No. 19-16122

United States Court of Appeals for the Ninth Circuit

FEDERAL TRADE COMMISSION,
Plaintiff – Appellee,

v.

QUALCOMM INCORPORATED, A DELAWARE CORPORATION,
Defendant – Appellant.

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

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Abbreviation	Description
Briefs for the Parties	
OB	Opening Brief for Appellant Qualcomm Incorporated (Dkt. No. 80, filed August 23, 2019)
AB	Answering Brief of the Federal Trade Commission (Dkt. No. 144, filed November 22, 2019)
Excerpts of Record	
ER	Qualcomm's Excerpts of Record (Dkt. No. 75, filed August 27, 2019)
SER	FTC's Supplemental Excerpts of Record (Dkt. Nos. 139, 140, filed November 22, 2019)
FER	Qualcomm's Further Excerpts of Record (filed together with this Reply Brief)
Briefs of *Amici Curiae*	
Automakers	Brief of Association of Global Automakers and Alliance of Automobile Manufacturers as *Amici Curiae* Supporting Appellee (Dkt. No. 161, filed November 29, 2019)
Continental	Brief of *Amici Curiae* Continental Automotive Systems, Inc. and DENSO Corporation in Support of Appellee Federal Trade Commission (Dkt. No. 162, filed November 29, 2019)

Abbreviation	**Description**
Dolby	Brief of *Amicus Curiae* Dolby Laboratories, Inc. in Support of Neither Party (Dkt. No. 84, filed August 30, 2019)
Intel	Brief of Intel Corporation as *Amicus Curiae* in Support of Appellee and Affirmance (Dkt. No. 160, filed November 29, 2019)
Law&EconCenter&Profs	Brief of *Amici Curiae* International Center for Law and Economics and Scholars of Law and Economics in Support of Appellant and Reversal (Dkt. No. 99, filed August 30, 2019)
Michel	*Amicus Curiae* Brief of the Honorable Paul R. Michel (Ret.) in Support of Appellant Qualcomm Incorporated (Dkt. No. 88, filed August 30, 2019)
Nokia	Brief of *Amicus Curiae* Nokia Technologies Oy in Support of Neither Party (Dkt. No. 98-2, filed August 30, 2019)
USA	Brief of the United States of America in Support of Appellant and Vacatur (Dkt. No. 86, filed August 30, 2019)

INTRODUCTION

In granting Qualcomm's motion to stay, this Court recognized that the District Court's ruling is either a "trailblazing application of the antitrust laws" or "an improper excursion beyond the outer limits of the Sherman Act." 2ER280. One thing it is not is a routine application of settled antitrust principles. Now, the FTC disclaims huge portions of the decision. The dubious quality of the District Court's reasoning is also underscored by regulators' own stark disagreement about this case. The Department of Justice's Antitrust Division, the government's co-equal antitrust enforcer, has advised this Court that the FTC's claims and District Court's ruling rest on "fundamental errors of antitrust law." USA at 4. The FTC itself initiated the suit only on a 2-1 vote, over an uncustomary written dissent objecting to an enforcement action based on flawed legal theory that lacks economic and evidentiary support. OB69.

The cellular industry as we know it today was born in the lab of Qualcomm's founders, and the company has remained the leading innovator in cellular technology ever since. The company has invested some $60 billion in research and development, building a global portfolio of tens of thousands of patented inventions that cover virtually every aspect

of mobile communications and are used by every cellphone, no matter what modem chip it includes.

The company licenses its technology to manufacturers of cellphones (original equipment manufacturers or OEMs) rather than the manufacturers of cellphone components, such as cellular modem chips. That is the settled practice of the major licensors of cellular standard essential patents (SEPs). Because Qualcomm licenses its patents at the OEM level, chipmakers make and sell chips practicing some Qualcomm technologies without paying Qualcomm any royalties at all.

The District Court nonetheless required Qualcomm to grant exhaustive licenses to its chip rivals. The FTC repudiates the District Court's reasoning, recognizing that settled precedent does not compel Qualcomm to deal with rivals except under narrow circumstances not present here. The FTC's half-hearted request that this Court impose the identical duty based on Qualcomm's supposed contractual obligations conflicts with that same precedent.

The District Court also theorized that Qualcomm leverages its market power in modem chips to require OEMs to pay a patent royalty "surcharge." The FTC caricatures Qualcomm as extorting exorbitant license

fees from OEMs by threatening to destroy them by cutting off their supply of chips. Putting aside the fact Qualcomm is not alleged to have harmed competition in the cellphone market, the FTC's narrative is fanciful. Qualcomm has the right to license its patent portfolio to OEMs. For many years, Qualcomm's license rate has been stable and reaffirmed by numerous customers that are not subject to any alleged market power. The OEMs are companies worth billions or even hundreds of billions of dollars. *Far* before they seek to purchase Qualcomm's chips, they are well aware of both the license requirement and the market rate and have ample time to account for them and to contest the rate. The OEMs negotiate hard. They threaten not to purchase Qualcomm's chips and threaten to (or actually do) stop complying with the license to dispute its terms. On its side, Qualcomm takes steps to preserve its patent rights. There is no basis for the FTC's attempt to recharacterize this common bargaining between sophisticated companies as federal antitrust violations.

The District Court violated the requirement that it determine the reasonableness of a patent royalty based on the most comparable agreements for the same patents. Here, Qualcomm receives the same royalties for its patent portfolio under agreements entered into before Qualcomm

ever had a chip business, agreements entered into during lengthy periods of time in which Qualcomm had no market power, and agreements entered into with OEMs that did not buy Qualcomm chips.

Even if one assumes a surcharge exists, the surcharging ruling must be reversed. The District Court hypothesized an attenuated—and unproven—mechanism, the heart of which was that Qualcomm's license rates somehow lower its rivals' revenues. But as explained by the United States, the ruling below is "[b]ereft of a legally sufficient theory of competitive harm" because the antitrust laws forbid only conduct that undermines the competitive process, not conduct that merely harms competitors. USA at 18.

Recognizing as much, the FTC principally relies on inapposite cases in which a monopolist imposed a penalty on its customer for transacting with a rival. Qualcomm does not make it more expensive for an OEM to use a rival's product rather than its own. Qualcomm's royalties are "chip-neutral"; chip suppliers compete for business on an even playing field.

The FTC also substitutes its own, equally unsupportable theory that Qualcomm uses its royalty revenues to reduce its chip prices, and in

turn uses low prices to squeeze rival chip manufacturers out of the market. The District Court affirmatively found the opposite: that Qualcomm charges "monopoly prices" for its chips. 6ER1364. But even if the FTC's subsidization theory had some factual basis, it would be precluded by the Supreme Court's holding that a monopolist may use supposedly excess profits from one product to reduce prices on another, so long as they do not go below cost—which Qualcomm's indisputably did not.

The surcharging ruling also must be reversed because neither the FTC nor the District Court identified a factual basis for finding that Qualcomm's practices are anticompetitive. The direct evidence is that the cellular industry has been dynamic and thriving. Innovation is unceasing. Output is growing. Quality-adjusted prices are declining.

With respect to indirect evidence, the FTC introduced no proof that Qualcomm's royalty rates undermined competition in chip markets, or impaired chip manufacturers' ability or incentive to invest in R&D. Instead, the District Court and the FTC posit hypothetical possibilities, based on speculation.

The FTC only seriously tries to defend a sliver of the District Court's "exclusive dealing" ruling, dismissing the District Court's broad

condemnation of Qualcomm's actual and offered discounts as mere "context." The FTC argues only that two expired discount agreements between Qualcomm and Apple, which provided for a "clawback" of discounts if Apple changed chip suppliers, excluded competitors. That theory fails as a matter of law, because Qualcomm's pricing—even with the "clawbacks"—was at all times above cost. Far from exclusionary, even with those conditional discounts available, Apple switched to Intel as a supplier.

The disconnect between the FTC and the District Court—not to mention the United States' rejection of the views of both—highlights the speculative theories and errors of law upon which the District Court's judgment rests. It also highlights the overreach of the injunction, which would restrict Qualcomm's activities even absent market power, would endanger national security, and would regulate conduct affecting only foreign commerce that is already subject to foreign regulation.

The judgment should be reversed.

ARGUMENT

I. THE FTC ADMITS THE DISTRICT COURT ERRED IN ITS ANTITRUST DUTY-TO-DEAL HOLDING, AND THE FTC'S ATTEMPT TO DEFEND THE JUDGMENT ON OTHER GROUNDS IS WITHOUT MERIT.

A. The Holding that Qualcomm Must Grant Its Chip Rivals Exhaustive Licenses Must Be Reversed.

It is now common ground that the District Court erred as a matter of law in "holding that Qualcomm's refusal to license its patents to competing chipmakers violated" an antitrust duty to deal. AB4-AB5, AB30. As the Department of Justice explains, reversing that holding invalidates the judgment outright. USA at 5 n.2. This includes not only the specific injunction entered by the District Court based directly on its erroneous liability finding, 6ER1395, but also its further holding that Qualcomm unlawfully imposed excessive licensing fees. The court hypothesized those fees would be lower if chip manufacturers held exhaustive licenses. *See* AB68-AB69 (citing 6ER1290; 6ER1356-6ER1359).

Below, the FTC argued that this case was controlled by the very precedents it now admits preclude the imposition of liability. 7ER1722. Here, it argues that those precedents are irrelevant because they address a "heightened" refusal-to-deal standard, whereas cases involving SEPs

should uniquely be subject to a different, far more interventionist rule. AB69.

That is not the law. Under settled precedent, the default rule is that even a monopolist has the right to determine with whom it will do business, and on what terms. *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407-08 (2004); *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 600 (1985). Those precedents govern all duty-to-deal claims, whatever contractual or other commitment the monopolist may have to its rivals; they set the terms of "the sole exception to the broad right of a firm to refuse to deal." *In re Elevator Antitrust Litig.*, 502 F.3d 47, 52 (2d Cir. 2007). *Aspen Skiing* is already "at or near the outer boundary of § 2 liability" for recognizing *any* antitrust duty to deal. *Trinko*, 540 U.S. at 409. The FTC's position would impermissibly require this Court to go far beyond that outer boundary of § 2 liability by imposing an antitrust duty to deal where *Aspen Skiing*'s tests are not met.

Antitrust law imposes a duty to deal only in very limited circumstances: when the refusal to do so (1) involves a break from prior voluntary conduct, that (2) results in a sacrifice of short-term profits that can

only be explained as an attempt to impair competition. *Trinko*, 540 U.S. at 407-09; *see also* OB47-OB48. The FTC cannot, and does not try to, satisfy that demanding standard. The District Court expressly found that Qualcomm's licensing of OEMs rather than chip rivals *increases its profits*, including in the short term. 6ER1285; 6ER1295-96. Further, following the industry-wide practice of major cellular SEP licensors to license OEMs is not an attempt to harm competition; it is among other things a "rational response[] to avoid the potentially negative effects of patent exhaustion." Michel at 25.

The FTC now urges the Court to recognize the same duty to deal under what it dubs "traditional" rather than supposedly "heightened" antitrust grounds. The FTC argues that Qualcomm made and breached FRAND "commitments" to two standards development organizations (SDOs). AB81-AB86. But *Trinko* makes clear that duties to deal that arise outside of antitrust, such as regulatory requirements or (as here) contractual commitments, are not antitrust duties. The FTC's new proposed "voluntary commitment" standard is nothing more than an effort to negate the second of *Trinko*'s two elements, which strictly limits the

imposition of a duty to deal to circumstances in which a monopolist sacrifices short-term profits in a way that can only be explained as anticompetitive. It is not enough that, as the FTC would have it, the refusal to deal could "deter rivals' entry and investment." AB77.

To justify its new rule, the FTC asserts that because SDOs can raise competitive concerns under certain circumstances, *any* conduct related to them should be subject to heightened antitrust scrutiny. AB83-AB85. In fact, the special antitrust issue arising from SDOs is the prospect that competitors could engage in collusive standard setting, which is subject to Section 1 of the Sherman Act. *See Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 500 (1980). But such possibly conspiratorial concerns are distinct from the unilateral conduct at issue here, which is subject to Sherman Act Section 2 scrutiny.

The FTC asserts that courts have "recognized that conduct that breaches or otherwise 'side-steps' these [SDO] safeguards is [exempt from the] *Aspen*/*Trinko* standard." AB84. In fact, "courts have uniformly rejected this view." Joshua D. Wright, *SSOs, FRAND, and Antitrust: Lessons from the Economics of Incomplete Contracts*, 21 Geo. Mason L. Rev. 791, 803 (2014). The very decision on which the FTC principally relies

holds that antitrust liability can arise in connection with the breach of a FRAND commitment only if the breaching party *intentionally misled* the SDO, and the SDO relied on the "intentionally false promise" by the patentee "when including the [patentee's] technology in a standard." *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 314 (3d Cir. 2007); *see also Rambus Inc. v. FTC*, 522 F.3d 456, 466-67 (D.C. Cir. 2008). Here, the FTC never alleged, nor did the District Court find, that Qualcomm intentionally misled SDOs.

Even if Qualcomm had a contractual obligation to license its SEPs to chip rivals, that fact "does not automatically lead to the conclusion that [the obligation] can be enforced by means of an antitrust claim." *Trinko*, 540 U.S. at 406. Instead, Qualcomm's chip competitors would have the ability to bring a contract action to enforce any supposed FRAND obligation; the District Court did not find any impediment to chip competitors' doing so. By contrast, the prospect that violations of FRAND commitments will be deemed antitrust violations, resulting in treble damages awards, will deter participation in the SEP process and discourage the

development of standards. *E.g.*, Douglas H. Ginsburg et al., *The Troubling Use of Antitrust To Regulate FRAND Licensing*, 10 CPI Antitrust Chron. 1, 6-7 (Oct. 2015).

B. This Court Should Reverse the District Court's Summary Judgment Ruling that SEP Owners Have Contractually Committed to Two SDOs To License Component Manufacturers.

The District Court's erroneous duty-to-deal holding was premised on its equally unsound summary judgment ruling that cellular SEP owners have committed contractually to grant exhaustive SEP licenses for the manufacture of modem chips. 6ER1290. In reversing the duty-to-deal holding, this Court should disavow that ruling because it erroneously resolved disputed issues of material fact. It also undermines the global nature of standards with a disjointed licensing rubric and threatens to substantially disrupt licensing *throughout* the cellular industry.

The language of the two SDO policies at issue (TIA and ATIS) evinces their ambiguity. Cellular SEP owners are obligated to grant licenses only "to the extent necessary for *practice* of any or all Normative portions of the standard" (TIA) or "to applicants desiring to utilize the license for the purpose of *implementing* the standard" (ATIS). AB70-AB71. Citing nothing, the FTC declares it obvious that a modem chip by

itself practices some of the "normative portions" of a standard. AB70-AB71. But the FTC's assertion is not proof of the terms' meaning.

Under California law, such terms must be construed in accordance with their "technical" or specialized meanings. OB134. The record contains undisputed testimony from SDO participants that in determining whether a product "implements" the standard or "practices" a normative portion of a standard, the industry considers and tests whether the product meets the written requirements and specifications of a standard. 4ER929-4ER935; 4ER951-4ER958; *see also* Dolby at 13. The evidence, construed most favorably to Qualcomm as the non-moving party, showed that the standards are implemented or practiced by a phone, not a component chip. OB133-OB134. Additionally, a standard may contain "thousands of instances stating that the 'mobile station [or UE, *i.e.*, phone] shall' meet some particular performance or communication requirement," but standards impose *no* requirements concerning modem chips and do not even mention them. 4ER918; 4ER920; 4ER941; 4ER945. Qualcomm made a factual showing that a modem chip does not "implement" or "practice" the standard; thus, no contractual obligation to license such products can be found.

California law also requires the court to consider extrinsic evidence. OB135-36. That includes the practice recognized by industry participants on both sides of the case and the FTC's expert that the major cellular SEP licensors grant licenses at the OEM level, rather than the component level. OB136-OB137; *see also* Dolby at 16-22; Nokia at 16-20; Continental at 6; Automakers at 18-19; 1FER180:9-24; 7ER1737:8-7ER1738:25. The FTC's contrary argument reduces to the implausible claim that industry participants have uniformly flouted the agreements' plain meaning for years.

Also telling is the FTC's own recognition that it was *not* entitled to summary judgment with respect to the policies of ETSI, which is the leading SDO in the cellular industry. OB138; 1FER174. ETSI, TIA, and ATIS play interlocking parts in global cellular standards development efforts. To ensure patentholders can maintain a single, worldwide licensing program, the three organizations have committed to maintain compatible patent policies. OB137-OB138; 1FER174-1FER176. Qualcomm accepted the relevant FRAND commitments based on its understanding that the SDOs' policies would remain consistent. 1FER176. Yet ETSI has rejected

a patent policy of an SDO that required component-level licensing as incompatible with its own. 7ER1726:4-7ER1730:18; *contra* AB76-AB77.

The FTC's reliance on its own (disputed) extrinsic evidence only highlights the disputed issued of material fact. The FTC relies on *cross*-licenses that Qualcomm has received. AB75. Those demonstrate only that Qualcomm, like other patentholders, tries to avoid the possibility it would grant a portfolio-wide license to an OEM, which would then opportunistically assert its patents against Qualcomm. 4ER1012-4ER1016.[1]

II. THE DISTRICT COURT'S "SURCHARGING" HOLDING SHOULD BE REVERSED FOR THREE SEPARATE REASONS.

The District Court held that Qualcomm leverages its power in two chip markets to charge an unreasonable patent royalty, which it deemed an anticompetitive "surcharge" that supposedly injured its chip rivals by

[1] The other evidence on which the FTC relies is similarly misplaced. Qualcomm's 2005 statement that it "acquired licenses from its licensees and others," AB75, does not relate to SEPs in particular. And Qualcomm argued that Ericsson should not be permitted to use SEPs to "shut down" Qualcomm's manufacture of modem chips and cellphones (which Qualcomm sold at the time) through an injunction, AB74-75, without ever asserting that Ericsson had the duty to grant component-level SEP licenses even if it were not asserting its patents against chipmakers.

reducing their revenues, lowering their R&D budgets, and in turn impairing their ability to create competitive products. That holding rests on three separate legal errors: (1) the District Court applied an erroneous standard in deeming Qualcomm's license rates to be unreasonable; (2) the District Court and the FTC rely on theories of injury that are not legally cognizable theories of harm to the competitive process; and (3) even if there were a viable theory, the District Court improperly resorted to supposition and conjecture that anticompetitive harm actually occurred.

A. The District Court Erred as a Matter of Law in Ruling that Qualcomm's Royalty Rates Are Unreasonable.

The District Court's "surcharge" theory rests on the premise that Qualcomm's royalty rates are dramatically excessive. 6ER1323-6ER1349. But that holding collapses at the outset because the Court failed to apply the governing legal standard, under which Qualcomm's royalties are reasonable as a matter of law.

Well-settled rules govern the determination whether patent royalties are reasonable. The "best measure" is an established arm's-length royalty for the same portfolio in relevant markets. OB85-OB86; *see also United States Nat'l Bank of Portland v. Fabri-Valve Co. of Am.*, 235 F.2d

565, 568 (9th Cir. 1956) ("the primary method" for determining reasonable royalty is "using the claimant's established royalties"). If there is no such established royalty, the court may base the reasonableness determination on a comparison with royalty rates for other portfolios that are *proven* to be technically and economically comparable. OB91-OB92.

The FTC now says the District Court could ignore those legal tests because it "was not fixing a specific royalty" but instead was confirming Qualcomm's royalties do not reflect the "value of its patents." AB50. That is no distinction—the processes of fixing a reasonable value for a portfolio and of assessing whether an established portfolio value is reasonable are the same. Thus, in *Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1040 (9th Cir. 2015), this Court employed this settled patent-law methodology to assess whether a patentee offered a reasonable royalty under a FRAND commitment, which is exactly what the District Court purported to determine here.

Failure to follow the legal rule governing the reasonable royalty determination is reversible legal error. *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1324-25 (Fed. Cir. 2014); *see also Ambassador Hotel Co. v. Wei-Chuan Inv.*, 189 F.3d 1017, 1024 (9th Cir. 1999) ("Whether the district

court applied the correct legal standard in computing damages receives *de novo* review."). For example, in *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 871-73 (Fed. Cir. 2010), a district court committed "legal error" in relying on non-comparable licenses when determining a reasonable royalty. The judgment therefore cannot stand.

1. The District Court Erroneously Disregarded Qualcomm's Established Royalties for the Same Portfolio.

The District Court failed to apply the "best measure" of reasonableness: Qualcomm's well-established royalty rate received on *hundreds* of licenses for the identical patent portfolio. *See, e.g.*, *U.S. Nat'l Bank of Portland*, 235 F.2d at 568 (reversing holding that 1.5% royalty was reasonable where patentee had established licenses at 5%). Those licenses could not even arguably be impacted by Qualcomm chip market power, because they were (a) entered when Qualcomm was not alleged to hold monopoly power in the chips relevant to the license, (b) licensing phones using chips that Qualcomm is not alleged to have monopolized, or (c) with OEMs that did not purchase chips from Qualcomm. 2FER182-2FER187; 6ER1418-6ER1421; OB86-OB88. Indeed, Qualcomm's royalty rates were established before Qualcomm began selling chips *at all*, then reaffirmed

repeatedly in new licenses and extensions of existing licensing agreements in markets in which Qualcomm is not alleged to have market power. *See* 1FER24:9-1FER27:15; 1FER29:23-1FER34:6; 1FER18-1FER20.

The FTC argues these established licenses are meaningless because *Qualcomm's* expert did not *disprove* there was also "chip leverage" associated with them. AB51-AB52. That argument is upside down: *the FTC* bore the burden of proving Qualcomm's royalty rate was unreasonable because Qualcomm's established licenses are not proper comparators. *See* OB89-OB90 n.14. It could not and did not satisfy that burden. It merely cites evidence Qualcomm had "leadership" in another type of modem chip. AB51-AB52. That is no substitute for a finding of monopoly power and does not prove the relevant licenses were not at arm's length. Indeed, FTC's whole theory centers on the purported "must have" nature of Qualcomm's chips, not on mere "leadership."

Nor did the FTC prove that Qualcomm's licenses with companies that did not purchase Qualcomm modem chips were tainted. OB87. There are dozens of examples. 6ER1418-6ER1421. The FTC's claim that "Qualcomm was found to have coerced" certain OEMs "through other means,"

AB52, again does not rest on a District Court finding. Instead, it cites testimony discussing an order from a Japanese agency that has since been reversed. 1FER7; 1FER3.

The FTC does not defend the District Court's conclusion that Qualcomm's royalties should have decreased with its share of SEPs. That conclusion confuses Qualcomm's numerical share of SEPs with the *value* of its specific, continually pioneering SEPs that are foundational to multiple generations of cellular standards. 2ER451:6-2ER452:8; 2ER452:23-2ER453:4; OB88-OB89. Qualcomm's patent portfolio continually grows, adding an increasingly broad array of technologies, 3ER631:17-3ER633:2; 3ER659, while its nominal royalty rate remained constant and its effective rate *decreased*, OB88; 6ER1339.

Furthermore, Qualcomm's licensed portfolio includes tens of thousands of *other* valuable patents (Non-SEPs). OB89. The FTC's only response is to claim that Qualcomm collects "*de minimis*" royalties on Non-SEPs, citing the testimony of its expert Michael Lasinski, AB51, whom the District Court expressly found unreliable, 6ER1348. In any case, Mr. Lasinski did not conclude that the Non-SEPs have *de minimis* value, 2FER196:16-21, and he conceded that Qualcomm has multiple licensees

who pay more for a license that includes Non-SEPs than for a "cellular SEP only license," 2FER197:19-2FER199:1. In fact, Qualcomm's established licensing rates are 3.25% for a cellular SEP-only license, and 5% for a license that also includes Non-SEPs. *See* 2ER428:17-2ER430:2; 3ER564:5-14; 3ER630:2-631:13. This sets the *floor* for the Non-SEPs at a non-*de minimis* 1.75%. *See Microsoft v. Motorola*, 795 F.3d at 1044 (portfolio of SEPs and Non-SEPs not comparable to SEP-only portfolio).

2. The District Court Erroneously Relied on Supposed Alternative Measures of Qualcomm's Patent Portfolio.

The District Court based its unreasonableness finding on royalty rates charged by a few other SEP licensors for different patent portfolios based on a handful of agreements. But because the court erroneously rejected the best measure of reasonableness, there was no basis to consider other portfolios at all. *See*, *e.g.*, *Tektronix, Inc. v. United States*, 552 F.2d 343, 347 & n.5 (Ct. Cl. 1977) (only if no established royalty exists can alternative measures be used).

Ignoring the governing legal standard, the FTC argues that "[n]o patent-by-patent parsing was required to assign probative weight to 'staggering' disparities in the royalties charged on roughly comparable

portfolios." AB50. But that argument assumes its own conclusion: that the portfolios in question (Nokia's and Ericsson's) were in fact comparable. The FTC introduced *no* objective evidence that they were.

The FTC did not prove that other patent portfolios were in fact comparable to Qualcomm's through objective evidence. Importantly, the District Court rejected as unreliable the testimony of the FTC's only patent valuation witness (Mr. Lasinski). 6ER1348. But then the District Court committed the same error the court correctly identified in Mr. Lasinski's testimony: using "contribution counting to value a patent portfolio." 6ER1348; OB92-OB93. As the District Court explained, merely counting contributions is unreliable because "a company can receive credit for an approved contribution based on a mere cosmetic change to an existing standards document." 6ER1348.

The FTC now defends its reliance on the number of contributions (and equally irrelevant "rapporteurships") because "Qualcomm itself internally charts the major players" using these metrics. AB49 & n.9. But Qualcomm's use of various metrics to confirm it is a "major player" in

SDOs says nothing about technical or economic comparability of its patent portfolio vis-à-vis other licensors. The FTC identifies no evidence that these metrics are used as "portfolio-value proxies." *Id.*[2]

The FTC principally relies on self-interested statements by licensees that want to pay a lower royalty rate. AB46-AB47. But that is no substitute. *See United States v. AT&T Inc.*, 310 F. Supp. 3d 161, 211 (D.D.C. 2018) (in weighing evidence of competitive harm, "competition authorities and courts . . . refus[e] to take the views expressed by customers at face value and insist[] that customer testimony be combined with economic evidence providing objective support for those views"), *aff'd*, 916 F.3d 1029 (D.C. Cir. 2019). This testimony does not meet the legal requirement to establish that other licensors' patents were technologically or economically comparable to Qualcomm's. OB94-OB95; *see ResQNet*,

[2] Nor does Qualcomm's participation in the "Avanci" patent pool for licensing a subset of its SEPs in entirely different fields—automotive and smart meters—demonstrate that its full portfolio royalties for cellphones are unreasonable. *Contra* AB49. That very limited alternative licensing program does not cover cellphones, relates to far more limited use cases, and is in no way comparable to Qualcomm's much broader SEP and Non-SEP portfolio license. OB94 n.16 (citing testimony of Mr. Gonell). Rather than refute this evidence, the FTC notes that the District Court declined to accept Mr. Gonell's testimony on unrelated points, AB49 n.10, but ignores that the District Court credited his testimony regarding Avanci, *see* 6ER1334.

594 F.3d at 871, 873. For example, it does not provide necessary evidence that the other portfolios contain seminal patents. Nor does it say anything about whether the other portfolios contain numerous Non-SEPs covering a broad set of technologies used in cellphones, like Qualcomm's does. OB89; OB94-OB95.

The FTC also relies on snippets from internal Qualcomm documents discussing a potential corporate separation of its licensing and chip businesses. AB45-AB47. Those documents cannot countervail actual market evidence of the established rates Qualcomm repeatedly received during times when it had no alleged chip power. In none of them did Qualcomm "recognize[]" that "QCT's monopoly chip power sustains QTL's unreasonably high royalty rates." 6ER1325. Rather, most speak only to the challenges of monitoring licensees' compliance when they source their chips elsewhere (because Qualcomm cannot track the number of chips they buy from other suppliers and therefore the number of phones they sell). *See* OB99 n.18. The FTC quotes a single sentence in an email where a Qualcomm executive surmised that separating the chip and licensing businesses could pose challenges to "maintaining the royalty rate" and "sustaining our royalties." AB46. This was simply one person's view that

the chip business may at times have helped Qualcomm maintain its established royalty rate without the need for uncertain litigation. *See* 1FER163:6-1FER164:3-4. Even if that singular view were correct, nothing about it suggests the established rates were *unreasonable*—a separate question that turns on an objective assessment of value, which the FTC did not provide.

Finally, the FTC does not seriously defend the District Court's legally erroneous conclusion that it is unreasonable for Qualcomm to calculate royalties as a percentage of the cellphone price. It has no response to the Federal Circuit's express rejection of that proposition as "untenable." OB96-OB99; *Commonwealth Scientific & Indus. Research Org. v. Cisco Systems, Inc.*, 809 F.3d 1295, 1303 (Fed. Cir. 2015); Michel at 5-17.

B. The District Court Erred in Holding that Qualcomm's Royalties Harm the Competitive Process.

Even if the District Court could properly find that a "surcharge" exists, the surcharging ruling must be reversed. Under the rule of reason, the District Court was required to find harm to competition in a relevant market for modem chips. *United States v. Microsoft*, 253 F.3d 34, 58 (D.C. Cir. 2001) (requiring that monopolist "harm the competitive *process*"). Its

theory was that Qualcomm's royalty charges to OEMs include a "surcharge" that somehow reduces the margins of rival cellular modem chip suppliers, limits their R&D efforts, and stunts their competitiveness, to the benefit of Qualcomm.

The "surcharge" theory fails as a matter of law for two reasons. *First*, it does not describe a harm to the competitive process. *See* Section II.B.1. That is a question of law subject to *de novo* review. *SmileCare Dental Grp. v. Delta Dental Plan of Cal., Inc.*, 88 F.3d 780, 783 (9th Cir. 1996); *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1376 (9th Cir. 1992). *Second*, even if the theory were viable, the District Court erred in holding that it could find harm to competition without proof that its theoretical predictions actually occurred in the real world. *See* Section II.B.2.

1. The "Surcharge" Theory Does Not Describe a Harm to the Competitive Process.

The District Court and the FTC have offered varying (and sometimes conflicting) theories for how the supposed royalty surcharge paid by OEMs harms competition among chip manufacturers. Each fails as a matter of law.

1. The *Caldera* Theory. The FTC errs in arguing that "[t]his case involves the same mechanism of anticompetitive harm" as the per-processor license charged by Microsoft in *Caldera, Inc. v. Microsoft Corp.*, 87 F. Supp. 2d 1244 (D. Utah 1999). *See* AB37-AB39; AB41-AB44. In *Caldera*, Microsoft forced OEMs to sign software licenses requiring the OEMs to pay for Microsoft's operating system on every computer they made—even those that had a rival's operating system. So when an OEM chose Microsoft's operating system, it just paid the Microsoft fee. But if an OEM chose a rival's operating system, it would have to pay *both* the price of the rival system *and* the price of Microsoft's. *See Caldera*, 87 F. Supp. 2d at 1249-50.

Caldera is different on two grounds. *See, e.g.*, OB66. *First*, Microsoft's agreements were exclusionary—and hence anticompetitive—because they imposed costs that were borne *only* when purchasing a rival's software. The agreements made rivals' software more expensive than Microsoft's in every instance. No matter what Microsoft's rivals charged for their software, it would be in addition to (not instead of) the price an OEM would pay for Microsoft's. *See Caldera*, 87 F. Supp. 2d at 1249-50. Thus, competitors in *Caldera* had to compete against Microsoft's product that

had already been paid for. This was blatantly exclusionary; it gave OEMs a massive incentive to choose Microsoft's software over rivals'.[3]

This case is *very* different. Unlike Microsoft in *Caldera*, Qualcomm sells two separate products—a license and a chip. When an OEM pays for a Qualcomm patent license, that license covers all phones. It does not provide the OEM with chips; the OEM pays separately for chips, from Qualcomm or a rival. And the choice of chip does not change the Qualcomm royalty.[4] Thus, an OEM can make its chip choice based solely on

[3] The same is true in other cases cited by the FTC. *See United Shoe Machinery Corp. v. United States*, 258 U.S. 451, 456-58 (1922) (defendant manufacturer of shoe machines imposed leases that, among other things, "require[d] the payment of a royalty on shoes operated upon by machines made by competitors"); *Premier Elec. Constr. Co. v. Nat'l Elec. Contractors Ass'n*, 814 F.2d 358, 359 (7th Cir. 1987) (association members entered into Section 1 price-fixing conspiracy forcing non-member competitors to pay 1% into union negotiating fund for the association's benefit, in addition to their own negotiating costs).

[4] The FTC does not seriously press its passing statement in a footnote asserting that "Qualcomm sometimes expressly charged higher royalties on phones that used rivals' chips." AB42 n.6. That claim singles out agreements with two OEMs signed over 15 years ago based on terms approved by relevant foreign governments and which were replaced years ago. They are not representative of the license agreements at issue in this case. 6ER1215-6ER1216; 1FER139:2-1FER140:15; 6ER1229; 6ER1233; 1FER73:1-1FER74:5.

the price and quality of chips; the royalty does not push the OEM in either direction. Instead, all chip manufacturers including Qualcomm compete for the OEM's business on an even footing.[5]

Second, in *Caldera*, Microsoft had no basis—other than exclusion—for charging *anything* on computers with rivals' operating systems. *See* 87 F. Supp. 2d at 1250. By contrast, Qualcomm has a right to "require customers to pay Qualcomm even when they deal with its rivals." AB1. Qualcomm's patents cover all cellphones, whether or not they use a Qualcomm chip. *See* 3ER629:9-3ER631:13; 3ER638:13-3ER645:22; AB10. Thus, although the FTC opens its brief by complaining that Qualcomm charges OEMs "even on phones that use rivals' chips," AB1, the FTC ultimately concedes that "Qualcomm is entitled to collect a royalty" on every phone, AB39.

Because the FTC concedes that Qualcomm may charge a royalty on all cellphones, the "surcharge" theory depends on the contention that

[5] The FTC's repeated assertions that Qualcomm conceded the applicability of *Caldera* are false, as shown by the quote from Qualcomm's brief the FTC cites. *See* AB41. Qualcomm explained that Microsoft's agreements gave OEMs "a large incentive to choose [Microsoft's software] over the competitor's," OB66—precisely what is missing here.

some undefined portion of Qualcomm's royalties "exceed[s] the reasonable value of its patents," and this supposed "excess" is a surcharge on rivals' sales. AB39. Thus, despite its protestations, AB35, and unlike *Caldera*, the FTC's legal theory does indeed require a court to assess whether royalties are "too high." Accordingly, it raises the acute dangers of "false positives" that led the Supreme Court to conclude that courts should *not* make antitrust decisions on the basis of whether a price is too high. *See Trinko*, 540 U.S. at 407-08, 414 ("Mistaken inferences and the resulting false condemnations 'are especially costly, because they chill the very conduct the antitrust laws are designed to protect.'"). "Premising liability on 'unreasonably high' prices, as the court did here—instead of harm to competition—can *radically* undermine important incentives to innovate." USA at 9 (emphasis added). Unlike *Caldera*, the FTC's theory would drag courts into the business of assessing whether firms charge "excessive" prices.

The FTC claims that Qualcomm's supposed "surcharge" is different from typical monopoly pricing—which antitrust law regards as benign—because Qualcomm purportedly obtains high prices for its patents by exercising monopoly power in completely different markets (for chips).

AB35. Even if that were true, that is a form of monopoly leveraging that does not violate the antitrust laws. As this Court explained in *Alaska Airlines, Inc. v. United Airlines, Inc.*, "[t]he danger that a lawful monopoly will . . . unduly perpetuate itself is *no more evident* when a lawful monopoly is leveraged [in a different market] than when a lawful monopolist reaps its monopoly profit solely from price increases in the monopoly market." 948 F.2d 536, 549 (9th Cir. 1991) (emphasis added); *see also* USA at 8 ("Notwithstanding the court's misbranding of these consequences as 'anticompetitive,' none establish the requisite harm to competition."). If Qualcomm were indeed extracting a surcharge from OEMs to access chips, that would "undermine monopoly power," because OEMs would have "more incentive to find an alternative supplier," spurring rival chipmakers to take share from Qualcomm. *See Alaska Airlines*, 948 F.2d at 549 (emphasis omitted). Indeed, the larger the alleged surcharge, the more motivated OEMs would be.

The fact that some of Qualcomm's patents are SEPs subject to a FRAND commitment does not change the analysis. Even if Qualcomm could be (mis-)characterized as having engaged in an "end-run around

[FRAND] constraints," that fact would "not alone present a harm to competition in the monopolized market." *Rambus*, 522 F.3d at 466-67; *see supra* Section I.A. In any event, the FRAND constraint is not even applicable to Qualcomm's tens of thousands of Non-SEPs. *See* 6ER1172; 3ER629:9-3ER630:15.

2. The "All-in Price" Theory. The District Court also relied on another theory of anticompetitive harm: that OEMs consider an "all-in" price for modem chips together with patent royalties, with the consequence that the amount of the Qualcomm royalty "affects demand for rivals' chips." 6ER1351. The Court thought that higher Qualcomm patent royalties caused lower demand and lower prices for rivals' chips, and hence lower rivals' margins. 6ER1349; 6ER1351; 6ER1360.

This theory fails at the outset because it confuses harm to competitors with harm to competition. Showing that rivals make less money is not enough to demonstrate that the competitive process has been impaired. *See Cascade Cabinet Co. v. W. Cabinet & Millwork, Inc.*, 710 F.2d 1366, 1373 (9th Cir. 1983) ("economic injury to a competitor does not equal injury to competition").

In addition, antitrust theories "must make economic sense." *United States v. Syufy Enters.*, 903 F.2d 659, 663 (9th Cir. 1990). There is no basis for the District Court's belief that Qualcomm's royalty rate would reduce rivals' prices. The District Court tellingly did not rely on any expert testimony. It simply assumed that if OEMs paid more for one component of the "all-in" price (the royalty), then they would pay less for the other (the chip). But there is no natural cap or floor on what OEMs would pay for the combination of chips and a set of patent rights. OEMs would seek to drive chip prices down as low as they can, as they would for any input cost, irrespective of the amount of Qualcomm's royalty. A higher royalty would not give OEMs leverage to push chip prices down even more. Conversely, lowering Qualcomm's royalty would not suddenly make OEMs willing to pay, beneficently, any more to buy chips.

3. <u>The "Price Squeeze" Theory</u>. The FTC tries to plug the gap in the District Court's theory by arguing that concurrently with charging higher royalties, Qualcomm lowers its chip prices, effectively shifting some portion of its chip prices into the royalty. AB3; AB14; AB35; AB43. According to the FTC, this in turn forces competitors to lower their own chip prices, thereby squeezing their margins. AB54-AB55.

That theory is no different from the "price squeeze" rejected by *Pacific Bell Telephone Co. v. linkLine Communications, Inc.*, 555 U.S. 438 (2009). OB39; OB60-OB61 & n.10. In *linkLine*, the plaintiffs competed with AT&T in the retail DSL market. Plaintiffs claimed that AT&T used its monopoly power in another market (wholesale DSL transport) to increase the plaintiffs' costs, while AT&T simultaneously lowered its retail DSL prices; in essence, it shifted a portion of its retail DSL price to its wholesale pricing, which it charged directly to competitors. The plaintiffs claimed that this "squeezed" their margins and impaired their ability to compete with AT&T, which was still earning monopoly profits through wholesale DSL transport sales. *See linkLine*, 555 U.S. at 442-44.

The FTC makes the same substantive claim here: that Qualcomm continues to earn monopoly profits from the supposed "surcharge" while lowering its chip prices and not leaving its rivals enough room to underbid Qualcomm on chips and still make as large a margin as they otherwise would. The Supreme Court rejected this theory in *linkLine*, finding that as long as AT&T's retail prices remained above cost (and absent an antitrust duty to deal with its competitors), the conduct was lawful. *See id.* at 451-52, 457; *see also John Doe 1 v. Abbott Labs.*, 571 F.3d 930,

935 (9th Cir. 2009) (following *linkLine*). The same is true here, where the District Court did not find that Qualcomm prices its chips below cost. *See* USA at 16 ("Similar to the facts of *linkLine*, here there is no antitrust duty to price reasonably in the licensing market and no evidence of predatory pricing in the chip market that created harm to competition.").

The FTC's attempts to distinguish *linkLine* and *Doe* fail. *First*, the FTC argues that "[t]he only conduct that the *linkLine* and *Doe* plaintiffs challenged was the defendants' setting prices for their own products and services," whereas Qualcomm "used its chip monopoly power to coerce chip customers to agree to pay a fee to Qualcomm when they buy from chip competitors." AB66. But that is no distinction at all. It could just as easily have been said in *linkLine* that by using its DSL transport monopoly to raise the costs of its rivals, AT&T "coerced" consumers to pay an amount attributable to AT&T's monopoly power even when they purchased from AT&T's retail rivals. And the alleged harm is still the same, *i.e.*, an alleged reduction in rivals' margins. Indeed, it would be perverse for Qualcomm to be liable for imposing a supposed cost on rivals indirectly when AT&T was not liable for imposing one directly. To the extent the FTC is simply saying that *linkLine* is limited to cases that involve

only pricing actions, *linkLine* itself says otherwise: "for antitrust purposes, there is no reason to distinguish between price and nonprice components of a transaction." 555 U.S. at 450.

Second, the FTC argues that "[t]he plaintiffs in *linkLine* and *Doe* contended that the antitrust laws require vertically integrated firms to afford their unintegrated retail rivals 'a "fair" or "adequate" margin,'" whereas Qualcomm "use[d] its monopoly to impose a financial penalty on its customers' use of rivals' products." AB67. But as explained above, there is no "penalty" here. Instead, as in *linkLine*, customers pay the same amount, regardless of whether they buy from the defendant or from its competitors. In *linkLine*, the charge was for use of AT&T's broadband infrastructure; here it is for the use of Qualcomm's patents. Simply calling that charge a "penalty" does not change the underlying economics of the price squeeze. In *Doe*, this Court made clear that a plaintiff cannot escape the logic of *linkLine* through the expedient of renaming a theory that is "the functional equivalent of the price squeeze the Court found unobjectionable in *Linkline*." 571 F.3d at 935.

2. The FTC Failed To Prove that Qualcomm's Practices Caused Substantial Anticompetitive Effects.

Even if the District Court had applied the correct legal standard in determining that Qualcomm's royalty rates are unreasonable, and even if those rates gave rise to a legally cognizable antitrust theory, the FTC was still required to prove that Qualcomm caused "substantial anticompetitive effect[s]" in the real world. *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018); *see also* Law&EconCenter&Profs at 8 ("Inferring anticompetitive effect without probative evidence is tantamount to holding such conduct *per se* illegal."). Here, the FTC's theory is predicated on a theorized causal chain whereby the alleged surcharge imposed on OEMs reduces the sales and/or margins obtained by competing chip suppliers; those compressed margins cause chip suppliers to invest less in R&D; and the diminished investment in R&D makes them unable to develop products to compete with Qualcomm.

The FTC therefore had to show at least that any purported surcharge paid by OEMs *resulted* in reduced R&D by chipmakers, and that reduced R&D *substantially impacted* competition. The FTC failed to do so at every step: it did not prove any surcharge, let alone one large enough

to affect competition, *see* OB58-OB60; it did not prove that rivals faced lower margins, *see* OB80-OB81; it did not prove that reduced margins caused a lessening of R&D, *see* OB81-82; and it did not prove that diminished R&D drove rivals to lose business to Qualcomm, *see* OB82-OB83. The multiple failure points in the mechanism demonstrate that the District Court embraced the theory alone, without holding the FTC to the requisite proofs that coherently link to a *viable*, *actual* exclusion of competition in the relevant markets.

That was legal error. It was not enough for the FTC to show that Qualcomm's licensing practices "reasonably appear capable" of causing anticompetitive effects. As explained in Qualcomm's Opening Brief, OB70-OB73, courts following *Microsoft*, 253 F.3d at 79, ask whether conduct with anticompetitive effects "reasonably appears capable" of maintaining a monopoly. Before reaching that analysis, however, a plaintiff must first prove that the challenged conduct actually had anticompetitive effects. Indeed, the D.C. Circuit itself, in *Rambus Inc. v. FTC*, confirmed that "the antitrust plaintiff—including the Government as plaintiff—bears the burden of *proving* the anticompetitive effect of the monopolist's conduct." 522 F.3d at 463.

1. Reduction in Rivals' Chip Prices. A key to the District Court's conclusion of competitive harm is its supposition that OEMs consider an "all-in" price for rivals' modem chips, such that an increase in Qualcomm's royalties will inexorably lead to a decrease in rivals' chip prices. OB77-OB80. Here it was unproven, and makes no economic sense.

The FTC devotes pages of its brief to testimony showing that OEMs pay attention to patent licensing costs, AB56-AB58, but that is neither surprising nor meaningful—in the absence of evidence that patent licensing costs actually affect the prices that OEMs pay to Qualcomm's rivals. All the FTC's evidence shows was that royalties are just one part of the "total cost" that OEMs bear. AB56. None of that evidence shows that a higher royalty actually led to a lower chip price or to lower chip margins, as opposed to a higher "total cost." Indeed, the FTC itself argues that total costs for OEMs go up. AB56. But because higher royalties raise the cost of making a phone using *any* chip, an increase in cost would not prove harm to competition in the relevant *chip markets*. Neither the FTC nor the District Court identified any evidence showing that OEMs would be willing to pay more for rivals' chips if Qualcomm's royalties were lower. To the contrary, the evidence shows that OEMs bargain vigorously to get

the best prices they can, *see* 1FER42:18-1FER43:25; 1FER124:10-1FER126:25; 1FER145:19-1FER147:9, and they would do so regardless of the amount of royalties due to Qualcomm.

The cited testimony of Mr. Gonell and the statements in Qualcomm's internal documents, AB56-AB58, have nothing to do with changes in rivals' chip prices resulting from Qualcomm's royalties. They recognize that some OEMs view buying chips from Qualcomm's competitors as a way to *evade* paying royalties on their phones, *see* 1SER0078:21-1SER0080:16, because, for example, it is easier for the OEM to hide sales it is contractually obligated to report to Qualcomm when the phones do not have a Qualcomm chip, *see* 1FER131:10-1FER132:3, 3SER0550-3SER0551. This evidence suggests, if anything, that Qualcomm's royalties should encourage OEMs to purchase chips *from rivals*, which runs counter to the FTC's exclusion theory. Qualcomm's practice of not selling chips to unlicensed OEMs *helps* rivals win business from those unlicensed OEMs, as Qualcomm literally cedes the field of competition at those OEMs, giving its rivals an unimpeded opportunity. 1FER131:10-1FER132:3.

Likewise, the brief squib of testimony of Wistron's Brian Chong, AB56 (citing 2SER0347), does not show a link between Qualcomm's royalties and the price OEMs would pay for competitors' chips. This testimony shows only that when Wistron considered Qualcomm and MediaTek chips on an equal footing, with the same royalty applicable regardless of chip choice, Wistron chose Qualcomm. There is no reason Wistron would have been willing to pay MediaTek a higher price if Qualcomm charged less in royalties.[6] Another OEM representative thus testified that "performance, pricing, [and] schedules" drove chip purchasing decisions, not Qualcomm's royalties. 1FER88.

The FTC presents an alternative basis for arguing how Qualcomm depresses rivals' prices. It argues that Qualcomm's royalties allow *Qualcomm* to lower the price of its chips, which then prevents chip competitors from "underbidding" Qualcomm. AB54. But this theory fails at the outset,

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[6] Mr. Chong also obviously misunderstood Qualcomm's upfront license fee, asserting that it was "recouped" over time by buying Qualcomm modem chips; that is plainly incorrect from the face of the agreement. *Compare* 2SER0347 *with* 2FER210-2FER211. The amounts due under the license are not recouped, and do not otherwise change, based on an OEM's chip selection; they therefore do not provide an incentive to buy chips from Qualcomm.

because it is irreconcilable with the District Court's factual finding that Qualcomm "charge[s] monopoly prices on modem chips." 6ER1364; *see also* 6ER1194-6ER1195 (CDMA chips); 6ER1206 ("premium LTE" chips).[7]

Moreover, the evidence showed that responsibility for chip pricing rests with an entirely separate business unit from licensing, with no visibility into the terms of customers' license agreements. 3ER793:2-3ER794:4; 2ER426:18-2ER427:3. More fundamentally, the evidence shows that prices for modem chips are set for each cellphone model through a bidding process. *See* 3ER791:23-3ER792:23; 1FER41:23-1FER43:25. The FTC itself presented evidence that Qualcomm lowers its price in bids where it faces competition. 1SER0119:10-1SER0120:8; 1SER0125:14-1SER0126:9.

Nevertheless, the FTC now hypothesizes, without any support in the District Court's findings or in record evidence, that had Qualcomm's

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[7] The FTC cites to the District Court's reference to "underbidding," AB23; AB54 (citing 6ER1351), to suggest its theory is consistent with that of the District Court. It is not. The District Court never made any finding that Qualcomm reduced the price of its chips. Rather, it believed that Qualcomm prevented "underbidding" because "the surcharge . . . *raises* the market price of *rivals'* chips." 6ER1351 (emphases added).

royalties been lower, Qualcomm would have charged more for its chips, such that rivals could more easily underbid Qualcomm's prices. AB23; AB54. That is wrong. The record evidence shows that in the real world, Qualcomm would not keep its prices high while its rivals win business; Qualcomm would respond by reducing its own prices if it could still make a profitable sale. 1FER117:18-1FER119:15; 3ER791:23-3ER792:23; 1FER41:23-1FER43:25. A lower royalty would not shield rival chipmakers from competition; *with or without a surcharge*, Qualcomm would lower its price as needed to meet the competition. This is garden-variety price competition that the law encourages.

2. Reduction in Rivals' Margins. Next, the District Court assumed (again without proof) that the economic burden of Qualcomm's purported surcharge fell squarely on rivals. 6ER1351. The FTC concedes that the textbook cited by the District Court as the sole support for this proposition says no such thing; to the contrary, it states that "how buyers and sellers ultimately share [] economic burdens [] depends on the 'elasticities of supply and demand.'" AB43 n.7. The FTC offered no proof of these elasticities and the District Court did not address the question; there is no proof that Qualcomm's royalties had *any* effect on competitors' margins,

as opposed to affecting the margins of the OEM, of its customers, its suppliers, or some combination thereof. *See also* OB28; OB78-OB79.

The FTC next argues that the District Court "was not required to quantify the extent to which rivals pass on the alleged surcharge to OEMs." AB59. But Qualcomm's rivals pay *no* royalty to Qualcomm, and have nothing to "pass on" to OEMs. OB28. It was the FTC's burden to show that a purported surcharge collected from OEMs diminished rival chip suppliers' margins, their R&D spending, and ultimately, their ability to offer competitive products; the FTC cannot make that showing by pretending that the supposed surcharge was imposed on chip suppliers in the first place.[8]

Similarly unavailing is the FTC's argument that it was not required to prove that chip suppliers bore the burden of allegedly excessive royalties, because "Qualcomm is liable for its anticompetitive exclusion . . . regardless of how the harms of that exclusion are distributed between competitors . . . and consumers." AB59. This *presupposes* the ultimate issue,

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[8] The FTC's reliance on *United States v. Dentsply International*, 399 F.3d 181 (3d Cir. 2005), is unavailing. AB60. Qualcomm never argued that the FTC had to quantify the exact effects on competitors. Rather, Qualcomm pointed out that much more is needed than six layers of general hypothesizing.

i.e., whether the alleged surcharge had the effect of excluding rival chipmakers. However, under the FTC's theory, if the royalties are borne not by rivals, but rather by OEMs or their customers, then there would be no "anticompetitive exclusion" to begin with—rivals' margins would be unaffected and their R&D efforts would not suffer.[9] By arguing that it does not matter who bore the burdens of the allegedly excessive royalties, the FTC essentially concedes it did not even *attempt* to prove that rivals' margins were affected—the very crux of any "raising rivals' costs" theory.[10]

3. Reduction in R&D. Finally, the FTC had to prove that the (completely unproven) diminution in rivals' margins stunted their R&D efforts and made them less competitive. Here too, the testimony referred to by the FTC, that rival chipmakers are "'very sensitive' to the sales and

[9] To the extent the FTC is arguing that it can prove anticompetitive effects even if the harm was borne entirely by OEMs or consumers, it is wrong. "Reducing consumers' choices or increasing prices to consumers does not sufficiently allege an injury to competition." *Brantley v. NBC Universal, Inc.*, 675 F.3d 1192, 1202 (9th Cir. 2012).

[10] The FTC's claim is further undermined by its concession that even the collection of reasonable royalties (to which Qualcomm is indisputably entitled) would provide Qualcomm a competitive advantage, AB39 n.4, coupled with its failure to prove that the purported surcharge would substantially *enhance* that advantage. The FTC offered no evidence, and the District Court made no finding, that the supposed "surcharge" had any effect beyond that of a reasonable royalty.

revenues they anticipate R&D investments will yield," AB61-AB62, hardly proves the point. At most, it stands for the unremarkable proposition that firms will not invest in R&D if they do not expect a return on their investment. But this is theory alone; it says nothing about how supposedly diminished margins resulting from Qualcomm's licenses affected R&D spending in the real world, generally or at any specific chipmaker. Indeed, the record contains no evidence from any chipmaker suggesting that Qualcomm's royalties factored into its R&D decisions, or were an impediment to R&D plans. To the contrary, direct evidence rebuts any conclusion that Qualcomm's rivals were incapable of investing in R&D if it made sense to do so. For example, there is no question that Intel had sufficient resources to devote to R&D, but for years its technical results were insufficient to meet the technical and supply requirements of Apple. 7ER1575; 1FER79:24-1FER84:23. Likewise, an ST-Ericsson executive testified that his firm failed as a chip supplier due to execution problems, and that additional capital would not have helped it to become more competitive. OB83; 3ER651. This *affirmative* evidence demonstrates a clean causal break in the FTC's already flawed logic that competition was harmed.

C. The District Court Improperly Failed To Account for Legitimate Justifications for Qualcomm's Business Practices.

Qualcomm has sound justifications for the business practices at issue. *See* OB44-OB45; OB48-OB51. Given that Qualcomm started as a licensing business, Qualcomm always needed to prevent a situation where chip sales to OEMs could be said to exhaust some of its patents, relieving the OEM from its obligation to pay royalties to Qualcomm. To that end, Qualcomm never provided exhaustive licenses to other chipmakers, always focusing its efforts on licensing OEM customers. In the same vein, Qualcomm always sold modem chips only to OEMs that have taken a license, ensuring contractual protection against claims by purchasers that buying the chips relieved them of the need to pay royalties for their use of Qualcomm's patents. OB11-OB13. Having the contractual protection of a license in place before selling chips legitimately protects Qualcomm from claims that the chip sale "exhausted" Qualcomm's patents and relieved OEMs of the need to pay for those rights. 1FER152:20-1FER156:3; 4ER857-4ER858; *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1531 (2017); *In re Qualcomm Litig.*, 2018 WL 6062352, at *5-6 (S.D. Cal. Nov. 20, 2018).

Selling only to licensed OEMs also ensures that Qualcomm does not help OEMs that infringe its patents, at the competitive expense of OEMs who have agreed to take a license. 1FER131:10-1FER132:10; 3SER0550; 1FER63:5-1FER68:19; 1FER90.

Qualcomm has conducted *all* of its modem chip sales with these safeguards, since the very beginning of its chip business, at a time when it could not have had market power, and in chip markets in which the FTC never even alleged any market power. OB13-OB17. During the more than 25 years that Qualcomm has followed this practice, the cellular industry has grown faster and more dynamically than perhaps any other industry in history. OB9; 3ER680:21-3ER681:6.

The District Court acknowledged these justifications, 6ER1330 (sale of chips only to licensed OEMs); 6ER1305 (licensing only OEMs). The Court did not doubt, for example, that Qualcomm was seeking to preserve its patent licensing program from being undermined by exhaustion. The District Court nonetheless dismissed them as "pretextual," 6ER1298-6ER1300, based on the assumption that avoiding patent exhaustion is improper, *see, e.g.*, 6ER1210. In fact, Qualcomm has the right to earn a return on its investment in developing patented technologies by

licensing at the OEM level and not making exhaustive sales of modem chips. *See Impression Prods.*, 137 S. Ct. at 1531; Michel at 25-26. And Qualcomm has a valid interest in protecting its investments in innovation and R&D and its OEM licensing program. *Image Tech. Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1218 (9th Cir. 1997).

As such, the District Court's conclusion was legal error. *See Bose Corp. v. Consumers Union of U.S., Inc.*, 466 U.S. 485, 501 (1984) (errors of law include "a finding of fact that is predicated on a misunderstanding of the governing rule of law"); *Kirola v. City & Cnty. of S.F.*, 860 F.3d 1164, 1179 n.7 (9th Cir. 2017) (explaining that "where, as here, the credibility finding was based on a legal interpretations, we review that legal interpretation *de novo*").

III. QUALCOMM'S DISCOUNTING AGREEMENTS WERE NOT UNLAWFUL "EXCLUSIVE DEALING" ARRANGEMENTS.

The District Court erred in its sweeping condemnation of discounts that Qualcomm has provided—or merely *offered*—to its modem chip customers. Antitrust law favors discounts because they reflect price competition and lower prices to consumers. Accordingly, above-cost discounts are generally considered *per se* legal. *See* OB108; *see, e.g.*, *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312, 319 (2007);

Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 (1993). The same is true of discounts conditioned on the customer's meeting certain volume or share thresholds ("conditional discounts"). An efficient competitor can always win the business by offering a matching or better discount, superior products, or both. *See Allied Orthopedic Appliances Inc. v. Tyco Health Care Grp. LP*, 592 F.3d 991, 997-98 (9th Cir. 2010); *ZF Meritor, LLC v. Eaton Corp.,* 696 F.3d 254, 275 (3d Cir. 2012); *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1060-61 (8th Cir. 2000).

A. The District Court's Holding Concerning the Non-Apple Agreements Must Be Reversed.

The FTC does not seriously defend the District Court's ruling that a series of actual and proposed agreements with OEMs besides Apple are prohibited exclusive dealing arrangements. OB114-OB115. Nor could it: the District Court made no finding that the agreements either resulted in below-cost pricing or (even collectively) foreclosed a substantial share of the market. But the FTC argues the District Court merely contextualized the Apple agreements. AB98-AB99. It never explains what that means, or how it satisfies the governing legal standard. The District Court ordered specific injunctive relief addressing these agreements.

6ER1395-6ER1396. And without any analysis of the extent of foreclosure, the discounts offered to other OEMs cannot provide "context" to the equally erroneous conclusions concerning the Apple agreements.

B. The Apple Agreements Were *Per Se* Legal Above-Cost Discounts.

Below, the FTC presented evidence concerning only a single Qualcomm agreement with Apple—the First Amended Transition Agreement (FATA)—claiming that it foreclosed Intel from supplying chips to Apple for five iPad models. OB110-OB111. Here, the FTC also defends the District Court's ruling as to an earlier Apple agreement—the Transition Agreement (TA)—even though at trial it presented no evidence even suggesting that agreement had any foreclosure effect.

The TA and FATA provided discounts to Apple. They were not "exclusive dealing" agreements, because rather than require exclusivity, they permitted Apple to change its chip supplier at any time. 3ER745:13-19. There is no basis for the FTC's contrary claim that the agreements "precluded Apple from working with any of Qualcomm's rivals." AB88. Apple worked closely with alternative chip suppliers throughout their terms, and switched to Intel chips in 2016. *See* 3ER671:5-9; 1FER109:24-1FER110:7.

Absent any requirement of exclusivity, it is dispositive that the TA and FATA resulted in above-cost pricing for Qualcomm. OB108-OB109. The FTC nonetheless argues that the Apple agreements are unlawful because of the so-called "clawback" provision, under which Apple received up-front discounts and committed to return a portion of them if it changed its chip supplier. AB89-AB90. But this Court has held that the below-cost pricing rule applies to discounts that are "conditional." Conditional discounts, without "something more," are not exclusive dealing arrangements unless they "*prevent* the buyer from purchasing a given good from any other vendor." *Allied Orthopedic*, 592 F.3d at 996-97 (emphasis added); *see also W. Parcel Express v. United Parcel Serv. of Am. Inc.*, 190 F.3d 974, 975-76 (9th Cir. 1999).[11] Other circuits hold that above-cost conditional discounts are *per se* legal. *Meritor,* 696 F.3d at 274 n.11 (collecting cases).

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[11] *Allied Orthopedic* made clear that an above-cost conditional discount, "without more," is not an exclusive deal, resolving the question left open in *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 916 n.27 (9th Cir. 2008), and *Masimo Corp. v. Tyco Health Care Group, L.P.*, 350 F. App'x. 95 (9th Cir. 2009). The FTC's reliance on a concurring opinion in the unpublished ruling in *Masimo*, 350 F. App'x. at 99 (Bea, J., concurring in part and concurring in the judgment), AB90, is therefore misplaced.

The decisions cited by the FTC are inapposite. AB89. Each involved restraints that went beyond discounts to induce exclusivity. *See McWane, Inc. v. FTC*, 783 F.3d 814, 820-21 (11th Cir. 2015) (cut-off from purchasing products for up to three months); *Meritor*, 696 F.3d at 265-66 (contractual limitations on display of competitors' products); *Masimo Corp. v. Tyco Health Care Grp. L.P.*, 2006 WL 1236666, at *4-6 (C.D. Cal. Mar. 22, 2006) (discounts on products with fixed demand if the buyer committed to purchasing other products), *aff'd*, 350 F. App'x 95 (9th Cir. 2009); *see* Areeda & Hovenkamp, *Antitrust Law* ¶ 1807b2 (4th ed. Supp. 2019) (noting that conditional discounts should "not be subjected to the laws of exclusive dealing," unless below cost).

Nothing about the Apple agreements justifies departing from the rule of *per se* legality. The agreements' structure reflects a valid business purpose. Apple insisted on receiving large, upfront payments. 1FER100:20-1FER102:22; 1FER48:3-1FER49:13. For its part, Qualcomm invested heavily in designing chips that would work with Apple's products. 1FER56:15-1FER58:10. Qualcomm needed assurance that Apple would in fact purchase a volume of chips that would justify the up-

front payments, and would return some portion if those volumes did not materialize. 3ER777:7-15. Hence, the need for a "clawback."

Importantly, the Apple agreements, even with the clawbacks, never resulted in below-cost pricing. It is undisputed that a competitor that was equally efficient to Qualcomm could profitably win Apple's business, *even if* it had to compensate Apple for any clawed-back amounts or unearned discounts. The proof is in the pudding: Apple in fact switched to Intel as a supplier and the FTC's own expert estimated that Apple forfeited $640 million. 1SER0131:25-1SER0132:21; 2FER192.[12]

C. The Apple Agreements Did Not Foreclose a Substantial Share of the Relevant Market.

Even if a discounting agreement provides below-cost pricing and therefore functions as an exclusive dealing agreement, it remains lawful so long as it does not foreclose a "substantial share" of competition.

[12] In a footnote, the FTC claims that the District Court's comment that "Qualcomm sacrificed profits for exclusivity" satisfies the price-cost test. AB93 n.25. But the price-cost test requires something the District Court did not find: pricing below cost, not just lower profits. *See Cascade Health*, 515 F.3d at 903. Intel seemingly concedes that a showing of below-cost pricing is required, but its claims that Qualcomm engaged in below-cost pricing have no record support. Intel at 36-38. The testimony Intel cites, 1SER0135-1SER0140, says no such thing, and the District Court made no such finding.

Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 327 (1961). That is because exclusive dealing arrangements are often pro-competitive. *See Allied Orthopedic*, 592 F.3d at 996.

The general rule is that "substantial" foreclosure involves precluding competition in 40% to 50% of the market. OB110. This Court has not adopted the D.C. Circuit's dictum that a lesser market share could be appropriate in cases involving monopolists. AB95 (citing *Microsoft*, 253 F.3d at 70). But the precise standard makes no difference here, because the Apple agreements did not affect competition in anything approaching a substantial share of the relevant market.

At trial, the FTC offered no evidence that the TA foreclosed competition—at all.[13] With respect to the FATA, the FTC's expert testified that in the relevant time period—before Apple began using Intel chips in 2016—Qualcomm's competitors "had a shot" at providing chips only for five iPad models, and no iPhones. 1SER0195:8-1SER197:2; 2FER193-

[13] Here, the FTC cites in a footnote its own closing *argument* rather than trial *evidence*, AB98 n.29, which obviously is no substitute. *United States v. Tootick*, 952 F.2d 1078, 1083-86 (9th Cir. 1991).

2FER194 (contestable iPad sales were only [redacted] units).[14] That is so because the only plausible competitor—Intel—did not yet have a chip that could support voice calls over LTE. 1FER84:14-16. The iPads at issue made up just 5% of Apple's own demand for modem chips, and therefore only a sliver of the "premium LTE" chip market accepted by the District Court. OB110-OB111. That is well below any plausible threshold of substantial foreclosure.

In this Court, the FTC cites two documents, belatedly arguing that Qualcomm recognized that Apple as a company—as opposed to the contestable portion of its demand—accounted for "between 40% and 60%" of premium-LTE chip demand between 2014 and 2016. AB94 & n.26. The FTC never cited these documents at trial, for good reason. *First*, the law is clear: the relevant measure of foreclosure here is not Apple's share of the market, but rather the portion of the relevant market that competitors had the ability to serve but did not serve *as a result of* the Apple

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[14] The FTC never explains its passing statement in a footnote that its expert did not conduct a formal "foreclosure analysis." AB95 n.27. There is no such requirement, and the label makes no difference. The FTC's expert unambiguously testified as to which Apple products were "contestable"—*i.e.*, could viably be won by a Qualcomm competitor. 1SER0195:8-1SER0196:22.

agreements. *See* Areeda & Hovenkamp, *supra*, ¶ 570b1 (foreclosure analysis looks at "selling opportunities *reasonably open to rivals*, namely, all the product and geographic sales they may *readily compete for*") (emphases added). Five iPad models is well below substantial foreclosure. *Second*, the documents principally reflect projections, and importantly, nothing indicates those correspond to the "premium LTE" market defined by the District Court. For example, the documents describe a market of 373 million "premium" units in 2015, AB94 n.26, while the premium-LTE market identified by the FTC included vastly more: nearly 650 million. 1SER0126:10-1SER0127:2; 2FER191.

Like the District Court, the FTC provides no legal support for the suggestion that Apple's status as a customer justifies applying a vastly less rigorous standard, nor cites a single case condemning an agreement that forecloses, at most, a fraction of the demand of a single customer, however "important." AB96.

IV. THE DISTRICT COURT ERRED AS A MATTER OF LAW IN IMPOSING ITS INJUNCTION.

Independent of its liability determination, the District Court erred in entering an injunction for three reasons: (1) it deemed it irrelevant whether Qualcomm would have market power prospectively; (2) it failed

to account for the fact that the injunction would harm the public interest by damaging national security; and (3) it did not tailor the injunction to avoid regulating wholly foreign commerce and overriding the judgments of foreign regulators.

A. In Imposing an Injunction, the District Court Erroneously Deemed It Irrelevant Whether Qualcomm Would Continue To Have Market Power.

The District Court imposed a prospective injunction because Qualcomm's *conduct* was likely to continue, without regard to whether that conduct would constitute an antitrust *violation*. AB100-AB101. That was legal error. OB115-OB119. It is settled that injunctions exist to "prevent future violations" of law. *United States v. W.T. Grant Co.*, 345 U.S. 629, 633 (1953). The identical conduct may violate the antitrust laws under one set of conditions and be innocuous—or even pro-competitive—under another. They accordingly may issue under Section 13(b) "only if" a past violation is "ongoing or likely to recur." OB116 (citation omitted).

A "violation" requires more than conduct; evidence of ongoing or likely-to-recur monopoly power in a relevant market is also required. OB116-OB117. Here, the injunction prohibits conduct that, absent monopoly power, will not harm competition; the injunction therefore not

only lacks a statutory basis but also serves no purpose and interferes with the ordinary operation of market forces.

Because the evidence showed that Qualcomm would not continue to have market power in the relevant markets—CDMA and "premium LTE"—the District Court's error requires reversal. OB117-OB119. The FTC's expert recognized that Qualcomm's market share in both the CDMA and "premium LTE" markets has been rapidly declining since 2014. 3ER677:8-3ER679:12. In CDMA, the FTC's expert estimated that MediaTek captured 37.1% of the market by 2016, about one year after its entry. 1SER0150:12-1SER0151:8; 2FER190. In "premium LTE," the evidence showed that by 2017, Qualcomm's share had already dipped below 50%. 2ER493:6-18; 6ER1442-6ER1443. By 2018, MediaTek, Intel, Samsung, and Huawei had all entered both markets. 2ER489:6-2ER490:7; 2ER491:20-2ER492:8; 3ER683:11-21. Qualcomm's declining shares reflect an increasingly competitive market, and the FTC presented no evidence suggesting that Qualcomm's precipitous decline in market share had ceased by March 2018 or would reverse itself thereafter. This is especially meaningful here because the FTC's theory cannot stand on some attenuated measure of market power; the premise of the theory is that

OEMs must have Qualcomm's chips, *i.e.*, that Qualcomm enjoys an absolute or close to absolute monopoly. By the time of trial, however, viable alternatives were available in all markets; indeed, the three largest OEMs—Apple, Samsung, and Huawei—were purchasing only a small minority of their aggregate demand from Qualcomm. 3ER789:1-3ER791:12.

The FTC erroneously suggests that the District Court concluded that Qualcomm will continue to have market power. AB102. If the District Court intended to make such a finding, it would have done so explicitly; instead, it held that there is "no legal requirement that a plaintiff show future market power." 6ER1387. The District Court's non-specific statement that Qualcomm's competitors are "hobbled," 6ER1369, does not overcome the actual evidence that Qualcomm will lack market power in the future. OB117-OB119.

The District Court also erred in extending the injunction to 5G technology—an error that directly gives rise to serious national security concerns. *See infra* Section IV.B. The FTC limited its case to two narrow chip markets, rather than all modem chips. The FTC's choice here matters, because it naturally circumscribes any injunctive relief. Remedies must be narrowly tailored to redress the harm, and here, it does not follow that

any harm will occur in a nascent, undefined 5G chip market. And absent detailed findings, a district court's discretion to impose "fencing-in" remedies does not extend to fields with no defined market *at all*. *See* OB116-OB117. Here, the FTC's own expert disclaimed any ability to reliably analyze whether Qualcomm will have market power with respect to 5G chips. 3ER681:7-3ER683:6. For good reason. At the time of trial, there were no 5G chips—only announcements from Qualcomm's major competitors indicating strong potential competition. 4ER844:15-19; 3ER783:5-21; 3ER784:5-23; 2ER436:24-2ER437:4. Qualcomm's aspirational projections about its technical prowess in the field generally, 6ER1387-6ER1388, are not sufficient to find that it will in fact have monopoly power.

B. The District Court Erred by Issuing an Injunction Without Regard to Its Effect on the Public Interest.

The FTC defends the District Court's failure to consider whether its injunction would disserve the public interest. AB105; 6ER1383. Regardless of whether a preliminary or permanent injunction is at issue, this Court's precedents hold that under Section 13(b)'s second proviso an injunction is appropriate only when "the usual equitable standards" are satisfied. *See* OB121-OB123; *FTC v. H.N. Singer, Inc.*, 668 F.2d 1107,

1111 (9th Cir. 1982) (second proviso applies to preliminary and permanent injunctions). The FTC's reliance on *United States v. E.I. du Pont de Nemours & Co.* is misplaced because that decision requires that injunctions be tailored to minimize injury to the "interest of the general public." 366 U.S. 316, 327-28 (1961) (citation omitted).

The FTC offers no basis to doubt the conclusions of the Departments of Defense and Energy that the injunction threatens national security. *See* AB106-AB108. The FTC's argument that those express, expert determinations are irrelevant because in every case "competition furthers the public interest," AB107-AB108, reduces to the claim that every liability finding automatically requires imposing an injunction. That rule cannot be reconciled with *Winter v. Natural Resources Defense Council, Inc.*, 555 U.S. 7, 23-25 (2008), and *eBay v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006).

There also is no merit to the FTC's argument that the United States is barred from presenting these serious national security concerns because Qualcomm waived this argument. Precisely because this question relates to the interests of the public generally—not Qualcomm individu-

ally—this Court should not lightly find waiver. Qualcomm's pretrial submissions, which the District Court deemed to be sufficient, 1FER95:2-8, expressly address harm to national security. 7ER1706-7ER1707, 7ER1711-7ER1713. The District Court rejected a request by the United States to hold a separate remedial proceeding in which the issue could have been further elaborated. 6ER1392-6ER1393. Having been denied the opportunity to litigate the issue, Qualcomm cannot now be said to have waived it. *See Reno Air Racing Ass'n v. McCord*, 452 F.3d 1126, 1138 n.13 (9th Cir. 2006).

C. The District Court Erred in Imposing a Worldwide Injunction.

The District Court extended its remedy to wholly foreign commerce, enjoining conduct affecting licenses of non-U.S. patents that govern the manufacture, use, and sale of devices only abroad (*e.g.*, Qualcomm's Chinese Patent License Agreements, *see* OB127-OB128). That was error. The Foreign Trade Antitrust Improvements Act (FTAIA) limits the reach of the Sherman Act to conduct having "a direct, substantial, and reasonably foreseeable effect" on domestic commerce. 15 U.S.C. §§ 6(a)(1), 45(a)(2). Conduct concerning licenses that affect only the manufacture and sale of products outside the U.S. does not meet this requirement; any effect on

U.S. commerce would be indirect at most. *See United States v. LSL Biotechnologies*, 379 F.3d 672, 674, 680-82 (9th Cir. 2004) (allegations of reduced innovation and increased prices in U.S. did not constitute "direct" effects).

The FTC acknowledges that it may seek foreign remedies only "to the extent necessary 'to effectively redress harm . . . to U.S. commerce.'" AB111 n.39 (citation omitted). But it nonetheless maintains that the FTAIA is irrelevant to the District Court's determination of an appropriate remedy. AB111. That is incorrect. The FTAIA prevents the "risk of interference with a foreign nation's ability independently to regulate its own commercial affairs" by limiting the application of U.S. "remedies." *F. Hoffmann-La Roche Ltd. v. Empagran S.A.*, 542 U.S. 155, 165-68 (2004). An alleged antitrust violation accordingly must be "analyzed for its separate domestic and foreign components," *In re Rubber Chems. Antitrust Litig.*, 504 F. Supp. 2d 777, 784 (N.D. Cal. 2007), and only that component with a "direct" (as well as "substantial" and "reasonably foreseeable") effect on U.S. commerce is subject to U.S. antitrust law, *In re Static Random Access Memory (SRAM) Antitrust Litig.*, No. 07-md-01819

CW, 2010 WL 5477313, at *4, *7 (N.D. Cal. Dec. 31, 2010); *see* OB129-OB130. *Contra* AB111.[15]

The FTC does not dispute that foreign regulators have imposed remedies that differ from the District Court's injunction. *See* AB112 (China and Taiwan).[16] But it errs in asserting that this case implicates no comity concerns because foreign regulators have not affirmatively forbidden Qualcomm from licensing its chip rivals. AB112. Comity compels deference to the foreign jurisdiction's determination *how* to protect competition even if not in direct opposition to U.S. injunctions. *See Mujica v. AirScan Inc.*, 771 F.3d 580, 602 (9th Cir. 2014) (rejecting "true conflict" requirement).[17]

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[15] That some markets affect U.S. commerce in a way that makes global injunctions appropriate, *see* AB109-AB111, does not mean that injunctions are appropriate insofar as they address wholly foreign commerce.

[16] This Court can take judicial notice of foreign regulatory proceedings. *See Singh v. Ashcroft*, 393 F.3d 903, 905 (9th Cir. 2004). That course is particularly appropriate with respect to the revocations of the Taiwanese and Japanese regulatory determinations—on which the District Court had relied—that Qualcomm violated their respective nations' antitrust laws. *See* OB128-OB129; 1FER6-1FER7; 1FER3.

[17] Qualcomm did not waive its comity objection. *Contra* AB112. It presented evidence about CPLAs, including that the Chinese government rejected requiring Qualcomm to exhaustively license its Chinese SEPs to chip suppliers. 1FER169-1FER170; 2ER431:7-2ER434:17; 1FER12:25-1FER13:22.

CONCLUSION

This Court's Order granting a stay, the amicus brief of the United States, and the FTC's inability to defend central aspects of the ruling below make plain that the District Court's decision cannot stand. The decision upends the longstanding business practices of the nation's leading innovator in the most dynamic industry of our time, which is thriving. One would expect so disruptive an intervention to be based on established antitrust principles and due respect for national security concerns. The ruling below is anything but. Instead, as the Department of Justice has made clear, the District Court adopted novel legal rules that conflict with settled precedent and that will impede, not promote, competition and innovation. The judgment should be reversed.

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Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

This brief contains 13,029 words, excluding the items exempted by Fed. R. App. P. 32(f). The brief's type size and typeface comply with Fed. R. App. P. 32(a)(5) and (6).

I certify that this brief is accompanied by a motion to file a longer brief pursuant to Cir. R. 32-2(a).

December 13, 2019

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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 December 16, 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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