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**FTC V. QUALCOMM AND INTELLECTUAL PROPERTY LAW:
PERSPECTIVES BY THE 2018-2019 INNOVATORS NETWORK IP FELLOWS**



5G/IOT, SEPS AND THE NEW EU COMMISSION

By Jim Beveridge

SUMMARY

In 2017 as part of its Communication on SEPs (Setting out the EU approach to Standard Essential Patents) the European Commission wrote “For Europe to reap the full benefit of the Single Market and Digital Single Market a balanced IPR framework is needed that supports a sustainable and efficient standardisation ecosystem and SEP licensing environment.”

This paper looks at the 5G/IoT SEP licensing situation in Europe today and considers how the recent case of the FTC v. Qualcomm supports the principles outlined in the Commission’s Communication.

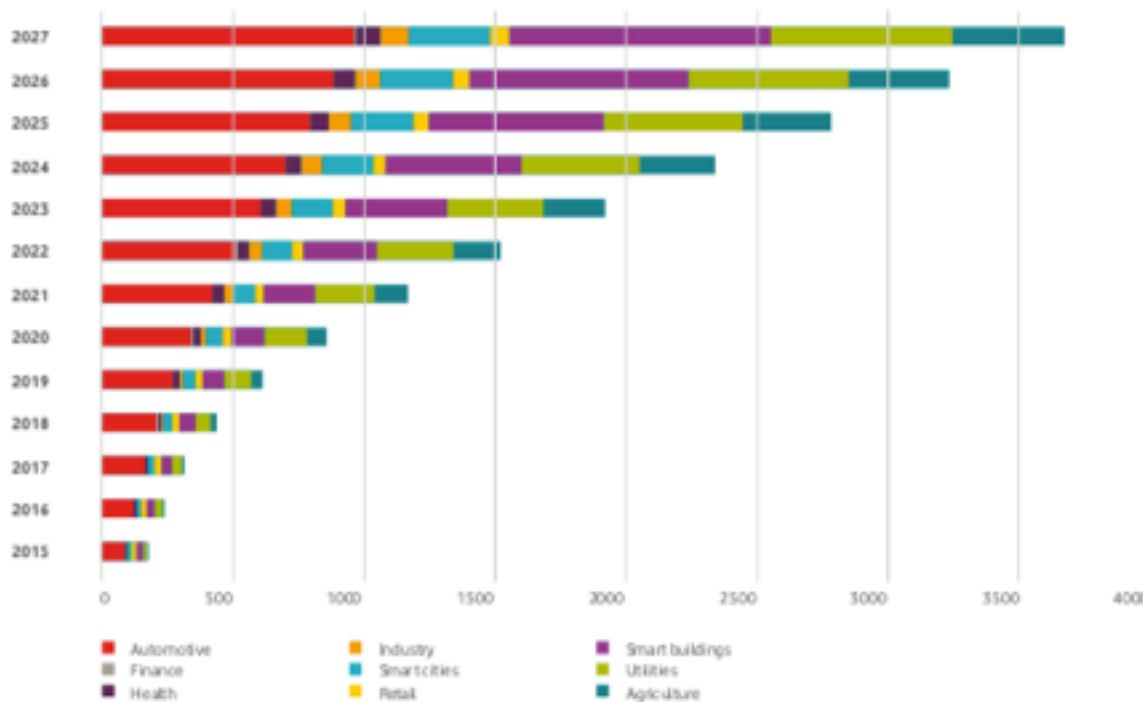
Additionally, the paper highlights and provides links to the work carried out by the Berlin-based CEN/CENELEC CWA2 committee. This group was set up to aid the roll out of internet of things (IoT) in Europe and has recently published practical guidance on the licensing of SEPs.

2019 NEW COMMISSION, NEW PRIORITIES

At the end of October 2019, a new European Commission President will take the baton from the outgoing President, Jean-Claude Juncker. One of the challenges facing the incoming President will be how to re-establish Europe as a global technology leader. As the digital transformation gathers pace within Europe’s Digital Single Market we can expect 5G and IoT to rapidly move to the top of the President’s agenda. 5G and IOT are widely perceived as providing a pivotal link, helping society transition from a physical economy to a prosperous data driven future.

A recent Analysis Mason report produced in March this year highlighted the importance of connected IoT devices to the future competitiveness of Regional Powers. Connected smart devices will play a crucial role in addressing pressing economic and social challenges impacting the life of European citizens.

Figure 1: IoT connections worldwide share by sector



Source: Analysis Mason, IoT forecast connections, revenue and technology trends 2018-2027, March 2019

The new President will be expected to instigate a proactive review of the regulatory tools at his/her disposal to reduce regulatory barriers to 5G/IoT adoption thereby boosting EU competitiveness.

Work is already underway to this effect. In April 2019 the EU Commission commissioned a report entitled Competition Policy for the Digital Era. This report is receiving extra scrutiny not least because European Commissioner for Competition Margrethe Vestager at the time of writing will be promoted on November 1, becoming a top deputy to new commission chef, Ursula von der Leyen.

The report, which is seen by some as building on the 2017 Communication, is a step towards crystalizing the dialogue on how competition law could or should be adapted to a fast-changing technology landscape and the new multiplatform-based, data-driven economy. The report covers in detail regulatory issues concerning platforms, data portability, and interoperability.

One additional area receiving scrutiny in the marketplace is that of data generation. Arguably 5G linked to IoT is the next generation big data generating platform. The amount of data that will be generated by sensors across the vertical markets and processed at the edge or in the cloud will be substantial. This platform is sometimes known as the Cloud of Things.

With the of importance of 5G as a platform for IoT and the contribution of data collected by sensor devices to the growth of the data driven economy, companies holding pivotal intellectual property rights (IPR) positions in the ecosystem can expect increased regulatory scrutiny not just in Europe, but around the globe.

FTC VS. QUALCOMM

A case in point is the recent FTC ruling on Qualcomm regarding their SEP licensing activities.

On May 21st 2019 U.S District Judge Lucy Koh ruled that Qualcomm is a monopoly, its antitrust practices impacting 5G devices violate U.S. antitrust law, and thus it has to change the way it does business.

This judgement resonated in Europe where last year the EU Commission fined Qualcomm €997 million for abuse of its dominant market position in the supply of chips.

The EU Commission competition authorities have been following the U.S. case closely due to the key role interoperable standards play in underpinning the development of Europe's flagship Digital Single Market (DSM).

In the 2017 Communication on Standard Essential Patents (SEPs) the Commission again reinforced the importance of SEP protected digital technologies to the EU economy:

Standards support innovation and growth in Europe, in particular providing for interoperability of digital technologies that are the foundation of the Digital Single Market (DSM). For example, computers, smartphones or tablets connect to the internet or other devices via standardised technologies such as long-term evolution (LTE), WiFi, or Bluetooth, all of which are protected by SEPs. Without the widespread use of such standardised technologies, such interconnectivity would not be possible.

The glue that holds the multi-cultural and multilingual EU member states together in the Digital Single Market is their expertise in interoperable technical standards.

The findings from Judge Koh resonate with the principles laid down the EU Commission's communication on SEPs, supporting access to the standards.

In view of current developments, the Commission considers that SEP licencing should be based on the basis of the following principles:

- There is no one-size-fit-all solution on what FRAND is: what can be considered fair and reasonable can differ from sector to sector and over time. Efficiency considerations, reasonable licence fee expectations on both sides, the facilitation of the uptake by implementers to promote wide diffusion of the standard should be taken into account.

- Determining a FRAND value should require taking into account the present value added of the patented technology. That value should be irrespective of the market success of the product which is unrelated to the value of the patented technology.

- In defining a FRAND value, parties need to take account of a reasonable aggregate rate for the standard.

- The non-discrimination element of FRAND indicates that rightholders cannot discriminate between implementers that are 'similarly situated'.

- For products with a global circulation, SEP licences granted on a worldwide basis may contribute to a more efficient approach and therefore can be compatible with FRAND.

The Commission calls on SDOs and SEP holders to develop effective solutions to facilitate the licensing of a large number of implementers in the IoT environment (especially SMEs), via patent pools or other licensing platforms, while offering sufficient transparency and predictability.

The Commission will monitor licencing practices, in particular in the IoT sector. It will also set up an expert group with the view to deepening expertise on industry licensing practices, sound IP valuation and FRAND determination.

Judge Koh's summary included the provision that Qualcomm must make exhaustive SEP licenses available to modem chip suppliers on FRAND terms. This is in line with EU principle, published above, The non-discrimination element of FRAND indicates that right holders cannot discriminate between implementers that are 'similarly situated'.

Judge Koh's decision and the much-needed certainty it brings will be welcomed by the Europeans who have been concerned that the SEP situation is hampering the development of interconnected products in Europe which will in turn negatively affect the growth of the Digital Single Market.

CEN/CENELEC CWA2 WORKSHOP

Europe prides itself on the strength of its Standardisation institutions CEN, CENELIC and ETSI, and these institutions have the goal of using standardisation to reduce barriers to trade, support economic growth, promote well-being and address societal change. These institutions have all been impacted by ongoing SEP issues.

A further principle called out by the Commission in their Communication was for SDOs and SEP holders to develop effective solutions to facilitate the licensing of a large number of implementers in the IoT environment (especially SMEs), via patent pools or other licensing platforms, while offering sufficient transparency and predictability.

This principle has been supported by the CEN/CENELEC Workshop (CWA2) which provided practical guidance and best practices for the Licensing of SEPs.

This Paris-based workshop which comprised of representatives from a diverse range of industries representing different sectors of the value chain published its findings on June 12, 2019.

The six core principles covered:

1. Injunctions
2. License availability:
3. Court FRAND methodologies:
4. Patent bundling:
5. NDAs and fairness:
6. Patent transfers.

In the FTC case the Judge found that Qualcomm had been refusing to license its SEP patents to competitors. The result was that Judge Koh banned Qualcomm's harmful "no license, no chips practices."

The CEN/CENELIC workshop recommended that

License availability: A FRAND license should be made available to anybody that wants one to implement the relevant standard. Refusing to license some implementers is the antithesis of the FRAND promise. In many cases, upstream licensing can create significant efficiencies that benefit the patent holder, the licensee and the industry.

IMPACT OF THE RULING ON EU VERTICAL INDUSTRIES

This ruling will be welcome news to many of the participants in EU vertical industries which increasingly rely upon communications and networks for their future growth. EU verticals, which pride themselves on their own industry standards expertise, have been blindsided by the "pervasiveness" of horizontal Telecom 5G standards into their product and service designs and the potential impact of that ingress on bottom line margins.

Take automotive as one example. A recent report from IPLYTICS highlighted that not a single car manufacturer was amongst the top 15 companies contributing to the 5G standard. Not a single car manufacturer or automotive supplier has declared SEPs for 5G.

The recent request from Daimler to EU competition authorities to probe Nokia's SEPs has shone a light on the tensions existing between telecoms and transportation in the EU domain.

This tension is further exacerbated by the massive changes taking place in transportation. In the addition to the connected car the sector is moving towards Smart Mobility and Mobility as a Service (MaaS). These dynamics are expected to put further margin pressure on car manufacturers and fundamentally change the automotive value chain. Layer onto this current thinking around merging the physical and digital worlds and its unsurprising that transportation is becoming a hotbed of innovation with industry players vying for position in the future value chain.

Referencing the Analysis Mason report on IoT connections their analysis shows that automotive is, outside of the smart home, forecasted to lead the number of IoT connected devices worldwide up to 2027.

5G/IOT DATA PLATFORM

The Greek philosopher Heraclitus is reported to have said: τὰ πάντα ῥεῖ καὶ οὐδὲν μένει (everything flows and nothing stays). The fate of any technology field today is that technologies not only do not stay but move fast and actually accelerate.

Technology doesn't stand still and in transportation (and in turn other sectors) we are about to enter the realm of Algorithmic Governance (<https://www.itf-oecd.org/governing-transport-algorithmic-age>).

This recent OECD/ITF report looks at how efficiencies can be achieved in transportation by algorithmic control, this isn't far-fetched as some are suggesting. Today's internet relies for its efficiency and reliability on network management functions being automated. In this future the curation, preservation, and dissemination of IP may well be automated.

Some SSOs are already anticipating this automation. MPEG (Moving Pictures Expert Group) has a great track record in developing compression standards for a multi-industry environment.

In their latest endeavor, MPEG5, they are architecting the next generation of video compression using the structure of an automated toolbox. This future standard will be built on 20-year-old public domain technology to which modern more efficient tools are added. If any particular tool has "issue" it can be bypassed without impacting the base functionality of the compression.

5G/IoT is disruptive partially because it is cost cutting in nature. To be successful and achieve ubiquity in deployment requires low cost sensors and low connectivity and processing costs.

Defining FRAND in a way that restricts access to technology and/or raises the cost of deployment and operation will function as a gate keeper restricting the generation, dispersion, and manipulation of data. This in turn will adversely affect sector competition, hindering European growth.

The flip side is that with the correct foundations vast quantities of machine generated non-personal data can be cultivated, harvested, and used to transform Europe's standing in global competitiveness.

CONCLUSION

Small businesses addressing the Digital Single Market need to be able to trust the open standards they are basing their product upon. When the SME purchases an order of chips from the semiconductor salesman they don't expect his parting shot to be a, "By the way, before we deliver please get your legal department to contact us so you can obtain a license." They might then find out that the terms of the license are onerous or even worse that no license is forthcoming and a product redesign is necessary.

Europe's standardization institutions have an excellent global reputation and are the bedrock of the DSM. The incoming Commission will have the opportunity to further promote the uptake and deployment of 5G/IoT, paying attention to reducing various regulatory hurdles including the uncertainty surrounding SEPS.

The ruling by Judge Koh is a timely intervention ahead of the appointment of a fresh group of EU Commissioners with the responsibility for piloting the EU through fast changing tech waters over the next five years. It is a ruling that, in line with the Commission's 2017 Communication, improves transparency, clarity, and provides a more solid foundation for Europe's small business tech innovator community, regarding the licensing of SEPs.

Looking to Kneecap Antitrust Scrutiny of Standards? Don't Rely on Property

Michael A. Carrier^{1*}

Introduction

The head of the U.S. Department of Justice's Antitrust Division, Makan Delrahim, has been on a mission to eradicate antitrust scrutiny of standards. In particular, he has advocated an absolutist conception of property for patents, asserting that they provide an unqualified right to exclude followed by an injunction. He also has claimed that antitrust has no role to play in addressing patent holdup, which occurs when a patent owner seeks an injunction or excessive royalties after an industry has adopted a patented technology that the industry cannot avoid. In furtherance of this absolutist position, Delrahim took the highly unusual step of intervening in the FTC's antitrust case against Qualcomm.

This essay demonstrates that Delrahim's attempt to remove antitrust scrutiny from standards cannot rely on property. In particular, it shows how absolutist conceptions of limitless rights are not consistent with property law and do not justify abandoning antitrust scrutiny of patent holdup.

I. Absolutist Property

In the setting of standards and patent holdup, Assistant Attorney General (AAG) Delrahim has staked out an aggressive position that relies on absolutist conceptions of property. This edifice is constructed on four pillars, whose flaws were on display in Judge Koh's decision.

A. Absolute Right to Exclude

First, Delrahim emphasizes the “core of what it means to hold an IP right—namely, the right to exclude.”² Patents are “a form of property, and the right to exclude is one of the most fundamental bargaining rights a property owner possesses.”³ Patent rights “function best if an owner retains a right to exclude,” and “[d]epriving a patent holder of this right would skew the bargain away from the free-market incentive scheme the Constitution and Congress have established.”⁴

Delrahim turns for support to the Constitution's text, which provides that “Congress shall have the Power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”⁵ Delrahim asserts that “the authors of the Constitution not only used the word ‘right,’ but . . . also preceded it with the equally important word ‘exclusive.’”⁶

And he states that patent law “offer[s] incentives for holders of valid patents to seek the greatest rewards possible for their inventions.”⁷ In underscoring the importance of absolute exclusionary rights and ignoring the utilitarian justification that links these rights with societal welfare, Delrahim's position implicates a natural rights justification for property.

¹ * Distinguished Professor, Rutgers Law School; Intellectual Property Fellow, Innovators Network Foundation. Copyright © 2019 Michael A. Carrier. Parts of this article are adapted from previous work.

² Makan Delrahim, The “New Madison” Approach to Antitrust and Intellectual Property Law, University of Pennsylvania Law School, Mar. 16, 2018 [Penn speech].

³ Assistant Attorney General Makan Delrahim Delivers Remarks at the USC Gould School of Law's Center for Transnational Law and Business Conference, Nov. 10, 2017 [USC speech].

⁴ Makan Delrahim, Protecting Free-Market Patent Bargaining, Competition, and the Right to Exclude, Ottawa, Canada, Oct. 10, 2018 [Ottawa speech].

⁵ Assistant Attorney General Makan Delrahim Delivers Remarks at the 19th Annual Berkeley-Stanford Advanced Patent Law Institute, Palo Alto, CA, Dec. 7, 2018 [Palo Alto speech].

⁶ Id.

⁷ Assistant Attorney General Makan Delrahim Delivers Remarks at IAM's Patent Licensing Conference in San Francisco, San Francisco, CA, Dec. 7, 2018 [San Francisco speech].

The Flaws

Property's right to exclude is not sacrosanct. As I have shown in detail elsewhere, at least 50 doctrines limit property owners' rights.⁸ Just to mention one, landowners cannot prevent others from entering their land to save lives or property or to avoid some other serious harm.

Delrahim's treatment of patents as natural property rights ignores the uncontroversial utilitarian framework for the patent grant. The Supreme Court has long made clear the primacy of the utilitarian justification. Half a century ago, for example, the Court in *Graham v. John Deere* explained that "[t]he patent monopoly was not designed to secure to the inventor his natural right in his discoveries," but instead was "a reward, an inducement, to bring forth new knowledge" and was to be granted only to "inventions and discoveries which furthered human knowledge."⁹

Exclusive rights exist not to bestow upon patentees a moral right to a reward but to promote the best interests of society. That is why patents, like other forms of intellectual property, are subject to doctrines (like novelty, nonobviousness, the written-description and enablement disclosure requirements, and a limited 20-year term) that ensure that protections for market competition balance patents' incentive effects. A focus on exclusionary natural rights also is inconsistent with the Supreme Court's reminder, in upholding the Patent Office's inter partes review process for administratively reconsidering patents, that "[p]atents convey only a specific form of property right—a public franchise."¹⁰

B. Needed Leverage from Injunctions

AAG Delrahim's second pillar centers on injunctions. A patentee's ability to obtain an injunction against infringement "gives it necessary leverage in a free market negotiation."¹¹ Understanding "patent rights, once conferred, as a form of property right helps frame the current debate over injunctions, and demonstrates how far we've strayed off course."¹² In other words, "a violation by a patent holder of an SSO rule that restricts a patent-holder's right to seek injunctive relief should be appropriately the subject of a contract or fraud action and rarely if ever should be an antitrust violation."¹³

The Flaws

The position that patent infringement automatically leads to an injunction is, for good reason, no longer the law. More than a decade ago, the Supreme Court ruled unequivocally that courts must decide whether to grant injunctions "consistent with traditional principles of equity, in patent disputes no less than in other cases."¹⁴ To similar effect, the patent statute provides that courts "may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable".¹⁵

8 Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 *DUKE L J.* 1 (2004).

9 383 U.S. 1, 9 (1966).

10 *Oil States Energy Servs. v. Greene's Energy Group*, 2018 WL 1914662, at *8 (U.S. Apr. 24, 2018); see also *id.* at *6 (patents "involv[e] public rights").

11 Ottawa speech, *supra* note 3.

12 Penn speech, *supra* note 1.

13 USC speech, *supra* note 2.

14 *eBay v. MercExchange*, 547 U.S. 388, 394 (2006).

15 35 U.S.C. § 283.

In fact, the Federal Circuit, not historically associated with insufficient protection of patent rights, has made clear that the framework the Supreme Court set forth in *eBay v. MercExchange* “provides ample strength and flexibility for addressing the unique aspect of FRAND committed patents and industry standards in general.”¹⁶ Because there could be thousands of patents in a product today, it is not appropriate uniformly to apply standards from the 18th century, when there were so few patents in a product that “if you put technology in a bag and shook it, it would make some noise.”¹⁷

C. Overblown Patent Holdup

Delrahim claims that the notion of patent holdup is overblown. He states that “in recent years, competition policy has focused too heavily on the so-called unilateral hold-up problem, often ignoring what fuels dynamic innovation and efficiency.”¹⁸ In fact, he laments that “[e]very incremental shift in bargaining leverage toward implementers of new technologies acting in concert can undermine incentives to innovate.”¹⁹

Delrahim worries that “[t]oo often lost in the debate over the hold-up problem is recognition of a more serious risk: the hold-out problem.”²⁰ He warns that “implementers threaten to under-invest in the implementation of a standard . . . until their royalty demands are met.”²¹ This problem is “a more serious impediment to innovation” because (in contrast to implementers, some of whose investments “occur after royalty rates for new technology could have been determined”), innovators “make an investment before they know whether that investment will ever pay off.”²²

The Flaws

The holdup problem has been recognized by courts and standard setting organizations themselves. As one court stated, patent holdup is not a theoretical concern, but instead “is a substantial problem that [F]RAND is designed to prevent.”²³ And a second court rejected the argument that “hold up does not exist in the real world,” finding that such an argument “does not trump the evidence . . . that holdup took place in this case.”²⁴

As former FTC Commissioner Terrell McSweeney pointed out, courts in two cases awarded patentees only 1/150 and 1/500 of the royalties the patentholder sought.²⁵ The fact that SSOs—those with the most knowledge of the issues—adopt FRAND policies is itself telling proof that holdup is a problem. Otherwise, it is not clear why they would adopt policies to prevent holdup.²⁶

16 *Apple v. Motorola*, 757 F.3d 1286, 1332 (Fed. Cir. 2015).

17 Robert P. Merges, *As Many As Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform*, 14 *BERKELEY TECH. L.J.* 577, 585 (1999).

18 *Id.*

19 *Id.*

20 USC speech, *supra* note 2.

21 *Id.*

22 *Id.*

23 *In re Innovatio IP Ventures*, 2013 WL 5593609, at *9 (N.D. Ill. Oct. 3, 2013).

24 *Microsoft v. Motorola*, 2013 WL 5373179, at *7 (W.D. Wash. Sept. 24, 2013).

25 Commissioner Terrell McSweeney, *FTC, Holding the Line on Patent Holdup: Why Antitrust Enforcement Matters*, Mar. 21, 2018.

26 TIMOTHY J. MURIS, *BIPARTISAN PATENT REFORM AND COMPETITION POLICY*, AMERICAN ENTERPRISE INSTITUTE REPORT 9 (2017).

The anticompetitive harms from patent holdup also have been consistently acknowledged by officials in Republican and Democratic administrations. The unanimously adopted 2007 joint report of the Department of Justice and Federal Trade Commission explained the difference between a patentee's power *ex ante* (when “multiple technologies may compete to be incorporated into the standard”) and *ex post* (when “the chosen technology may lack effective substitutes precisely because the SSO chose it as the standard”), with this disparity allowing the patentee to “extract higher royalties or other licensing terms that reflect the absence of competitive alternatives.”²⁷ The FTC also unanimously endorsed a 2011 Report that highlighted how “an entire industry” could be “susceptible” to the “particularly acute” concern of holdup, which can result in “higher prices” and “discourage standard setting activities and collaboration, which can delay innovation.”²⁸

Finally, holdup presents a more serious antitrust concern than holdout. Implementers that suffer holdup because of sunk investments in a technology are vulnerable to paying supra-competitive royalties based on the entire value of the product, as opposed to the value of the patented technology.²⁹ In contrast, the risks faced by innovators who complain about licensees “holding out” are consistent with the “speculative investments” always made by technology and product developers.³⁰

To be sure, coordinated action between licensees could implicate antitrust, but these concerns are not presented in licensing disputes at the core of holdout. Both licensors and licensees can engage in holdout, merely by “refus[ing] to perform in good faith or negotiate reasonably.”³¹ In contrast, the holdup problem, and accompanying lock-in binding implementers, exist only on one side of the exchange.

D. No Role for Antitrust

Fourth, Delrahim disclaims a role for antitrust. He states that “patent hold-up is not an antitrust problem”³² and that “a unilateral refusal to license a valid patent should be *per se* legal.”³³ A patent holder “cannot violate the antitrust laws by properly exercising the rights patents confer, such as seeking an injunction or refusing to license such a patent.”³⁴ Nor should a “unilateral violation of a FRAND commitment . . . give rise to a cause of action under Section 2 of the Sherman Act, even if a patent holder is alleged to have misled or deceived a standard-setting organization with respect to its licensing intentions.”³⁵ The reason is that “[a]pplying Section 2 to this sort of unilateral conduct would contravene the underlying policies of the antitrust laws.”³⁶

27 U.S. DEPT. OF JUSTICE & FTC, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 35-36 (2007); see also *id.* at 37-38 (quoting witness who stated that holdup results in “either [not] mak[ing] the standard you acceded to [or] blackmail”).

28 FTC, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 234 (2011).

29 A. Douglas Melamed & Carl Shapiro, How Antitrust Law Can Make FRAND Commitments More Effective, 127 YALE L.J. 2110, 2119 (2018).

30 *Id.*

31 MURIS, *supra* note 25, at 9.

32 Penn speech, *supra* note 1.

33 USC speech, *supra* note 2; see also Penn speech, *supra* note 1.

34 USC speech, *supra* note 2.

35 San Francisco speech, *supra* note 6.

36 *Id.*

The fact that “a patent holder can derive higher licensing fees through hold-up simply reflects basic commercial reality,” and “[c]ondemning this practice . . . as an antitrust violation, while ignoring equal incentives of implementers to ‘hold out,’ risks creating ‘false positive’ errors of over-enforcement that would discourage valuable innovation.”³⁷ A monopolization cause of action “would skew the patent licensing bargain away from the bargaining outcome that a free market dictates.”³⁸ It “would be a mistake to infer that a contractual FRAND commitment somehow establishes a duty under the antitrust laws to license on terms demanded by a licensee or that violations of an ambiguous FRAND term become an antitrust violation.”³⁹ And even deception to an SSO “is not the sort of market-power-enhancing conduct that Section 2 should reach because a cause of action for treble damages would impede the policies underlying the Sherman Act.”⁴⁰

The Flaws

Antitrust plays an important role in evaluating standard-setting conduct. Patentees that obtain or maintain monopoly power as a result of breaching a FRAND commitment present a standard monopolization case.⁴¹ FRAND breaches could satisfy the elements of monopolization, in particular, the requirement that a plaintiff demonstrate exclusionary conduct by showing an exclusion of competitors (the exclusion of rival competitive technologies not chosen by the SSO) that results in competitive injury (price increases and innovation harms from the breach) and acquisition or maintenance of monopoly power (obtained through the breach).

Moreover, the conduct here is not immune from the application of antitrust law. Parties filing petitions with government agencies often can claim antitrust immunity based on the Noerr-Pennington doctrine, as “[t]hose who petition [the] government for redress are generally immune from antitrust liability.”⁴² But the “absolutist position” that the Noerr doctrine “immunizes every concerted effort that is genuinely intended to influence governmental action” would allow parties to violate the antitrust laws, for example by being “free to enter into horizontal price agreements.”⁴³ A breach of a FRAND promise is “distinguish[able] from Noerr and its progeny” because it is “the type of commercial activity that has traditionally had its validity determined by the antitrust laws themselves.”⁴⁴

Conclusion

When exported outside its domain, property often loses its identity. Gone are the nuances. Gone are the limits. And in their place is a barren caricature of absolutist property that does not reflect actual property law.

Outside property’s home, some may not appreciate its true identity. That is exactly what AAG Delrahim has done in adopting just such an amped-up version of absolutist property. But if Delrahim is going to launch an assault on antitrust’s vital role in policing standard-setting abuses, he will need support from somewhere other than property law.

37 Penn speech, *supra* note 1.

38 San Francisco speech, *supra* note 6.

39 *Id.*

40 *Id.*

41 E.g., *Broadcom v. Qualcomm*, 501 F.3d 297, 314 (3d Cir. 2007); *Microsoft Mobile v. Interdigital*, 2016 WL 1464545, at *2 (D. Del. Apr. 13, 2016). Relatedly, seeking an injunction against a licensee willing to pay a FRAND rate—such as where LSI sought an exclusion order in the U.S. International Trade Commission before proposing a FRAND license to Realtek, *Realtek Semiconductor v. LSI*, 946 F. Supp. 2d 998, 1007-08 (N.D. Cal. 2013)—can constitute monopolization.

42 *Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus.*, 508 U.S. 49, 56 (1993).

43 *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 503 (1988).

44 *Id.* at 505; see also *FTC v. Superior Court Trial Lawyers Ass'n*, 493 U.S. 411, 424-25 (1990).

FTC v. Qualcomm: Implications for Implementers

Harry First^{45*}

Introduction

Judge Koh's decision in *FTC v. Qualcomm* was an important victory for the FTC in its effort to end the abuse of standard essential patents (SEPs), but the litigation is not over. The appellate process will need to run its course, including the potential for an unprecedented intervention in the Ninth Circuit by the Justice Department on behalf of Qualcomm and possible Supreme Court review. On the other hand, a settlement is not out of the question. The Commissioners who voted to bring the case are now gone, replaced by some who may be critical enough of the FTC's case that they would be willing to accept a settlement on terms more to Qualcomm's liking than the relief Judge Koh has ordered. It would not be the first time that a new national administration settles, on more defendant-friendly terms, an important antitrust case brought by its predecessor.⁴⁶

Whatever the future holds for this particular litigation, however, the Qualcomm case is not a sport on the antitrust landscape. Qualcomm fits within a broader—and worldwide—effort to ensure that although SEP holders should get sufficient rewards to stimulate their innovation, they should not be able to burden licensees with high costs that can reduce downstream innovation and raise prices to end-user consumers. The Qualcomm case also reflects a more general concern about the ability of monopoly firms to suppress competition from their rivals, whether large or small, with potential adverse effects on innovation.

Qualcomm in context

The FTC has been concerned with the anticompetitive conduct of SEP holders for more than twenty years. Its first enforcement effort was against Dell for ambushing computer OEMs by failing to disclose to a standard setting organization (SSO) that it held a patent that a proposed standard would infringe. After the standard was adopted, and after more than a million computers were manufactured employing the standard, Dell sued the OEMs for infringement. The FTC filed a complaint alleging that this conduct was an unfair method of competition, in violation of Section 5 of the FTC Act.⁴⁷ Six years later the Commission brought a similar case against Rambus for failing to disclose its patents to an SSO that was adopting standards relating to the design and architecture of SDRAM. Like Dell, once the standard was adopted, Rambus contacted implementers (there, chip makers) and demanded that they take licenses at inflated fees. The FTC alleged a violation of Section 5 of the FTC Act. The FTC argued that but for Rambus's deception, the SSO would either have chosen a different standard or required Rambus to commit to licensing its patents to users of the standard on FRAND terms (fair, reasonable, and non-discriminatory).⁴⁸

45 * Charles L. Denison Professor of Law, New York University School of Law. Fellow, Innovators Network Foundation. I was a consultant in a proceeding related to the Japan Fair Trade Commission's investigation of Qualcomm, but the views expressed here are mine alone.

46 For example, the Bush administration settled the Microsoft litigation brought by the Clinton Administration and the Reagan administration settled the monopolization suit brought against AT&T and dismissed the case brought against IBM.

47 In the Matter of Dell Computer Corp., 121 FTC 616 (1996).

48 See In the Matter of Rambus, Inc., Docket No. 9302 (2002), available at <https://www.ftc.gov/sites/default/files/documents/cases/2002/06/020618admincomp.pdf>, vacated, 522 F. 3d 456 (D.C. Cir. 2008).

In another group of cases the Commission focused on the conduct of SEP holders that had committed to licensing on FRAND terms but had subsequently attempted to extract above-FRAND rates from locked-in implementers. In one case the patent holder had committed to licensing its patents for a flat \$1000 fee; subsequent owners of the patent threatened infringement actions unless OEMs paid more.⁴⁹ In another case the Commission challenged a SEP holder's practice of seeking injunctions and exclusion orders when prosecuting infringement claims against implementers that would not accept the SEP holder's proposed royalty terms. Given the devastating impact of an injunction or exclusion order, the FTC alleged, implementers were likely to agree to pay royalty rates in excess of FRAND, which the Commission characterized as "substantial consumer injury."⁵⁰

Competition law enforcers in the rest of the world have also been concerned about how SEP holders committed to FRAND licensing have exercised their monopoly power. The European Commission has brought two cases involving SEP holders that sought injunctions against infringers rather than negotiating FRAND rates with a "not unwilling" implementer.⁵¹ The Korea Fair Trade Commission has brought two cases against Qualcomm for its practices in licensing its FRAND-committed SEPs; one case involved discriminatory royalties, the other involved the same basic licensing practices that were at issue in the FTC litigation. In both cases the KFTC found that Qualcomm had violated Korea's competition law, imposing fines totaling more than \$1 billion.⁵² The Chinese competition enforcement agency has investigated two companies for their SEP licensing practices, eventually settling both cases; in one, involving Qualcomm, the agency issued a formal decision that Qualcomm had charged excessive royalty rates (a practice outlawed as an abuse of dominance under China's Antimonopoly Act) and fined Qualcomm nearly \$1 billion.⁵³

Qualcomm's two critical legal points

Although government antitrust enforcers have taken a number of legal actions against SEP holders in the past, Qualcomm is the first case in which an agency has litigated such a case to judgment in court. This makes Judge Koh's decision particularly important.

There are two critical legal points of antitrust doctrine in Judge Koh's opinion. The first is her finding that Qualcomm's refusal to license its SEPs to competing chip makers violated the antitrust laws. The second is her view that the "unreasonably high royalty rates" that Qualcomm forced its licensees to pay constituted consumer harm, and that the tactics that Qualcomm used to get those high royalties were anticompetitive. Both will be important for future disputes over SEP licensing practices.

Qualcomm's refusal to license its SEPs to competing chip makers (except on some very restrictive terms) meant that, as Judge Koh pointed out, "a rival cannot sell modem chips with any assurance that Qualcomm will not sue the rival and its customers for patent infringement."⁵⁴ This had a significant impact on the ability of other chip makers to compete with Qualcomm in selling modem chips to handset manufacturers. It was in this market that Judge Koh found Qualcomm had maintained its monopoly, in violation of the antitrust laws.

49 See *In the Matter of Negotiated Data Solutions, LLC.*, Docket No. C-4234 (2008), <https://www.ftc.gov/sites/default/files/documents/cases/2008/09/080923ndscomplaint.pdf>.

50 See *In the Matter of Motorola Mobility LLC and Google, Inc.*, Docket No. C-4410 (2013), <https://www.ftc.gov/sites/default/files/documents/cases/2013/07/130724googlemotorolacmpt.pdf>

51 See Case AT.39985 - Motorola - Enforcement of GPRS standard essential patents, C(2014) 2892 (April 29, 2014), available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1501_5.pdf; Case AT.39939 - Samsung - Enforcement of UMTS standard essential patents, C(2014) 2891, paras. 75-118 (April 29, 2014), available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1501_5.pdf.

52 For a description of the two cases, see Dae Sik Hong, *Regulating Abuse of SEPs in Mobile Communications Market: Reviewing 1st and 2nd Qualcomm Cases in Korea*, in *Multi-dimensional Approaches Towards New Technology: Insights on Innovation, Patents and Competition* (Ashish Bharadwaj, Vishwas H. Devaiah, & Indranath Gupta, eds. 2018), available at <https://ssrn.com/abstract=3318137>

53 See Press Release, NDRC, National Development and Reform Commission ordered rectification Qualcomm monopolistic behavior and fined six billion yuan (Aug. 30, 2015), http://jjs.ndrc.gov.cn/gzdt/201502/t20150210_663872.html (Google translation).

54 *FTC v. Qualcomm Inc.*, 2019 U.S. Dist. LEXIS 86219 *213 (N.D. Cal. 2019).

Refusals to deal by firms with monopoly power have been a violation of the Sherman Act for more than 100 years.⁵⁵ The Supreme Court reaffirmed the doctrine in 1985 in *Aspen Skiing*⁵⁶ and applied it most recently in *Trinko* in 2004, where the Court found the doctrine was still viable even if it did not lead to a finding of a violation in the case itself.⁵⁷ Nevertheless, requiring intellectual property rights holders to license their rights as a matter of antitrust law has proved controversial, with some arguing that an IPR holder's refusal to license should never violate the antitrust laws. The courts, however, have not taken such an extreme position.

FTC Commissioner Wilson has been highly critical of Judge Koh's decision regarding Qualcomm's refusal to license its SEPs.⁵⁸ Contrary to what she has written, however, *Aspen Skiing* is not a "discredited" case and Judge Koh's interpretation of antitrust law did not depend on her finding that Qualcomm's agreement with the standard setting organization required such licensing. In fact, Judge Koh evaluated Qualcomm's refusal to license on straight competition grounds, concluding that Qualcomm's refusal "prevents rivals' entry, promotes rivals' exit, and hampers Qualcomm's rivals in the marketplace."⁵⁹ Careful factual analysis of competitive effects won the day, as it should have.

The second important legal point in Judge Koh's opinion relates to her findings that Qualcomm's royalty rates were "unreasonably high."⁶⁰ There was no dispute in the case over what Qualcomm charges its licensees. Its standard licensing agreement provides for a 4% or 5% running royalty on the price of each handset sold, based on the wholesale net selling price of the device and subject to a cap on the price of the handset. The question was whether these rates could be characterized as an anticompetitive effect of Qualcomm's overall licensing practices, including its threats to withhold its chips unless handset makers acceded to Qualcomm's royalty terms for its SEPs.

To answer this question Judge Koh emphasized a number of aspects of Qualcomm's rate structure. She pointed out that Qualcomm's own documents showed that its royalty rates were set by its monopoly chip market share rather than the value of its patents, that is, its monopoly in chips allowed it credibly to threaten to withhold supply and thereby force licensees to pay its high rates. Further, the testimony showed that the communications technology embodied in Qualcomm's modem chips (and SEPs) no longer drive the value of handsets, which are now essentially computers rather than phones. Even though other technologies have become more important to the value of handsets, Qualcomm has been able to maintain its royalties based on the price of the cellphone rather than the price of the modem chip (the "smallest salable patent-practicing unit," which is the industry norm).⁶¹

But why are unreasonably high rates anticompetitive? Judge Koh gave two reasons. First, "unreasonably high royalty rates raise costs to OEMs, and harm consumers because OEMs pass those costs along to consumers." Second, these rates affect innovation by implementers, depriving OEMs of revenues to invest in research and development and disincentivizing the addition of handset features that would raise the wholesale price and thereby increase the royalties the handset maker would owe Qualcomm.⁶²

55 *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912).

56 *Aspen Skiing Co. v. Aspen Highland Skiing Corp.*, 472 U.S. 585 (1985).

57 *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004) ("Aspen Skiing is at or near the outer boundary of § 2 liability.").

58 See Christine Wilson, "A Court's Dangerous Antitrust Overreach," *Wall St. J.*, May 29, 2019, at A15.

59 *Qualcomm*, 2019 U.S. Dist. LEXIS 86219 at *352.

60 *Id.* at *84.

61 *Id.* at *317-18.

62 See *id.* at *338-39.

Both reasons are important for future litigation. Whatever the dispute over the use of a consumer welfare standard in antitrust, Judge Koh's opinion makes clear that raising prices to intermediate buyers can be counted as "consumer injury" under the antitrust laws. Not only will consumers eventually have to pay at least some of the increase, this type of price increase is what the antitrust laws are intended to prevent. As the Supreme Court recently wrote in *Apple v. Pepper*, "[e]ver since Congress overwhelmingly passed and President Benjamin Harrison signed the Sherman Act in 1890, protecting consumers from monopoly prices has been the central concern of antitrust."⁶³

Judge Koh's opinion thus stands in some contrast to the D.C. Circuit's opinion in the FTC's *Rambus* case. There the court held that deception in the standard setting process, resulting in *Rambus* being able to charge above-FRAND royalties for its SEPs, was not anticompetitive because such high prices are "beyond the antitrust laws' reach."⁶⁴ Judge Koh's opinion makes clear why *Rambus*' result runs contrary to consumer welfare, and *Pepper* makes clear that *Rambus* took an incorrect view on what the antitrust laws should reach.

The second reason Judge Koh gave for concern over high price relates to its effect on implementers' innovation. Recent speeches by Makan Delrahim, the Assistant Attorney General in charge of the Antitrust Division, have tended to downplay the importance of implementers in the innovation process. Upstream SEP holders are referred to as the "IP creators" who come up with "break-through technologies," while the innovation that implementers bring is not mentioned at all.⁶⁵ Not only does this ignore the insight that invention is cumulative, with subsequent inventors relying on the work of their predecessors.⁶⁶ It also ignores the importance of the diffusion of technology, for without implementers to diffuse the upstream technology, and bring it usefully to market, the upstream innovation would be worthless. SEPs for connecting to wireless networks are great, but useless without a cellphone.

Why antitrust?

Assistant Attorney General Delrahim has recently called into question the use of antitrust law to police the anticompetitive conduct of SEP holders. Better than the "heavy hand" of antitrust, Delrahim argues, are the "perfectly adequate and more appropriate common law and [state] statutory remedies."⁶⁷

The *Qualcomm* case helps show why Delrahim is wrong. The antitrust laws have included public enforcement since they were enacted in 1890 in part because private litigants often lack the incentives or resources to remedy harms to competition. After all, what licensee was going to take on *Qualcomm* without fear of business reprisal? *Apple* did, but Judge Koh reviewed *Qualcomm*'s licensing practices with regard to fifteen other OEMs, some major companies and some smaller companies, none of which filed state contract suits over *Qualcomm*'s royalties. And even if they had sued, their interests would not necessarily be the same as the FTC's. They want money; the FTC wants to restore competition to the marketplace.

⁶³ *Apple Inc. v. Pepper*, 139 S. Ct. 1514, 1525 (2019) (internal quotation marks omitted).

⁶⁴ *Rambus, Inc. v. FTC*, 522 F.3d 456, 464 (D.C. Cir. 2008).

⁶⁵ See, e.g., Makan Delrahim, "Take It to the Limit: Respecting Innovation Incentives in the Application of Antitrust Law," Remarks as Prepared for Delivery at USC Gould School of Law, Nov. 10, 2017, at 3 (emphasis in original), <https://www.justice.gov/opa/speech/file/1010746/download>.

⁶⁶ The classic article is Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. Econ. Persps. 29 (1991).

⁶⁷ *Id.* at 8.

Congress made another key policy decision when it enacted the Sherman Act in 1890. Realizing that single damages would be an inadequate incentive for injured parties to sue under the antitrust laws, Congress included a provision for treble-damages plus attorneys fees. And because this provision applies to anyone injured in their “business or property,” consumers can sue in appropriate cases (these cases are now often brought under state antitrust law). Relegating private litigants to state contract or fraud law is thus either a pale remedy (no treble damages incentive) or no remedy at all (consumers don’t sign SEP licensing agreements).

Conclusion

Modem chips and interconnected communications are moving beyond our handsets to numerous other devices, the “Internet of Things.” Controlling how SEP holders exercise their market power—whether through the exclusion of competitors or by unreasonably high royalty rates—will have a profound effect on what devices get invented and how much they cost.

The district court’s decision in *FTC v. Qualcomm* is part of our on-going effort to use markets rather than government controls to constrain what firms with monopoly power can do. Public attention has recently been trained on “platforms in the news”—Apple, Amazon, Facebook, and Google—but Qualcomm reminds us that there are other “platforms” that can have far-reaching effects on technological progress. Antitrust enforcement in this area will benefit implementers of those technologies and the public interest.

FTC v. Qualcomm: A Principled & Evidence-Based “FRAND-ly” Ruling

John “Jay” Jurata, Jr. & Emily N. Luken

In a highly unusual move, FTC Commissioner Christine Wilson recently penned an opinion piece in the Wall Street Journal warning of the “dangerous antitrust overreach” and potential dire consequences of a district court decision that delivered a resounding victory to her own agency. In *FTC v. Qualcomm*, Judge Lucy Koh of the Northern District of California issued a 233-page opinion following a bench trial conducted in January of this year, concluding that a variety of Qualcomm’s business practices, including how it licenses patents essential to various wireless communications standards, violate the federal antitrust laws. This decision, according to Commissioner Wilson, is “both bad law and bad policy” and “create[s] new legal obligations, undermine[s] intellectual property rights, and expand[s] the application of our antitrust laws beyond U.S. borders.”

Commissioner Wilson is a well-respected veteran of the antitrust bar who has worked on noteworthy cases and mergers spanning across a variety of industries in private and public practice. In this case, however, we believe that the Commissioner’s editorial misses the mark. We would agree with much of what she states had Judge Koh’s decision concerned patents unencumbered by promises to license to others. And it is that critical factual distinction that we would like to explain further here.

The patents at issue in the Qualcomm case were standards-essential patents (“SEPs”) that Qualcomm had voluntarily agreed to license on fair, reasonable, and non-discriminatory (“FRAND”) terms. The presence of the FRAND commitment makes a significant difference in altering the competitive landscape in ways that would not otherwise occur if the patents had not been standardized. Through the FRAND commitment, a patent-holder voluntarily agrees to curtail some of its patent rights in exchange for the inclusion of its patents in the standard. Thus, the FRAND commitment results in widespread distribution of its technology and the elimination of potential competition.

In other words, the FRAND commitment is designed to limit the extent to which an SEP owner can exert the additional market power conferred upon it by the standard-setting process. The FRAND commitment is designed to strike an appropriate balance between the legitimate right of SEP-holders to be fairly compensated for their innovations and the equally legitimate right of downstream innovators to have access to standardized technology. This is especially true once a standard becomes adopted on a widespread basis, and companies making devices incorporating the standard are “locked in.” The SEP-holder’s voluntary agreement to limit its patent rights is also why courts in the Ninth Circuit and elsewhere have interpreted the FRAND commitment as binding, irrevocable, and enforceable by third parties.

The editorial perfunctorily noted that the opinion “found that Qualcomm’s promise to license its [SEPs] on [FRAND] terms created a contractual obligation to license rival chipmakers,” and that “breaching this contractual obligation was an antitrust violation, which permits more intrusive remedies.” However, the editorial does not address the role of the FRAND commitment when assessing the business practices, a commitment that the opinion referenced 59 times and was central to Judge Koh’s finding of anticompetitive harm. As the court observed, “Qualcomm’s own documents show that Qualcomm knew its licensing practices could lead to antitrust liability, knew its licensing practices violate FRAND, and knew its licensing practices harm competition, yet continued anyway.”

Judge Koh’s application of binding Supreme Court precedent concerning the limited duty to deal with competitors also supports her conclusion that Qualcomm’s conduct was anticompetitive. We agree with Commissioner Wilson that, as a general matter, the antitrust laws do not impose a duty to deal with one’s competitors. But this duty can arise under limited circumstances which were met in the Qualcomm case. As recently as 2004, the U.S. Supreme Court endorsed an earlier 1985 ruling

that a monopolist's termination of a profitable business venture to undermine long-term competition violates the antitrust laws. In *FTC v. Qualcomm*, the court applied this precedent, as well as Ninth Circuit precedent interpreting the two Supreme Court cases, to find that the limited antitrust duty to deal was triggered by the factual record before her.

Specifically, Qualcomm had a previous practice of licensing SEPs to the manufacturers of upstream components that infringed its patents, but later abandoned the practice because it realized it was more lucrative to license solely to downstream original equipment manufacturers (OEMs). Judge Koh, who served as the fact finder in the case, concluded based on Qualcomm's internal business documents written around the time of that decision that the terminated practice was motivated by anticompetitive intent. Further, her decision rejected Qualcomm's justifications at trial for the changed practice as "self-serving and pretextual," finding that Qualcomm's witnesses lacked credibility given the dramatic juxtaposition between their statements on the stand and prior contemporaneous statements and documents. Such credibility determinations based on first-hand observations at trial and understanding voluminous factual records are key roles of the trial judge.

The imposition of a duty to deal under governing Supreme Court and Ninth Circuit precedents is even more appropriate in the *Qualcomm* case, where Qualcomm has voluntarily and irrevocably committed to license its SEPs on FRAND terms and subsequently obtained significant market power as a result. In other words, when a company is refusing to license patents that the same company has represented are essential to technical standards, the antitrust duty to deal is triggered due to that SEP-holder's representation, its voluntary FRAND commitment, and the market power it subsequently enjoys as a direct result.

Nor will the court's finding that the antitrust duty to deal applied in the *FTC v. Qualcomm* case result in the "parade of horrors" that the editorial claims. It will not be the case that "if a company ever sells a product to any competitor, it then could have a perpetual antitrust obligation to sell every product to every competitor." The limited antitrust duty to deal can apply only to monopolies (as well as attempts and conspiracies to monopolize), a status that few companies ever obtain. In the absence of monopoly power, there never will be an antitrust duty to deal. Moreover, other requisites must be met, including anticompetitive malice under Ninth Circuit law, which is difficult to prove.

More broadly, although Qualcomm and its defenders are not pleased with the decision, the decision will not result in successful companies being forced to give away their technology to competitors. As described above, Judge Koh's decision was based on a principled application of a limited exception to the general rule that there is no duty to deal with one's competitors – that general rule remains the default baseline. It is further not surprising that antitrust law applies when market power is conferred in response to promise not to engage in certain conduct, i.e., a FRAND promise, but then the party voluntarily making that promise engages in that conduct anyway. Importantly, the decision is clear that Qualcomm is still entitled to be compensated based on a FRAND royalty.

Unsurprisingly, Qualcomm is seeking to appeal the court's decision, which it has the right to do. Qualcomm also is seeking to suspend some of the remedies imposed by the trial court, such as re-negotiating its existing patent licenses. Ironically, Qualcomm warns in a recent court filing that "[i]f this Court does not grant a stay, Qualcomm will be forced to negotiate under the cloud of an injunction requiring it to accept terms to which it would not otherwise agree." Of course, this "hold-up" scenario is exactly what potential licensees face when SEP-holders seek an injunction or exclusion order in conjunction with an infringement lawsuit involving FRAND-encumbered SEPs.

Ultimately, reversing the decision on appeal will be difficult given the extent to which Judge Koh's ruling is based on the detailed evidence presented in the case and the credibility of witnesses at trial. The failure to address those key facts undermines any attempt to criticize the court's conclusion, such as Commissioner Wilson's editorial. It also explains why there is growing, broad-based support on both sides of the political aisle to place more emphasis on the actual evidence in antitrust cases as opposed to mere assumptions arising from economic theory.

