all cases where innovators make technical contributions to SSOs and enter into licensing commitments, they do so against the background of a decades-long tradition of bilaterally negotiated license agreements employing the intentionally broad FRAND requirement. Changing those ground rules now would undermine the basis of the FRAND bargain, will likely reduce incentives to innovators, and would be fundamentally unfair to those who have relied on the FRAND bargain.

Importing the SSPPU concept into the standards context is also problematic for several practical reasons. First, FRAND negotiations are bilateral contract negotiations between private parties. But the SSPPU

⁴ See generally Douglas H. Ginsburg, Koren W. Wong-Ervin, & Joshua D. Wright, *The Troubling Use of Antitrust to Regulate FRAND Licensing*, *CPI Antitrust Chronicle* (Oct. 2015), https://www.law.gmu.edu/assets/files/publications/working_papers/LS1537.pdf.

concept does not necessarily apply in that context—especially when dealing with a large, complex patent portfolio like Qualcomm’s.

Second, a FRAND commitment is a contract between an innovator and an SSO, with implementer-licensees as third-party beneficiaries. The FRAND commitment’s meaning depends on the SSO’s intellectual property rights policy. Rarely do these contractual documents refer to the SSPPU concept, and it is inappropriate to impose it retroactively.

Third, one SSO, the IEEE, recently adopted an explicit SSPPU reference in its intellectual property rights policy, and that decision created substantial controversy. *See* J. Gregory Sidak, *The Antitrust Division’s Devaluation of Standard-Essential Patents*, 105 *Georgetown L.J. Online* 48 (2015). This shows the lack of consensus on the advisability of incorporating the SSPPU concept into FRAND obligations.

E. The SSPPU Concept Cannot Override Actual Market Value

Yet another concern is that a rigid application of the SSPPU concept inevitably leads to the improper discounting of more accurate, market-based evidence about the value of patented technologies. The district court appears to have succumbed to this error. *See infra*.

Settled precedent has long recognized that direct, market-based information in the form of actual licenses is some of the most relevant evidence of the true value of patented technology. As the Federal Circuit emphasized in *Versata Software*, where there is “an established royalty,” that market-based rate should be used as the basis for calculating the reasonable royalty in preference to other inherently more speculative calculations. *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1267–68 (Fed. Cir. 2013). This approach was reaffirmed in *Ericsson* and *CSIRO*, both of which used actual licenses as the evidence of a market-based royalty, no matter if those licenses were negotiated under the SSPPU approach. *Ericsson*, 773 F.3d at 1226–28; *CSIRO*, 809 F.3d at 1303.

These cases betray any suggestion that the SSPPU concept can trump market evidence. It would be illogical and irrational to myopically adopt the SSPPU concept in the face of empirical evidence. And it is telling that proponents of the SSPPU concept uniformly advocate for its use in order to lower a royalty award for infringement. This biased application speaks volumes, and it amounts to a suggestion that an adjudged infringer ought to pay less for infringement than a willing

licensee paid in the open market and without putting the patent holder to the trouble and expense of litigation. It flouts 35 U.S.C § 284 and its mandate that courts award “damages adequate to compensate for the infringement.”

F. The SSPPU Concept Does Not Compel Using the Cost of the Component as the Royalty Base

Some advocates of the SSPPU concept declare that it is a definitive rule for determining a royalty base, which should be the cost of the component. This approach would conflict with *CSIRO*, where the Federal Circuit squarely rejected the argument that the SSPPU concept must be employed in all damages models and affirmed the district court’s use of a non-SSPPU-based damages analysis. Moreover, as discussed above, the SSPPU concept does not apply and is inappropriate in most circumstances.

* * *

In sum, despite the district court’s rote application, the SSPPU concept is not a hard-and-fast rule that applies in every reasonable royalty analysis for a patented invention that is part of a multi-component consumer product. It should have no meaningful applicability outside the context of jury trials assessing patent damages.

II. The Proper Valuation Of Patented Technology Must Comport With Accepted Patent Law On Reasonable Royalties

The incorrect application of the SSPPU concept leads to a broader concern with the district court’s analysis—the lack of a proper application of federal patent law when assessing what constitutes a “reasonable royalty.” The opinion repeatedly refers to Qualcomm’s royalty rates as “unreasonably high,” yet the opinion lacks any substantive application of the law governing reasonable royalties in the patent context. This omission is a fundamental flaw on which the ultimate conclusion of antitrust liability rests.

A patent owner is entitled to compensation when an infringer uses the invention without authorization. By statute, the patent owner is entitled to “damages 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.” 35 U.S.C § 284.

Settled Federal Circuit precedent has consistently used the *Georgia-Pacific* factors for determining a reasonable royalty for patent infringement. *See, e.g., Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1294–97 (Fed. Cir. 2015) (discussing *Georgia-Pacific Corp. v. U.S.*

Plywood Corp., 318 F. Supp. 1116 (S.D.N.Y. 1970)). The *Georgia-Pacific* factors include a thorough, although not necessarily exclusive, list of evidence that can inform a court or jury about what would have been a reasonable royalty had the parties agreed to a license for the patented technology.

Under this analysis, the most informative evidence in assessing a “reasonable royalty” is evidence of an actual established royalty rate. As the Federal Circuit has explained, “[a]n established royalty is usually the best measure of a ‘reasonable’ royalty for a given use of an invention because it removes the need to guess at the terms to which parties would hypothetically agree.” *Monsanto Co. v. McFarling*, 488 F.3d 973, 978–79 (Fed. Cir. 2007). This proposition is not only commonsensical but is supported by continued and long-settled precedent. *See, e.g., Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, 778 F.3d 1365, 1377 (Fed. Cir. 2015) (citing and quoting approvingly *Monsanto*); *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1579 (Fed. Cir. 1996) (“Calculation of a reasonable royalty . . . is simplified when the record shows an established royalty for the patent in question or for related patents or products.”); *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 798 (Fed. Cir. 1988) (“Where an

established royalty exists, it will usually be the best measure of what is a ‘reasonable’ royalty.”); *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078 (Fed. Cir. 1983); *Tektronix, Inc. v. United States*, 552 F.2d 343, 347 (Ct. Cl. 1977) (“Where an established royalty rate for the patented inventions is shown to exist, the rate will usually be adopted as the best measure of reasonable and entire compensation.”).

The “established royalty” doctrine is not just Federal Circuit precedent; it follows from Supreme Court caselaw. In *Birdsall v. Coolidge*, 93 U.S. 64, 70 (1876), the Court explained, in no uncertain terms, that “[e]vidence of an established royalty will undoubtedly furnish the true measure of damages in an action at law.” The recognition of an established royalty’s significance in assessing the true value of a patented invention continued through the years. *See, e.g., Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 648 (1915) (explaining that “the established royalty could have been proved as indicative of the value of what was taken, and therefore as affording a basis for measuring the damages”); *Rude v. Westcott*, 130 U.S. 152, 167 (1889).

Despite this settled law, the district court seemingly disregarded Qualcomm’s evidence about an established royalty. While this brief does

not endeavor to scrutinize the evidence presented at trial, there is a plain disconnect between (a) the court's evaluation of Qualcomm's royalty rate it charged for over 30 years and (b) how established Supreme Court and Federal Circuit precedent would view that evidence of an established royalty. The district court's opinion does not address this controlling precedent and does not even use the phrase "established royalty." At a minimum, and as a matter of law, it is difficult to reconcile this disconnect.

The district court also appeared to accept, as a given, the alleged diminishing value of Qualcomm's patent portfolio. For instance, the district court cited the testimony of one witness who referred to the fact that "many of Qualcomm's CDMA patents had expired" and, because of that, Qualcomm's established royalty rate "violates FRAND." Slip op. at 78. The court referenced similar evidence from other witnesses. *See, e.g.*, slip op. at 65. Based in part on that evidence, the court concluded that Qualcomm's royalty rate was "unreasonably high."

But that evidence is woefully insufficient, under settled precedent, to disregard the established royalty and conclude that the royalty rates are "unreasonably high." To do so is to overlook basic patent valuation

fundamentals, which require knowing which patents are still in force, understanding the claim scope by construing the claims, *see Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and applying those claims to products and services in the marketplace. To be sure, when valuing a large, complex portfolio, one may not need to perform an exhaustive and completely comprehensive claim construction and infringement analysis, but some informed analysis has to be done to depart from an established royalty.

III. Contract And Patent Law Are Better Suited Than Antitrust Law For Addressing Disputes About A FRAND Agreement

A third concern with the outcome is the unnecessary extension of antitrust law. At its base, the FTC made the controversial decision to enter uncharted waters by using antitrust law to solve a purported problem that can be easily resolved through the application of contract and patent law.

The court's decision rests on its conclusion that Qualcomm committed to a FRAND agreement. This brief accepts, for the sake of argument, that the conclusion is correct. What is deeply concerning, however, is the next leap—that a breach of a FRAND agreement transforms aggressive negotiating about patent royalty rates into an

antitrust violation. No court has so held, and there is good reason for that.

As a first point, this Court itself has resolved disputes over FRAND agreements and obligations. *See Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024 (9th Cir. 2015); *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872 (9th Cir. 2012). The Federal Circuit has as well. *Ericsson*, 773 F.3d at 1225–36. Those cases confirm that, as a general proposition, the hammer of antitrust law is not needed to resolve FRAND disputes when more precise scalpels of contract and patent law are effective.

And there can be no getting around the highly controversial decision to institute this action in the first place. On the eve of the change in administration, the FTC voted 2–1 to commence the present enforcement action, over a rare written dissent. *See* Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Qualcomm, Inc.*, No. 141-0199 (Jan. 17, 2017) (describing “an enforcement action based on a flawed legal theory . . . that lacks economic and evidentiary support, that was brought on the eve of a new presidential administration, and that, by its mere issuance, will undermine U.S. intellectual property rights in Asia and worldwide”).

Many commentators have since voiced their concerns about the negative effect the district court's decision will have on the Nation's innovation policy. Indeed, in granting Qualcomm's motion for a stay of the injunction, this Court recognized that "this case is unique, as the government itself is divided about the propriety of the judgment and its impact on the public interest." While antitrust policy has its place as a policy lever to enhance market competition, the rules of contract and patent law are better equipped to handle commercial disputes between the world's most sophisticated companies about FRAND agreements and whether patent royalty rates on complex technology are "unreasonably high."

Another flaw in applying antitrust law to FRAND disputes is the alleged problem of the "patent holdup." In short, no evidence supports the oft-repeated claims that predictable, valid patent rights lead to a holdup problem that, in turns, creates antitrust violations.

Many legal scholars have explored the fallacy underlying the patent holdup argument. See Alexander Galetovic & Stephen Haber, *The Fallacies of Patent Holdup Theory*, 13 J. Competition L. & Econ. 1 (2017); Jonathan M. Barnett, *Has the Academy Led Patent Law Astray?*, 32

Berkeley Tech. L.J. 1316, 1344 (2017) (detailing the lack of empirical evidence for the patent holdup theory); Damien Geradin, *The Meaning of “Fair and Reasonable” in the Context of Third Party Determinations of FRAND Terms*, 21 Geo. Mason. L. Rev. 919, 940 (2014) (“[A]lthough holdup and royalty stacking could occur in theory, there is little evidence that they regularly occur in the real world.”); J. Gregory Sidak, *Holdup, Royalty Stacking, and the Presumption of Injunctive Relief for Patent Infringement: A Reply to Lemley & Shapiro*, 82 Minn. L. Rev. 714, 718–19 (2008) (discussing studies that expose the infirmities in the patent hold-up and royalty stacking theories).

A third concern with using antitrust law is that it overlooks Qualcomm’s rational reasons for not licensing its patent portfolio to rival chipmakers. The potential for patent exhaustion creates the real risk of not being able to realize the true value of a patented invention.

The record itself suggests that, in this industry, licensing at the OEM level is far from unusual. The licensing programs of Qualcomm and its rival chipmakers appear to be rational responses to avoid the potentially negative effects of patent exhaustion. *See generally Impression Prods., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523 (2017);

Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617 (2008). With patent exhaustion, “the initial authorized sale of a patented item terminates all patent rights to that item.” *Quanta*, 553 U.S. at 625.

Once patent exhaustion attaches, a downstream user of the patented technology has no obligation to compensate the patent owner. Once that happens, the patent owner may not realize the full value of the patented technology. But rational marketplace participants, such as Qualcomm and the other chipmakers, have determined that their patents are best licensed to OEMs, not to rival chipmakers.

While the district court’s opinion cites *Quanta* a single time, *see slip op.* at 44, it does not reconcile how *Quanta*’s change in law motivates competitive, rational innovators to license at points downstream in the production chain to avoid patent exhaustion. The district court’s failure to address these very legitimate and lawful motivations to license only at the OEM level further undermines the confidence this Court can have in the outcome.

IV. The Court’s Decision Devalues The Important Role Exclusive Patent Rights Play In Advancing Innovation And Improving Competition

Another fundamental concern with the decision is the failure to acknowledge the importance of the exclusive patent right as a tool for incentivizing innovation and rewarding inventors for their work in discoveries and inventions. The exclusive right permits innovators to decide how best to reap their rewards, and exercising that right is generally not a basis for antitrust liability.

A. The Exclusive Right Granted by a Patent is an Important and Vital Means for Promoting Innovation

The exclusive right secured by a patent is indeed a critical driving force for U.S. innovation and technological progress. *See Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480 (1974) (“The patent laws promote this progress by offering a right of exclusion for a limited period as an incentive to inventors to risk the often enormous costs in terms of time, research, and development.”). The Founding Fathers recognized its importance by including the exclusive right as the Constitution’s only personal right. *See* U.S. Const. art. I, § 8, cl. 8. After the Constitution’s

ratification, Thomas Jefferson remarked that “issuing patents for new discoveries has given a spring to invention beyond my conception.”⁵

For these and other reasons, a patent owner traditionally had the right to exclude others from infringing his or her patent. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 395 (2006) (Roberts, C.J., concurring) (“From at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases.”). A patent owner could exclude one from using the invention even if the patent owner did not use it. *See Cont’l Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 424–25 (1908).

Indeed, “the encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.” *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006) (quotation marks omitted). That is why “[i]njunctive relief is vital to this system.” *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633,

⁵ Justin Hughes, *Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson*, 79 S. Cal. L. Rev. 993, 1030–32 (2006) (citing Letter from Thomas Jefferson to Benjamin Vaughan (June 27, 1790), in 16 *The Papers of Thomas Jefferson* 579 (Julian P. Boyd ed., 1959)).

647 (Fed. Cir. 2015). Using untested antitrust theories to limit the exclusive patent right will only continue to erode the incentive to innovate.

Leading experts have warned against the harm that will be caused by the overreach of antitrust law in the SEP and FRAND contexts. *See, e.g.,* Douglas H. Ginsburg, Taylor M. Ownings, & Joshua D. Wright, *Enjoining Injunctions: The Case Against Antitrust Liability for Standard Essential Patent Holders Who Seek Injunctions*, The Antitrust Source, Oct. 14, 2014, at 1 (explaining that “the application of antitrust law in this situation could, by undermining the ability of courts to tailor appropriate remedies, diminish the incentives for companies to innovate and for industries to adopt standards”); David Teece, *The ‘Naked Tax’ in FTC v. Qualcomm is Patently Absurd*, Law360 (Feb. 1, 2019) (“The FTC risks existential harm to an important American technology developer.”).⁶

⁶ <https://www.law360.com/articles/1124762/the-naked-tax-in-ftc-v-qualcomm-is-patently-absurd>.

B. Exercising One’s Exclusive Patent Rights Generally Cannot Lead to Antitrust Liability

All of this is why the exercise of a valid patent right generally cannot create liability under antitrust law. *See* U.S. Dep’t of Justice & Fed. Trade Comm’n, *Antitrust Guidelines for the Licensing of Intellectual Property* 3 (Jan. 12, 2017) (“The antitrust laws generally do not impose liability upon a firm for a unilateral refusal to assist its competitors, in part because doing so may undermine incentives for investment and innovation.”); U.S. Dep’t of Justice & Fed. Trade Comm’n, *Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition* 32 (2007) (“[A]ntitrust liability for mere unilateral, unconditional refusals to license patents will not play a meaningful part in the interface between patent rights and antitrust protections.”); *see also* *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408 (2004) (recognizing that, “as a general matter, the Sherman Act ‘does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal’” (quoting *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919))).

Indeed, antitrust liability in the patent context is generally restricted to those instances in which a patent owner attempts to abuse the patent right, such as an unlawful tying arrangement, *see Ill. Tool Works Inc. v. Independent Ink, Inc.*, 547 U.S. 28 (2006), or patent misuse, *see Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 140 (1971). But that is not the basis of the district court's decision here. Rather, the end result is the forced renegotiation of private licensing agreements and the devaluation of an important and highly innovative patent portfolio of 140,000 patents and patent applications that are fundamental to cellphone technology.

The antitrust violations in this case rest on Qualcomm's "threats" to restrict access to its patented technology. That, however, is no more than exercising the statutory right to exclude based on the patent grant. Perhaps it amounts to a breach of the FRAND contract. But finding antitrust liability premised on the exercise of valid patent rights will fundamentally abrogate the patent system and its critical means for promoting and protecting important innovation.

V. Conclusion

Amicus Curiae the Honorable Paul R. Michel (ret.) respectfully submits that the district court's decision should be reversed.

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Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

This document complies with the type-volume limitation of Circuit Rules 29 and 32-3(2) because it contains 5,953 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Circuit Rule 29.

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on August 30, 2019. All participants in the case are registered CM/ECF users, and service will be accomplished by the appellate CM/ECF system.

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