No. 19-16122

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

FEDERAL TRADE COMMISSION,
Plaintiff-Appellee,

v.

QUALCOMM INCORPORATED,
Defendant-Appellant.

On Appeal from the United States District Court
for the Northern District of California
No. 5:17-cv-00220-LHK
Hon. Lucy H. Koh

OPPOSITION OF THE FEDERAL TRADE COMMISSION TO MOTION FOR PARTIAL STAY PENDING APPEAL

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Following a lengthy trial on the merits and a thorough review of the evidence, the district court concluded that Qualcomm engaged in a multi-year course of anticompetitive conduct, harming competition, market participants, and consumers. Qualcomm's motion for a partial stay of the district court's remedial order fails on all fronts and should be denied.

On the merits, Qualcomm falls far short of meeting its burden to show a likelihood of success on appeal. The district court's finding of antitrust liability does not hinge, as Qualcomm suggests, on a standalone duty to deal with competitors. Rather, the core anticompetitive conduct here is Qualcomm's leveraging of its chip monopoly to secure from its customers inflated license royalties that do not reflect the value of Qualcomm's patents. Those inflated royalties raise Qualcomm's rivals' costs, hobbling competition. The court's decision is solidly supported by the factual record and grounded in well-established precedent of the Supreme Court, this Court, and other circuits.

Qualcomm has not shown that it will suffer irreparable harm absent a stay. Qualcomm's argument, at bottom, is that the injunction entered below will cause it to lose revenues. But the order permits Qualcomm to secure every dollar to which it is entitled: market-based prices for its chips, and royalties that reflect the value of its patents. In contrast, a stay would allow Qualcomm to perpetuate its anticompetitive practices, creating roadblocks to competition that will impede innovation at this critical moment for 5G investment and harm consumers well into the future.

The three amici supporting Qualcomm fail to address Qualcomm's adjudicated conduct or its consequences and misapprehend the order. The district did not rule, as amici seem to believe, that high prices violate the antitrust laws, nor did it require Qualcomm's patent royalty revenue to be anything less than the patent system provides. And the court certainly did not order Qualcomm to curtail its R&D investments or nullify its contracts. The appropriately tailored injunction that Qualcomm actually faces allows it to sell its chips for market-based prices and to license its patents based on rights granted under the patent laws, creating an equitable solution for Qualcomm's years of anticompetitive practices.

BACKGROUND

Qualcomm is the dominant supplier of modem chips, semiconductor devices that manage cellular communications in mobile products. Handset manufacturers (known as "OEMs") depend on Qualcomm for modem-chip supply. Qualcomm also holds patents that it has declared essential to widely adopted cellular standards. In exchange for having its patented technologies included in these standards, Qualcomm voluntarily committed to standard-setting organizations ("SSOs") to make licenses to its standard-essential patents ("SEPs") available to all applicants on fair, reasonable, and non-discriminatory ("FRAND") terms. A6-10, A34, A42, A222.[1]

In January 2017, the FTC sued Qualcomm under Section 5 of the FTC Act, 15 U.S.C. § 45, which prohibits "unfair methods of competition," including practices that violate the Sherman Act. *See FTC v. Cement Inst.*, 333 U.S. 683, 694 (1948). The FTC alleged that Qualcomm unlawfully used its monopoly power in two modem-chip markets to impose anticompetitive licensing and supply terms on OEMs, thereby excluding competitors. The FTC sought a permanent injunction that would require Qualcomm to cease its anticompetitive conduct.

After a four-week trial addressing both liability and remedy, the district court held that Qualcomm's challenged practices violated both Section 1 and Section 2 of the Sherman Act, 15 U.S.C. §§ 1 and 2,[2] and thus were unfair methods of competition under Section 5 of the FTC Act. A216-17. The court first determined that Qualcomm has monopoly power in two relevant markets: the worldwide markets for CDMA modem chips and premium LTE modem chips—a fact that Qualcomm does not contest here. A26-42. Applying the "rule of reason,"

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[1] "A[#]" refers to Qualcomm's Appendix to its stay motion. Citations herein to "SA[#]" refer to the FTC's Supplemental Appendix.

[2] Section 1 of the Sherman Act prohibits "[e]very contract, combination … or conspiracy, in restraint of trade or commerce." 15 U.S.C. § 1. Section 2 makes it unlawful for a firm to "monopolize" a relevant market. 15 U.S.C. § 2.

A42, the court determined that Qualcomm's actions harmed competition in these markets. Based on a wide range of evidence—including in particular Qualcomm's own documents and statements, A13-15—the court found that Qualcomm has abused its chip monopoly power to distort license negotiations with OEMs, secure higher royalties than it could obtain based solely on the value of its patents, and weaken its competitors.

The court detailed the various anticompetitive tactics that Qualcomm employed to maintain its chip monopoly. In a practice that is "unique within Qualcomm and unique in the industry,"[3] Qualcomm refuses to sell modem chips to OEMs unless they first agree to a separate patent license—Qualcomm's "no license, no chips" policy. A45. (By contrast, in markets such as Wi-Fi where it lacks monopoly power, Qualcomm does not require OEMs to sign a separate license as a condition for supply but instead sells components "exhaustively"— *i.e.*, free from downstream patent claims. A89.) Qualcomm has threatened to cut off chip supply to coerce OEMs to sign license agreements on its preferred terms. A45-115 (detailing Qualcomm's anticompetitive acts against 16 OEMs). Because OEMs cannot risk losing Qualcomm's chips, the no license, no chips policy

[3] *See, e.g.*, SA043-45 (Intel testimony that Qualcomm is the only component supplier not to include intellectual property in the price of a component); SA049-50 (Apple testimony that Qualcomm is the only supplier to condition component sale on the existence of an IP license).

enables Qualcomm to secure "unreasonably high" royalty rates that "are set by its monopoly chip market share rather than the value of its patents."[4] A46, A158. OEMs must pay these elevated royalties to Qualcomm even when they use a rival supplier's chips. As a result, Qualcomm's no license, no chips policy "impose[s] an artificial and anticompetitive surcharge on the price of rivals' modem chips."A46. Qualcomm thus has "raised its rivals' costs, and thereby raised the market price to its own advantage." A186 (quoting *Premier Elec. Constr. Co. v. Nat'l Elec. Contractors Ass'n*, 814 F.2d 358, 368 (7th Cir. 1987)).

The district court found that Qualcomm has further sustained its elevated royalties by refusing to license its SEPs to competing chipmakers—in violation of its commitments to certain cellular standard-setting organizations to make licenses to its SEPs available to *all applicants*, including rivals, on FRAND terms. A125-27; *see* SA001-26. The court found that Qualcomm refused to license rivals to impede competition. A139-41. Qualcomm recognized that if it licensed its SEPs to rival chipmakers (against whom it could not leverage its chip market power), it would lose its ability to extract above-FRAND royalties from OEMs. A129-30. And Qualcomm's own documents state that denying SEP licenses to competitors

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[4] In some cases, Qualcomm also made cash payments to licensees to further inflate the royalty rate. A45-46.

would "reduce [their] customer base and ability to invest in future products," further entrenching Qualcomm's chip monopoly power. A139-40.

Finally, the district found that Qualcomm excluded competitors by entering into exclusive supply arrangements with Apple, a particularly important customer. Through these agreements, Qualcomm "shrunk rivals' sales and foreclosed its rivals from the positive network effects of working with Apple," A142, enabling Qualcomm to maintain its chip monopoly power.

The court concluded that, taken together, Qualcomm's practices "strangled competition" in the relevant chip markets "and harmed rivals, OEMs, and end consumers in the process" A216. Although Qualcomm offered supposedly procompetitive justifications for its practices, the court found that these justifications were "pretextual" and contradicted by Qualcomm's own documents. A133, A157, A165-66, A191.

Because the trial addressed both liability and remedy,[5] the court determined the appropriate remedy for Qualcomm's violations. Finding that Qualcomm's

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[5] *See* SA040 (November 2017 ruling on bifurcation); SA036 (order that "[t]he January 2019 trial will address both liability and remedy"). DOJ's statement of interest ("SOI") erroneously claims otherwise. SOI 10. Its citation to *Microsoft* is also off point. There, the trial court did not provide notice that remedy would be addressed at the liability proceeding and refused to take evidence relating to the remedy. *United States v. Microsoft Corp.*, 253 F.3d 34, 98-101 (D.C. Cir. 2001) (en banc). The cited *Microsoft* decision explains that "a trial on liability [] does not

anticompetitive practices are ongoing and, in any event, likely to recur, A219-25, the court entered an injunction. Qualcomm's stay motion challenges two of the injunction's provisions: (1) a requirement that Qualcomm refrain from implementing its no license, no chips policy and "negotiate or renegotiate license terms with customers" free from the threat of lack of access to modem-chip supply, A228;[6] and (2) a requirement that Qualcomm "make exhaustive SEP licenses available to modem-chip suppliers" on FRAND terms, A230.

On July 3, 2019, the district court denied a stay of these provisions.

ARGUMENT

To justify a stay, Qualcomm bears the burden to show that: (1) it is likely to succeed on the merits of its appeal; (2) it will be irreparably injured absent a stay; (3) issuance of a stay will not substantially injure other parties interested in the proceeding; and (4) the public interest favors a stay. *Lair v. Bullock*, 697 F.3d 1200, 1203 (9th Cir. 2012). The third and fourth factors may be considered together where, as here, the government is the opposing party. *Leiva-Perez v. Holder*, 640 F.3d 962, 970 (9th Cir. 2011). In particular, Qualcomm must meet the "bedrock requirement" of showing "that irreparable harm is *probable*," and a stay

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substitute for a relief-specific evidentiary hearing *unless the matter of relief was part of the trial on liability*," as was the case here. *Id*. at 101 (emphasis added).

[6] Contrary to some expressed concerns, this does not require Qualcomm to renegotiate any existing licenses unless licensees request that it do so.

"must be denied" if it fails to carry that burden. *Id.* at 965, 968 (emphasis added). Because, as shown below, Qualcomm cannot demonstrate that the "balance of hardships tips sharply in [its] favor," it must also establish "a strong likelihood of success" on the merits. *Id.* at 970. Qualcomm fails to meet its burden on any of those factors.

A. Qualcomm Has Not Established A Likelihood Of Success On The Merits

1. The District Court Correctly Held That Qualcomm's No License, No Chips Policy Is Anticompetitive

Qualcomm claims that the district court erred in holding that Qualcomm's no license, no chips policy harms competition. Mot. 18. This claim fails for several reasons. To begin, Qualcomm mischaracterizes the court's analysis (as does the DOJ). The court did not fault Qualcomm simply for "[c]harging high prices." SOI 4; *see* Mot. 18. Instead, the decision condemns a scheme whereby Qualcomm employs its monopoly power over chips to coerce OEMs to accept inflated royalties that do not reflect the value of Qualcomm's patents and that operate as a tax on Qualcomm's rivals. A45-46. This arrangement falls squarely within the category of conduct that "harm[s] the competitive *process*." *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (emphasis original); A185-87 (discussing cases in which courts have condemned substantially similar misconduct).

The evidence at trial strongly supports the district court's assessment of Qualcomm's no license, no chips practices—including its finding that Qualcomm's scheme imposes an "artificial and anticompetitive surcharge" on rivals' modem chips. A46. Qualcomm's own documents recognize that its chip monopoly—not the value of its patents—sustains its royalty rates. A158-62. Qualcomm executives explained that "[h]igh modem share drives … royalty rate," SA101, and thus repeatedly advised that a separation of Qualcomm's patent-licensing division (QTL) from its chip business (QCT) would "hurt QTL's leverage to negotiate … licensing deals." SA120.[7] OEM witnesses testified that Qualcomm's chip-supply threats preclude litigation over Qualcomm's royalty rates. A179-81.[8] The FTC's licensing expert testified that Qualcomm's chip supply threats enable Qualcomm to command a "disproportionately high royalty rate," SA052, by removing the prospect of patent litigation if the parties cannot reach agreement, SA052-54.

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[7] *See also* SA105 ("Without chip business, more licensees/potential licensees might fight QTL license demands."); SA109 (Qualcomm needs to keep OEMs "reliant on [QCT] for continued supply" to protect QTL from royalty attacks); SA-086 ("Separation could weaken [QTL] in rate negotiations with major customers.").

[8] *See, e.g.*, SA059-60 (Lenovo testimony); SA061 (BlackBerry testimony). Qualcomm has thus cut off OEM's access to both contract remedies for Qualcomm's breach of its FRAND commitments, and patent law remedies that might have constrained Qualcomm's licensing demands to its patents' value.

Furthermore, ample evidence demonstrates that Qualcomm's no license, no chips policy harms not only OEMs (and final consumers who buy mobile devices) but also the competitiveness of rival chipmakers. The FTC's economic evidence demonstrated that Qualcomm's royalty surcharge raises rivals' costs of selling chips. As a result, the surcharge reduces rivals' sales and margins and weakens them as competitors. The surcharge, by contrast, does not raise Qualcomm's costs because Qualcomm collects the surcharge.[9] A184-86. Qualcomm's no license, no chips policy excludes competitors by deterring OEMs' purchases of rivals' chips. *See* SA064 (Wistron testimony that Qualcomm's surcharge deterred OEM's purchase of MediaTek's chips).

Qualcomm argues that its licensing practices cannot raise its rivals' costs because OEMs, not chip suppliers, pay Qualcomm's surcharge. Mot. 19. As a matter of basic economics, however, it does not matter which party pays the surcharge in the first instance; the impact is the same: "'the price paid by buyers rises, and the price received by sellers falls.'" A186 (quoting 1 N. Gregory Mankiw, PRINCIPLES OF MICROECONOMICS 156 (7th ed. 2014)); *see also United Shoe Mach. Corp. v. United States*, 258 U.S. 451, 456-58 (1922) (condemning

[9] *See also* SA047 (Intel witness testified that "there is this chip price, and on top of that there's this royalty price. For them, Qualcomm, it doesn't really matter because both monies are the all-in price and go to them …, which then undercuts me as the competitor.").

defendant's use of monopoly power over machinery to collect "royalt[ies]" on customers' use of rivals' machinery).

Because this case concerns Qualcomm's threatened withholding of monopolized modem chips to raise the costs of rival chip suppliers, *linkLine* and *Doe*, the precedents on which Qualcomm relies (Mot. 20-21), are inapposite. *See Pac. Bell Tel. v. linkLine Commc'ns, Inc.*, 555 U.S. 438 (2009); *John Doe 1 v. Abbott Labs.*, 571 F.3d 930 (9th Cir. 2009). The findings of coercion and conditioning that are central to the district court's decision here were absent in *linkLine* and *Doe*, in which the defendants set prices for their wholesale and retail offerings independently of one another. *See Doe*, 571 F.3d at 935 (Abbott "raise[d] the price of [its wholesale product] while selling its own [retail product] at too low a price"). Whereas the court in this case found that Qualcomm's royalties reflect its modem-chip monopoly power, not the value of its patents (A214), the plaintiffs in *linkLine and Doe* did not claim that the prices the defendant set for wholesale offerings reflected anything other than the value of those offerings.

To the extent Qualcomm contends that *linkLine* creates a rule of *per se* legality for *any* conduct that diminishes rivals' margins so long as the monopolist's own prices remain above cost, that contention is insupportable. Many exclusionary practices—ranging from tying to exclusive dealing to sham litigation—harm competition by reducing rivals' margins. To read *linkLine* in this expansive fashion would mean that the Supreme Court, *sub silentio*, overruled nearly a century of its Sherman Act precedent. Courts have declined to read *linkLine* as creating "such an unduly simplistic and mechanical rule" because it "would place a significant portion of anticompetitive conduct outside the reach of the antitrust laws without adequate justification." *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 278 (3d Cir. 2012).

2. The District Court Properly Held That Qualcomm's Refusal To License SEPs To Competitors In Violation Of Its SSO Commitments Is Anticompetitive

Qualcomm is also unlikely to succeed in overturning the district court's conclusion that Qualcomm acted anticompetitively in reneging on its commitments to make SEP licenses available to rival modem-chip suppliers. The district court correctly found that Qualcomm's actions harmed competition by supporting Qualcomm's no license, no chips policy at the OEM level, raising its rivals' costs, and thereby maintaining its modem-chip monopoly. A115-17, A139-41; *see* SA090 (Qualcomm document stating that its reasons for denying SEP licenses to a rival include "destroy[ing the rival's] margin and profit" and "[t]ak[ing] away the $$ that [the rival] can invest" in future generations of cellular technology).

Cellular-communications standards are the product of industry-wide collaborative efforts to which numerous firms, Qualcomm among them, have made contributions. A166-67. In exchange for having its intellectual property included in cellular standards and to thereby expand the reach of its chip and licensing businesses, Qualcomm made licensing commitments to expand the reach of its chip and licensing businesses. SA056-57 (Qualcomm testimony).[10] The design of the licensing commitments. *See Microsoft Corp. v. Motorola Inc.*, 795 F.3d 1024, 1030-31, 1041 (9th Cir. 2015). Here, Qualcomm's breach of its commitments was not "just" a breach of contract. It was a mechanism by which Qualcomm effectuated its scheme to raise rivals' costs by binding OEMs to its no license, no chips policy.[11]

[10] The voluntary character of Qualcomm's commitments distinguishes this case from *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, in which the defendant never would have dealt with its rivals absent "statutory compulsion." 540 U.S. 398, 409 (2004). DOJ questions whether Qualcomm "truly volunteered to license chip makers." SOI 5-6. But the record shows that Qualcomm not only voluntarily agreed to the terms for participation in the SSOs, it also sought to enforce against others the very obligations it now disclaims. SA022-23 (order granting partial summary judgment for FTC); SA071 (declaration of Qualcomm's founder attesting that FRAND commitments to an SSO at issue in this case required another SEP holder to license to Qualcomm "any patents whose use would be required for compliance with [the applicable standard]"); SA066-67 (testimony of founder that products compliant with the standard included modem chips).

[11] *Cf. Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 500-01 (1988) (SSO members violated Sherman Act by subverting SSO rules to exclude competing products from industry standard); *Am. Soc'y of Mech. Eng'rs, Inc. v. Hydrolevel Corp.*, 456 U.S. 556, 571-72 (1982) (SSO member's misuse of SSO processes to exclude competitor violated antitrust law); *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 315-16 (3d Cir. 2007) (allegations that Qualcomm falsely assured SSOs it would license SEPs on FRAND terms sufficient ground for monopolization claim). *See generally Trinko*, 540 U.S. at 410 n.3 (exclusion of

Qualcomm's refusal to license rivals eliminated a means of escaping its anticompetitive conduct: one way OEMs could avoid Qualcomm's anticompetitive strategy of withholding chips to extract a royalty surcharge would be to obtain Qualcomm-licensed chips from other chipmakers. Those chipmakers would not be vulnerable to Qualcomm's chip supply leverage and would thus be in position to negotiate reasonable royalty rates in the shadow of patent law and Qualcomm's FRAND commitments. In fact, Qualcomm recognized that if it licensed its SEPs to rival chipmakers, it would lose its ability to extract inflated royalties from OEMs. A130.

Finally, Qualcomm argues that any refusal to deal must entail profit sacrifice to be deemed anticompetitive, Mot. 16-17, and that because the court found Qualcomm's actions were "lucrative," the court's analysis fails. But Qualcomm misconstrues the law. While a monopolist's willingness to forsake short-term profits may be evidence of an anticompetitive end, *see Trinko*, 540 U.S. at 409, the lucrative nature of a firm's actions do not immunize the actions from antitrust scrutiny and ultimately liability. *See McWane, Inc. v. FTC*, 783 F.3d 814, 841

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competitors from a collaboration "presents greater anticompetitive concerns" and is more "amenable to a remedy" than one firm's refusal to share a proprietary asset).

(11th Cir. 2015) (profitability is "'not an unlawful end, but neither is it a procompetitive justification'" (quoting *Microsoft*, 251 F.3d at 71)).

B. Qualcomm Fails To Show Irreparable Injury

Qualcomm fails to show irreparable injury from near-term enforcement of the two challenged provisions of the district court's order. The first requires Qualcomm to negotiate license terms without threatening to disrupt a customer's chip supply or conditioning the supply of modem chips on a customer's patent license status. A228. Qualcomm asserts that this requirement will cause it to lose licensing revenues from contracts it negotiated under its no license, no chips policy. Mot. 24-25. But the district court's order permits Qualcomm to negotiate and collect all the revenues to which it is entitled, namely, (i) chip prices that reflect the market-based value of its modem chips, and (ii) royalties that "reflect the fair value of Qualcomm's patents." A228-30.

Qualcomm's claim that it will be harmed by selling chips to unlicensed customers (Mot. 25-26) is meritless. Like any other supplier of smartphone components, Qualcomm can price its modem chips to reflect the value of its patents substantially embodied in those chips. *See* A45, A47, A57, A63, A70, A78, A84, A114, A164–65 (finding that Qualcomm's no license, no chips policy is unique within the industry); *see also* A89, A114, A163–65 (finding that

Qualcomm's modem policy is also unique within Qualcomm, as it sells other components exhaustively).[12]

Neither Qualcomm's motion nor its supporting declarations adequately explain how an order that expressly allows Qualcomm to collect "fair value" for its patents can deprive Qualcomm of reasonable patent royalties. *Cf. Qualcomm Inc. v. Compal Elecs., Inc.*, 283 F. Supp. 3d 905, 918–19 (S.D. Cal. 2017) (rejecting Qualcomm's contention that defendants' alleged breach of their license agreements would "cause irreparable harm by emboldening other licensees to improperly seek to breach or renegotiate their license agreements" and dismissing assertions contained in the supporting declaration of Alex Rogers as "remarkably general and speculative"). If a customer balks at paying "fair value," Qualcomm is free to seek damages for breach of contract or patent infringement. *See generally Apple, Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1332 (Fed. Cir. 2014) (affirming denial of a preliminary injunction because "Motorola's FRAND commitments … strongly suggest that money damages are adequate to fully compensate Motorola for any

[12] In the district court, Qualcomm argued that it cannot adjust its modem-chip pricing because competitors' chip prices do not include the value of Qualcomm's patents, as competitors do not pay license fees to Qualcomm. This argument is, at best, ironic given that chipmakers have requested licenses, whereas Qualcomm is desperately seeking to avoid the district court's order that Qualcomm license its chip competitors. As to any patents that are not substantially embodied in modem chips, *i.e.*, that would not be exhausted by their sale, Qualcomm can, like any other patent holder, negotiate licenses covering these patents.

infringement”), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015).[13]

Nor is a stay justified by Qualcomm’s claim (Mot. 26) that OEMs have cited the district court’s decision in recent license negotiations. That putative harm flows not from the court’s injunction, but instead from the authority of the court’s findings that Qualcomm’s royalties are higher than they would be absent its exercise of monopoly chip leverage. A stay will not undo those findings.[14]

Qualcomm’s claims of irreparable harm also depend critically on its speculation that OEMs will insist on, and Qualcomm will accept, new license agreements that will “remain in place for years.” Mot. 25. This claim is unsubstantiated and contrary to the trial evidence demonstrating that Qualcomm has negotiated (i) short-term or “interim” licenses and (ii) contractual provisions that would mitigate or eliminate any long-term adverse consequences to

[13] For this reason, the unsubstantiated concerns expressed in the DOJ filing about Qualcomm’s financial ability to engage in R&D are misplaced. SOI 11-13. Nothing in the remedy requires any catastrophic financial impact to Qualcomm, and nothing in the record substantiates any such assertion. Indeed, the record shows that Qualcomm spends more on stock buybacks and dividends than it does on R&D. *See* SA110-12 (Qualcomm 2017 10-K showing, for the period 2015-2017, Qualcomm R&D of $16.2 billion versus combined stock buybacks and dividends of $25.63 billion).

[14] Amicus curiae Ericsson’s concern about “uncertainty” arising from this case is similarly misplaced. The uncertainty arises from this appeal, not from the injunction itself, and certainly doesn’t affect Qualcomm’s ability to provide 5G chips.

Qualcomm of a license agreement concluded during the pendency of its appeal. *See, e.g.*, A55 (describing "[t]emporary" and "interim" license agreements); SA073, ¶ 6 (LGE declaration, describing "interim license agreement"); SA130 (amendment to license agreement, providing each party the "right to terminate this Agreement for convenience at any time, by providing at least thirty (30) days' prior written notice").

Qualcomm's claims of irreparable harm stemming from the second challenged provision—requiring Qualcomm to make SEP licenses available to modem-chip competitors on fair and reasonable terms—are conclusory and contradicted by the factual findings below. Qualcomm argues that licensing competitors is unprecedented and will force inefficiencies in the form of "patent exhaustion issues" upon Qualcomm. Mot. 23-24. But the district court considered these assertions and concluded, based the evidence introduced at trial, that (i) "Qualcomm has previously licensed its modem-chip SEPs to rivals and received modem-chip-level (as opposed to handset-level) licenses to other patent holders' SEPs," A128; (ii) "[o]ther modem chip suppliers grant chip-level licenses to their modem chip SEPs," A129; and (iii) Qualcomm's asserted efficiency justifications are "self-serving and pretextual" and based on testimony that is "not credible," A133.[15]

The cases Qualcomm relies upon for the proposition that "major disruption of a business" justifies a stay (Mot. 24) are readily distinguishable. As already noted, the order does not prevent Qualcomm from collecting market-based prices for its modem chips and reasonable royalties for its patents—the major revenue streams it has been collecting for years. This is wholly distinct from *NCAA v. Regents of Univ. of Okla.*, 463 U.S. 1311, 1313 (1983), where "the entire 1983 [intercollegiate football] season" was "at risk," or *American Trucking Associations v. City of Los Angeles*, 559 F.3d 1046, 1058-59 (9th Cir. 2009) (citations omitted), where this Court concluded that the injunction's provisions were "likely unconstitutional" and "constitutional violations cannot be adequately remedied through damages."[16]

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[15] Similarly, DOJ's assertion that the court erred in ordering Qualcomm to abide by its FRAND commitments, SOI 9, is groundless. The two Supreme Court decisions on which DOJ relies did not address FRAND commitments or suggest that reneging on such commitments is immune from antitrust scrutiny. Numerous cases recognize that abusing intellectual property can support antitrust liability. *See, e.g.*, *Microsoft*, 253 F.3d at 63.

[16] Other cases cited by Qualcomm similarly involved far different circumstances. *See San Diego Comic Convention v. Dan Farr Prods*., No. 18-56221 (9th Cir.), ECF Doc. 11 at ii, 3 (Oct. 10, 2018); ECF Doc. 16 at 6 (Oct. 10, 2018) (stay of damages award that defendant alleged would have bankrupted corporate defendants and cost individual defendants their homes; plaintiff had agreed to

Finally, this Court has expedited this appeal. This substantially reduces any impact on Qualcomm from compliance with the antitrust laws as ordered by the district court.

C. The Public Interest Weighs Against A Stay Pending Appeal

Any demonstrated harm to the adjudged law violator must be weighed against harm to competition, vulnerable market participants, and the public. As the district court's extensive findings on anticompetitive effects establish, Qualcomm's antitrust violations—including ongoing conduct resulting in royalty overcharges—have "strangled competition in the CDMA and premium LTE modem chip markets for years." A216. Because the Order allows customers to renegotiate their existing licenses with Qualcomm, a stay could leave some customers paying "unreasonably high royalty rates" that "harm[] rivals, OEMs, and consumers." A229.

The public interest in immediate relief is not limited to the ability to renegotiate Qualcomm's existing licenses. There is ample evidence that Qualcomm is continuing its unlawful practices, and absent an injunction is "likely to replicate

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temporary stay); *O'Bannon v. NCAA*, Nos. 14-16601 & 14-17068 (9th Cir. July 31, 2015), ECF Doc. 111 (stay granted by merits panel four months after oral argument and two months before this Court vacated part of district court's injunction); *Cal. Pharmacists Ass'n v Maxwell-Jolly*, 563 F.3d 847, 850-53 (9th Cir. 2009) (district court and this Court agreed that plaintiff hospitals likely to succeed on merits and no possibility to later remedy certain harm where reduced revenues came from sovereign state government).

its market dominance" in 5G chip supply. A218–27.[17] For example, the district court found that Qualcomm's 2018 license agreement with Samsung was influenced by Qualcomm's leading position in 5G chip supply. A225. The district court also found that Qualcomm used its chip-supply leverage to extinguish Samsung's antitrust claims against Qualcomm. A62-63. A stay would permit Qualcomm to impose anticompetitive terms on new licensees and on other OEMs whose licenses expire during the stay. *See* SA077-83 (LGE amicus brief detailing impact from stay on Qualcomm negotiations with LG Electronics); A239 (Han Decl.) (describing upcoming license negotiations with major customers, and conceding that a stay would "clearly affect the course of [those] negotiations").

Qualcomm's claim that a stay would not harm competition because the cellular industry is "vibrant" and "dynamic" (Mot. 27-28) is at odds with the district court's factual findings that Qualcomm's monopolistic practices have reduced competition, contributed to the exit of several competitors, and hobbled those that remain. A203-09. Qualcomm errs, moreover, in assuming that federal policy favoring competition applies only in declining or stagnant markets. To the contrary, vibrant and dynamic industries may fall prey to anticompetitive conduct, *see, e.g.*, *Microsoft*, 253 F.3d 34 (personal computer operating systems); Plea

[17] Again, the DOJ is mistaken in suggesting that the trial did not consider evidence about 5G. SOI 11.

Agreement, *United States v. Hynix Semiconductor Inc.*, No. 05-CR-249-PJH (N.D. Cal. May 11, 2005), ECF Doc. 11 (memory chips). The policy judgment underlying the antitrust laws is that an industry will be *more* innovative and efficient if freed from anticompetitive constraints. *See Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 695 (1978) ("The Sherman Act reflects a legislative judgment that ultimately competition will produce not only lower prices, but also better goods and services.").

Finally, Qualcomm (joined by the DOJ) argues that its continuing technological leadership is vital to national security and "could be harmed" by the injunction. Mot. 28; SOI 12. Qualcomm relies on a letter from the Treasury Department blocking the 2018 attempted acquisition of Qualcomm by a company headquartered overseas. As reasons for blocking the transaction, the letter cites classified national security concerns, the potential acquirer's "relationships with third-party foreign entities," and the likelihood that the acquirer would alter Qualcomm's "business model." A252-253. The letter does not speak to the Qualcomm practices enjoined by the district court, but asserts only that unspecified changes to Qualcomm's business model, would likely reduce its R&D expenditures. *Id*. Nothing in the letter, nor in the two new declarations of executive branch officials attached to the SOI, suggests that the injunction will impact Qualcomm's ability to invest in R&D or otherwise implicate national security concerns. As noted above, Qualcomm remains free under the injunction to pursue both its chip and licensing businesses and to collect royalties that "reflect the fair value of Qualcomm's patents." A229-30.[18]

If Qualcomm and the DOJ contend that any antitrust remedy that diminishes Qualcomm's corporate profits constitutes an impermissible threat to national security, that argument is misplaced. Congress determined, in enacting the Sherman Act, that competition furthers the public interest.[19] *See United States v. Nutri-Cology, Inc.*, 982 F.2d 394, 398 (9th Cir. 1992) ("[P]assage of the statute is itself an implied finding by Congress that violations will harm the public."); *Prof'l Eng'rs*, 435 U.S. at 695 (Sherman Act's legislative preference for competition "precludes inquiry into the question whether competition is good or bad").

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[18] The only case that Qualcomm cites as an instance of national security trumping other equitable considerations is readily distinguishable on this point. In *Winter v. Natural Resources Defense Council*, 555 U.S. 7 (2008), unlike here, the nexus between the injunction and resulting harm to national security was clearly established. The district court had directly enjoined certain naval exercises, and officers of the U.S. Navy detailed in concrete terms how the injunction would hinder military training efforts, "leaving strike groups more vulnerable to enemy submarines." *Id.* at 23-25.

[19] *See* Remarks of Dep. Ass't Att'y Gen. Roger Alford, 2019 China Competition Policy Forum (May 7, 2019), *available at* https://www.justice.gov/opa/speech/deputy-assistant-attorney-general-roger-alford-delivers-remarks-2019-china-competition (criticizing those who would use antitrust law to pursue broad "public interest" goals such as "supporting national champions" or "enhancing national security"; instead, antitrust enforcement should be guided by the "focused consumer welfare standard").

Moreove, the apparent assertion by DOJ and its supporting declarants that Qualcomm should be shielded from *any* financial consequences for violating the antitrust laws—as opposed to identifying specific national security concerns with specific provisions of the remedy—is, in essence, an assertion that Qualcomm should be immune from antitrust scrutiny. But antitrust immunity can only be conferred through the processes established by Congress. *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 226-27 (1940) ("Congress had specified the precise manner and method of securing immunity. . . . Otherwise national policy on such grave and important issues as this would be determined not by Congress nor by those to whom Congress had delegated authority but by virtual volunteers."). If legitimate national security objectives require subsidizing Qualcomm, and taxing Qualcomm's rivals and United States consumers to do so, there are proper political channels for pursuing those objectives. Interference in the judicial resolution of an action to enforce the antitrust laws is not one of them.

CONCLUSION

The Court should deny Qualcomm's motion for a partial stay pending appeal.

Respectfully submitted,

HEATHER HIPPSLEY
Deputy General Counsel

July 18, 2019

/s/ Michele Arington
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CERTIFICATE OF COMPLIANCE

I certify that this document complies with the type-volume limitation of Circuit Rules 27-1(d) and 32-3(2), in that it contains 5,594 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Circuit Rule 27-1(1)(d).

July 18, 2018 /s/ Michele Arington

No. 19-16122

IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

FEDERAL TRADE COMMISSION,
Plaintiff-Appellee,

v.

QUALCOMM INCORPORATED,
Defendant-Appellant,

On Appeal from the United States District Court
for the Northern District of California
No. 5:17-cv-00220-LHK
Hon. Lucy H. Koh

FEDERAL TRADE COMISSION'S SUPPLEMENTAL APPENDIX

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,
Plaintiff,
v.
QUALCOMM INCORPORATED,
Defendant.

Case No. 17-CV-00220-LHK

ORDER GRANTING FTC'S MOTION FOR PARTIAL SUMMARY JUDGMENT

Re: Dkt. No. 792

Plaintiff Federal Trade Commission ("FTC") sues Defendant Qualcomm, Incorporated ("Qualcomm") for violation of § 5 of the Federal Trade Commission Act ("FTCA"), 15 U.S.C. § 45. Before the Court is the FTC's motion for partial summary judgment on the issue of whether two industry agreements obligate Qualcomm to license its essential patents to competing modem chip suppliers. Having considered the submissions of the parties, the relevant law, and the record in this case, the Court GRANTS the FTC's motion for partial summary judgment.

I. BACKGROUND

A. Factual Background

This case presents the complicated interaction between cellular communications standards, standard essential patents ("SEPs"), and the market for baseband processors, or "modem chips."

In the Complaint, the FTC alleges that Qualcomm is a "dominant supplier" of modem chips and the holder of SEPs essential to "widely adopted cellular standards." ECF No. 1 ("Compl.") ¶ 2. The FTC alleges that Qualcomm has harmed competition and violated § 5 of the FTCA via several interrelated policies and practices. First, Qualcomm does not sell its modem chips unless a customer accepts a license to Qualcomm's SEPs, which the FTC alleges Qualcomm offers for "elevated royalties." *Id.* ¶ 3a. Second, Qualcomm refuses to license its SEPs to competitors in the modem chip supplier market, in violation of industry agreements. *Id.* ¶ 3c. Third, the FTC alleges that Qualcomm has entered "exclusive dealing arrangements" with Apple, an important cell phone manufacturer. *Id.* ¶ 3d.

The parties refer interchangeably to the companies that manufacture and sell modem chips as "modem chip suppliers," "modem chip manufacturers," and "modem chip sellers." For simplicity and consistency, the Court uses the term "modem chip suppliers" in this Order.

The FTC alleges that because of those practices, customers for Qualcomm's modem chips must pay elevated royalties while Qualcomm's refusal to license its SEPs to competing modem chip suppliers ensures that Qualcomm's customers must depend on Qualcomm for their modem chip supply. *Id.* ¶¶ 4, 6. The FTC further alleges that Qualcomm's exclusive arrangements with Apple preclude other modem chip suppliers from working with "a particularly important cell phone manufacturer," which harms competition. *Id.* ¶ 8.[1]

Here, the FTC's motion for partial summary judgment concerns a discrete legal question: whether two industry agreements require Qualcomm to license its SEPs to other modem chip suppliers. Below, the Court first discusses cellular communications standards and SEPs. Then, the Court turns to the two specific industry agreements that the FTC contends require Qualcomm to license its SEPs to modem chip suppliers, including suppliers competing with Qualcomm.

1. Cellular Standard Setting Organizations

[1] For a more fulsome discussion of the FTC's allegations that Qualcomm's conduct harms competition, the Court refers the reader to the Court's prior Order denying Qualcomm's motion to dismiss the FTC's Complaint. ECF No. 133; *Fed. Trade Comm'n v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2017 WL 2774406, at *1–7 (N.D. Cal. June 26, 2017).

Cellular communications depend on widely distributed networks that implement cellular communications standards. ECF No. 870-22 ¶ 10. These standards promote "availability and interoperability of standardized products regardless of geographic boundary." *Id.* Cellular standards have evolved over generations, beginning with the "first generation" standards developed in the 1980s. *See In re Qualcomm Antitrust Litig.*, 292 F. Supp. 3d 948, 955 (N.D. Cal. 2017). Second and third generation standards followed. ECF No. 870-22 ¶¶ 8–9.

Industry groups called standard-setting organizations ("SSOs")[2] have emerged to develop and manage the relevant cellular standards. *Id.* ¶ 11. For example, the Telecommunications Industry Association ("TIA"), a SSO in the United States, "establishes engineering and technical requirements for processes, procedures, practices and methods that have been adopted by consensus." ECF No. 792-2, Ex. 1 ("TIA IPR") at 8. As work began on third generation—or "3G"—cellular communication standards, collaborations of SSOs formed to ensure global standardization. ECF No. 870-22 ¶ 9; *see also* ECF No. 792-2, Ex. 5 at 7 (collaboration working procedures characterizing the collaboration's purpose as "to prepare, approve and maintain globally applicable Technical Specifications" for cellular communications). One such collaboration is the Third Generation Partnership Project ("3GPP"). *Id.* As 4G technology emerged, 3GPP developed the 4G LTE family of standards. ECF No. 870-22 ¶ 9. Another collaboration, the Third Generation Partnership Project 2 ("3GPP2"), focused its 3G standardization efforts on the CDMA2000 standard. *Id.*

Individual member SSOs of 3GPP and 3GPP2 are known as Organizational Partners. ECF No. 792-2, Ex. 5, at 8. The Alliance for Telecommunications Industry Solutions ("ATIS"), a SSO in the United States, is an Organizational Partner of 3GPP. *Id.* at 7. As a 3GPP Organizational

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[2] Qualcomm refers to these organizations as standards development organizations, or "SDOs." Opp. at 3. The terms SSO and SDO appear interchangeable, as both are employed in the record to refer to standards organizations. *See also Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1208 (Fed. Cir. 2014) (using the term "SDO"). Consistent with the Ninth Circuit's approach, the Court refers to ATIS and TIA as standard-setting organizations, or "SSOs." *See Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 875 (9th Cir. 2012) ("*Microsoft II*") (explaining that SSOs "establish technical specifications to ensure that products from different manufacturers are compatible with each other").

Partner, ATIS has "the capability and authority to define, publish and set standards within the 3GPP scope." *Id.* at 9. An Organizational Partner "approv[es] and main[tains] . . . the 3GPP scope" and "transpose[s]" 3GPP technical specifications into the Organizational Partner's own standards. *Id.* at 7, 10. TIA is an Organizational Partner of 3GPP2. ECF No. 870-22 ¶ 9.

2. Standard Essential Patents

The cellular communications standards that SSOs develop and adopt may incorporate patented technology. *See* ECF No. 792-2, Ex. 2 ("ATIS IPR"), at 9 (ATIS acknowledges that "use of [a] patented invention" may be required "for purposes of adopting, complying with, or otherwise utilizing" an ATIS standard); TIA IPR at 8 (TIA states that "[t]here is no objection in principle to drafting a [TIA] Standard in terms that include the use of a patented invention"). In order to prevent the owner of a patent essential to complying with the standard—the "SEP holder"—from blocking implementation of a given standard, SSOs maintain intellectual property rights ("IPR") policies. ECF No. 792-2, Ex. 3 at 1. These IPR policies "requir[e] members who hold IP rights in [SEPs] to agree to license those patents to all comers on terms that are 'reasonable and nondiscriminatory,' or 'RAND.'" *Microsoft II*, 696 F.3d at 876. The FTC and Qualcomm use the term FRAND, which stands for "fair, reasonable, and nondiscriminatory," and is "legally equivalent" to RAND. *Id.* at 877 & n.2.

3. IPR Policies

At issue in the FTC's partial summary judgment motion are Qualcomm's FRAND obligations under the IPR policies of two SSOs, TIA and ATIS. The TIA IPR policy is designed to "encourage[] holders of intellectual property to contribute their technology to TIA's standardization efforts and enable competing implementations that benefit manufacturers and ultimately consumers." TIA IPR at 6. Under the current TIA IPR policy, which has been in effect since 2005, TIA will approve a standard that requires the use of a SEP only if the SEP holder commits to TIA that:

> A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory . . . and only to the extent

> necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard."

Id. at 8–9. Even prior to 2005, the TIA IPR policy required SEP holders to license SEPs on "reasonable terms and conditions that are demonstrably free of unfair discrimination to applicants only and to the extent necessary for the practice of the TIA Publication." ECF No. 793-6, Ex. 39 (2002 version of TIA manual). The parties agree that on several occasions Qualcomm committed to TIA to license Qualcomm's SEPs pursuant to the current TIA IPR policy or to prior versions of the policy. Mot. at 11–14; Opp. at 5.

The ATIS IPR policy provides that if "use of [a] patented invention is required for purposes of adopting, complying with, or otherwise utilizing the standard," the ATIS patent policy applies. ATIS IPR at 9. ATIS has adopted the patent policy of the American National Standards Institute ("ANSI"). *Id.* Under that policy,[3] ATIS will not approve an ATIS standard that requires use of a SEP until the SEP holder provides "assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the standard . . . under reasonable terms and conditions that are demonstrably free of any unfair discrimination." *Id.* at 10. The parties agree that on several occasions Qualcomm sent ATIS letters of assurance that Qualcomm would license its SEPs pursuant to the ATIS IPR policy. Mot. at 8–10; Opp. at 4–5.

B. Procedural History

The FTC sued Qualcomm in this Court on January 17, 2017, and alleged that Qualcomm's course of conduct violated § 5 of the FTCA. Compl.

On April 3, 2017, Qualcomm moved to dismiss the Complaint. ECF No. 69. On May 12, 2017, the FTC opposed Qualcomm's motion. ECF No. 85. On May 12, 2017, ACT|The App Association ("ACT"), Samsung Electronics Co., Ltd., Intel Corporation, and the American Antitrust Institute each filed motions for leave to file amicus curiae briefs in support of the FTC's

[3] For simplicity, the Court refers to the patent policy as the "ATIS IPR policy," although ATIS adopted ANSI's patent policy.

opposition. *See* ECF Nos. 90–95. On May 15, 2017, the Court granted the motions for leave to file amicus curiae briefs. ECF No. 95. On June 2, 2017, Qualcomm filed its reply. ECF No. 120.

Then, on June 26, 2017, the Court denied Qualcomm's motion to dismiss the Complaint. ECF No. 133; *see Fed. Trade Comm'n v. Qualcomm Inc.*, 2017 WL 2774406.

On August 30, 2018, the FTC filed motions to (1) exclude the expert testimony of Qualcomm expert Dr. Edward Snyder and accompanying exhibits; and (2) exclude the expert testimony of Qualcomm expert Professor Aviv Nevo. ECF Nos. 788 & 790. That same day, the FTC filed its motion for partial summary judgment. ECF No. 792 ("Mot.").

Also, on August 30, 2018, Qualcomm filed motions to (1) strike portions of the rebuttal expert report of FTC expert Dr. Robert Akl; and (2) exclude the expert reports of FTC expert Richard Donaldson. ECF Nos. 797 & 799.

On September 17, 2018, ACT and the Computer & Communications Industry Association ("CCIA") filed a motion for leave to file an amicus brief in support of the FTC's motion for partial summary judgment. ECF No. 857 ("ACT Amicus"). On September 18, 2018, the Court granted ACT and CCIA's motion for leave to file an amicus brief. ECF No. 861.

On September 24, 2018, the FTC filed oppositions to (1) Qualcomm's motion to strike portions of the rebuttal expert report of Dr. Akl; and (2) Qualcomm's motion to exclude the expert reports of Richard Donaldson. ECF Nos. 866 & 868.

Also, on September 24, 2018, Qualcomm filed an opposition to the FTC's motion for partial summary judgment. ECF No. 870 ("Opp."). Qualcomm requested that the Court take judicial notice of 39 exhibits in connection with Qualcomm's opposition to the FTC's motion for partial summary judgment. ECF No. 871. That same day, Qualcomm filed oppositions to (1) the FTC's motion to exclude the expert testimony of Professor Nevo; and (2) the FTC's motion to exclude the expert testimony of Dr. Snyder and accompanying exhibits. ECF Nos. 873 & 874.

On October 3, 2018, Nokia Technologies Oy ("Nokia") filed a motion for leave to file an amicus brief in support of Qualcomm's opposition to FTC's motion for partial summary judgment. ECF No. 888 ("Nokia Amicus"). On October 4, 2018, the Court granted Nokia's motion for leave to file an amicus brief. ECF No. 890.

Then, on October 4, 2018, the FTC filed reply briefs in support of: (1) the FTC's motion to exclude the expert testimony of Professor Nevo; (2) the FTC's motion to exclude the expert testimony of Dr. Snyder; and (3) the FTC's motion for partial summary judgment. ECF Nos. 889, 891 & 893 ("Reply").

Also, on October 4, 2018, Qualcomm filed reply briefs in support of (1) Qualcomm's motion to strike portions of the rebuttal expert report of Dr. Akl; and (2) Qualcomm's motion to exclude the expert reports of Richard Donaldson. ECF Nos. 894 & 896.

On October 11, 2018, the FTC filed a motion for leave to file a response to Nokia's amicus brief. ECF No. 897. On October 11, 2018, pursuant to Civil Local Rule 7-3(d)(1), Qualcomm filed objections to evidence submitted with the FTC's summary judgment reply brief. ECF No. 898. On October 12, 2018, the Court granted the FTC's motion for leave to file a response to Nokia's amicus brief. ECF No. 899.

On October 15, 2018, the parties filed a joint administrative motion to defer the Court's ruling on the FTC's motion for partial summary judgment. ECF No. 902. That same day, the Court denied the parties' joint motion. ECF No. 903.

II. LEGAL STANDARD

A. Summary Judgment

Summary judgment is proper where the pleadings, discovery, and affidavits show that there is "no genuine dispute as to any material fact and [that] the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Material facts are those which may affect the outcome of the case. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute as to a material fact is genuine if there is sufficient evidence for a reasonable jury to return a verdict for the nonmoving party. *See id.*

The Court will grant summary judgment "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial [,] . . . since a complete failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial." *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986). The moving party bears the initial burden of identifying those portions of the record that demonstrate the absence of a genuine issue of material fact. *Id.* The burden then shifts to the nonmoving party to "go beyond the pleadings, and by [his] own affidavits, or by the depositions, answers to interrogatories, and admissions on file, designate specific facts showing that there is a genuine issue for trial." *See id.* at 324 (internal quotations omitted).

For purposes of summary judgment, the Court must view the evidence in the light most favorable to the nonmoving party; if the evidence produced by the moving party conflicts with evidence produced by the nonmoving party, the court must assume the truth of the evidence submitted by the nonmoving party. *See Leslie v. Grupo ICA*, 198 F.3d 1152, 1158 (9th Cir. 1999). The Court's function on a summary judgment motion is not to make credibility determinations or weigh conflicting evidence with respect to a disputed material fact. *See T.W. Elec. Serv. v. Pacific Elec. Contractors Ass'n*, 809 F.2d 626, 630 (9th Cir. 1987).

B. Judicial Notice

In connection with its opposition to the FTC's partial summary judgment motion, Qualcomm requests that the Court take judicial notice of 39 exhibits, some attached to Qualcomm's request for judicial notice and others attached to declarations submitted with Qualcomm's opposition. ECF No. 871. Qualcomm groups the documents into three general categories: (1) publicly available documents related to cellular standards; (2) examples of TIA and ATIS standards; and (3) a decision of a foreign court and other companies' submissions to foreign regulatory bodies. *Id.* at 1–5. The FTC does not oppose the request or dispute the authenticity of any of the documents. *See generally* Reply.

The Court may take judicial notice of matters that are either "generally known within the trial court's territorial jurisdiction" or "can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b). Public records, including judgments and other filed documents, are proper subjects of judicial notice. *See, e.g.*, *United States v. Black*, 482 F.3d 1035, 1041 (9th Cir. 2007) ("[Courts] may take notice of proceedings in other courts, both within and without the federal judicial system, if those proceedings have a direct relation to matters at issue."). In addition, courts routinely take judicial notice of statements or statistics that are posted on the Internet and not in dispute. *See Matthews v. Nat'l Football League Mgmt. Council*, 688 F.3d 1107, 1113 & n.5 (9th Cir. 2012) (taking judicial notice of facts posted on the NFL's website); *see also Matera v. Google, Inc.*, No. 15-CV-04062-LHK, 2016 WL 5339806, at *7 (N.D. Cal. Sept. 23, 2016) (noting that "publicly accessible websites" may be proper subjects of judicial notice).

The Court grants Qualcomm's request for judicial notice of documents posted on the public websites of several SSOs, which are included as Exhibits 1–14 to Qualcomm's request. The documents include a list of partners in various SSOs, the working procedures of several SSOs, and other companies' assurances to comply with the TIS and ATIS IPR policies. *See, e.g.*, ECF Nos. 871-3, 871-7, and 871-12. The authenticity and accuracy of the documents are not in dispute. *See Matthews*, 688 F.3d at 1113; *see also Perkins v. LinkedIn Corp.*, 53 F. Supp. 3d 1190, 1205 (N.D. Cal. 2014) (granting request for judicial notice of information not in dispute and posted on publicly accessible websites).

The Court also grants Qualcomm's request for judicial notice of over 20 different TIA and ATIS standards, which are attached to two declarations submitted with Qualcomm's opposition to the FTC's partial summary judgment motion. *See* ECF Nos 870-19 & 870-21. Again, the authenticity of the standards is not in dispute, and other courts have taken judicial notice of SSO standards. *See McMahon v. Bunn-O-Matic Corp.*, 150 F.3d 651, 655 (7th Cir. 1998) (taking judicial notice, of the court's own volition, of standards developed by a SSO); *see also Smart Modular Techs., Inc. v. Netlist, Inc.*, No. 12-CV-02319-TLN-EFB, 2017 WL 3009217 (E.D. Cal. July 14, 2017) (on a motion to dismiss, taking judicial notice of the full text of a SSO standard quoted in part in the complaint).

Lastly, the Court grants Qualcomm's request for judicial notice of both a decision of the United Kingdom High Court of Justice and other companies' submissions to the Korean Fair

United States District Court
Northern District of California

Trade Commission ("KFTC"), which are included as Exhibits 15–20 to Qualcomm's request. The High Court's decision is a public record, which is a proper subject of judicial notice, and courts have taken judicial notice of filings with government regulatory bodies like the KFTC. *See Yuen v. U.S. Stock Transfer Co.*, 966 F. Supp. 944, 945 n.1 (C.D. Cal. 1997) (taking judicial notice of filings before a foreign court); *see also Kramer v. Time Warner Inc.*, 937 F.2d 767, 774 (2d Cir. 1991) (taking judicial notice of company's filings with the Securities and Exchange Commission). Accordingly, the Court grants all of Qualcomm's requests for judicial notice.

In its reply brief, the FTC also suggests, in passing, that the Court may take judicial notice of certain evidence cited in the FTC's reply brief, including materials posted on public websites. *See* Reply at 4 n.4. The Court addresses the FTC's request in the Discussion section below because the Court must first decide whether to consider the evidence at all. *See Provenz v. Miller*, 102 F.3d 1478, 1483 (9th Cir. 1996) (holding that if the movant introduces new evidence in a reply, the court must generally permit the non-movant an opportunity to respond).

III. DISCUSSION

The FTC brings its Complaint against Qualcomm under § 5 of the FTCA, which prohibits "[u]nfair methods of competition in or affecting commerce." 15 U.S.C. § 45(a).

"Unfair methods of competition" under the FTCA includes "violations of the Sherman Act." *Fed. Trade Comm'n v. Cement Inst.*, 333 U.S. 683, 691 (1948). In addition, the FTC under Section 5 may "bar incipient violations of [the Sherman Act], and conduct which, although not a violation of the letter of the antitrust laws, is close to a violation or is contrary to their spirit." *E.I. du Pont de Nemours & Co. v. Fed. Trade Comm'n*, 729 F.2d 128, 136–37 (2d Cir. 1984) (internal citations omitted); *see also Fed. Trade Comm'n v. Brown Shoe Co.*, 384 U.S. 316, 321 ("This broad power of the [FTC] is particularly well established with regard to trade practices which conflict with the basic policies of the Sherman and Clayton Acts even though such practices may not actually violate these laws."). "The standard of 'unfairness' under the FTCA is, by necessity, an elusive one," and the precise contours of the FTC's authority under § 5 are not clearly defined. *Fed. Trade Comm'n v. Indiana Fed. of Dentists*, 476 U.S. 447, 454 (1986). However, the FTC's authority to proscribe "unfair methods of competition" under § 5 is not unbounded. *See E.I. du Pont de Nemours & Co.*, 729 F.2d at 137 ("When a business practice is challenged by the [FTC], even though, as here, it does not violate the antitrust or other laws and is not collusive, coercive, predatory or exclusionary in character, standards for determining whether it is 'unfair' within the meaning of § 5 must be formulated to discriminate between normally acceptable business behavior and conduct that is unreasonable or unacceptable.").

The FTC's instant motion for partial summary judgment does not seek to prove that Qualcomm violated § 5. Rather, the FTC seeks "a ruling that Qualcomm's voluntary FRAND licensing commitments to [ATIS and TIA] . . . require Qualcomm to make licenses available to competing modem-chip sellers." Mot. at 1. In opposition, Qualcomm contends that the TIA and ATIS IPR policies only require Qualcomm to license its SEPs to applicants that supply complete devices like cellular handsets, not applicants that supply components like modem chips. Opp. at 14–17. For the reasons stated below, the Court agrees with the FTC.

A. Legal Standard

The parties both contend that the Court should employ California contract law to interpret the terms of the TIA and ATIS IPR policies. Mot. at 15 n.49; Opp. at 12. After applying California choice-of-law principles, the Court reaches the same conclusion.

Neither IPR policy includes a choice-of-law clause, or otherwise specifies which state's contract law a court should apply to interpreting the policies. *See generally* TIA IPR and ATIS IPR. To determine the applicable law, the Court applies California choice-of-law rules. *Cf. Paulsen v. CNF Inc.*, 559 F.3d 1061, 1080 (9th Cir. 2009) ("In a federal question action that involves supplemental jurisdiction over state law claims, [the court] appl[ies] the choice of law rules of the forum state."); *see also Apple, Inc. v. Motorola Mobility, Inc.*, 886 F. Supp. 2d 1061, 1082 (W.D. Wisc. 2012) (applying Wisconsin choice-of-law principles to determine the state law applicable to a company's obligations under a different SSO policy).

Under California choice-of-law rules, "[a] contract is to be interpreted according to the law and usage of the place where it is to be performed; or, if it does not indicate a place of performance, according to the law and usage of the place where it is made." Cal. Civ. Code § 1646. "When the contract does not expressly specify a place of performance . . . the place of performance is the jurisdiction in which the circumstances indicate the parties expected or intended the contract to be performed." *Welles v. Turner Entm't Co.*, 503 F.3d 728, 738 (9th Cir. 2007). Although neither IPR policy specifies a place of performance, the circumstances indicate that under each IPR policy, Qualcomm was expected to perform its obligations—to provide licenses—from its headquarters in California. *See, e.g.*, ATIS IPR at 10 (requiring Qualcomm to assure that "a license . . . will be made available"). Alternatively, under California law, contracts were formed in California when Qualcomm executed its commitments to comply with the ATIS and TIA IPR policies. *See* Cal. Civ. Code § 1583 (holding that consent to contract is deemed communicated when the accepting party sends its acceptance). Accordingly, the Court applies California contract law to the terms of the ATIS and TIA IPR policies.

"Under California law, the fundamental goal of contract interpretation is to give effect to the mutual intent of the parties as it existed at the time of contracting." *U.S. Cellular Inv. Co. v. GTE Mobilnet, Inc.*, 281 F.3d 929, 934 (9th Cir. 2002) (citing Cal. Civ. Code § 1636). California's rules of contract interpretation instruct courts that if "[t]he language [of a contract] is clear and explicit, and does not involve an absurdity," the contract language must govern the contract's interpretation. Cal. Civ. Code § 1638. Moreover, "the intention of the parties is to be ascertained from the writing alone, if possible." Cal. Civ. Code § 1639. "Thus, if the meaning a layperson would ascribe to contract language is not ambiguous, [the Court] appl[ies] that meaning." *AIU Ins. Co. v. Superior Court*, 51 Cal. 3d 807, 822 (1990) (in bank). "The whole of a contract is to be taken together, so as to give effect to every part, if reasonably practicable, each clause helping to interpret the other." Cal. Civ. Code § 1641.

When interpreting a California contract, the Court must also "engage in a preliminary consideration of credible evidence offered to prove the intention of the parties." *U.S. Cellular*, 281 F.3d at 939; *see also First Nat'l Mortg. Co. v. Fed. Realty Inv. Trust*, 631 F.3d 1058, 1066 (9th Cir. 2011) ("California has long abandoned a rule that would limit the interpretation of a written instrument to its four corners."). If a preliminary consideration of that extrinsic evidence demonstrates that the evidence is "(1) 'relevant' to prove (2) 'a meaning to which the language of the instrument is reasonably susceptible,'" the extrinsic evidence is admissible. *Id.* at 938 (citing *Pac. Gas & Elec. Co. v. G.W. Thomas Drayage & Rigging Co.*, 69 Cal. 2d 33, 37 (1968)). Relevant extrinsic evidence may "include[] testimony as to the circumstances surrounding the making of the agreement . . . including the object, nature and subject matter of the writing . . . so that the court can place itself in the same situation in which the parties found themselves at the time of contracting." *Pac. Gas*, 69 Cal. 2d at 40 (internal quotation marks omitted). However, extrinsic evidence cannot be used to directly contradict an express term of a written contract. *Gerdlund v. Elec. Dispensers Int'l*, 190 Cal. App. 3d 263, 271 (1987).

It is appropriate for the Court to grant summary judgment "[i]f, after considering the language of the contract and any admissible extrinsic evidence, the meaning of the contract is unambiguous." *Miller v. Glenn Miller Prods., Inc.*, 454 F.3d 975, 990 (9th Cir. 2006). "[I]f the interpretation turns upon the credibility of conflicting extrinsic evidence, or if 'construing the evidence in the nonmovant's favor, the ambiguity can be resolved consistent with the nonmovant's position,' summary judgment is inappropriate." *Id.* (quoting *S. Cal. Gas Co. v. City of Santa Ana*, 336 F.3d 885, 889 (9th Cir. 2003)).

B. Nature of the Contracts

The Court now turns to the two SSO IPR policies at issue in this motion. The TIA IPR policy reads as follows:

> **Reasonable and Non-Discriminatory (RAND) Commitment**
> There is no objection in principle to drafting a Standard in terms that include the use of a patented invention, if it is considered that technical reasons justify this approach.
>
> Notwithstanding, with respect to any Essential Patent(s) necessary for the practice of any or all Normative portions of the Standard, the Patent Holder shall indicate its willingness to make a licensing commitment by stating either:
>
> (1) It does not hold the rights to license any Essential Patent(s) necessary for the practice of any or all of the Normative portions of the standard; or either of

> (2)(a) A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory . . . and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard; or
>
> (2)(b) A license under any Essential Patent(s), the license rights which are held by the undersigned Patent Holder, will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory, which may include monetary compensation, and only to the extent necessary for the practice of any or all of the Normative portions for the field of use of practice of the Standard.

TIA IPR at 8. The ATIS IPR policy reads as follows:

> If ATIS receives a notice that a proposed [American National Standard ("ANS")] or an approved ANS may require the use of such a patented claim, the procedures in this shall be followed.
>
> *Statement from patent holder*
>
> Prior to approval of such a proposed ANS, ATIS shall receive from the identified party or a party authorized to make assurances on its behalf, in written or electronic form, either:
>
> (a) Assurance in the form of a general disclaimer that such party does not hold and does not currently intend holding any essential patent claim(s); or
> (b) assurance that a license to such essential patent claim(s) will be made available to applicants desiring to utilize the license for the purpose of implementing the standard . . .
> (i) under reasonable terms and conditions that are demonstrably free of any unfair discrimination; or
> (ii) without compensation and under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

ATIS IPR at 10.

Here, Qualcomm's written assurances to TIA and ATIS to license its SEPs on FRAND terms mirror the respective policies' language. Qualcomm assured TIA that Qualcomm would make licenses available "under terms and conditions that are reasonable and non-discriminatory . . . and only to the extent necessary for the practice of any or all of the Normative portions . . . for the field of use of practice of the Standard." ECF No. 796-1. Likewise, Qualcomm assured ATIS that Qualcomm would make licenses available "under reasonable terms and conditions that are demonstrably free of any unfair discrimination to applicants desiring to utilize the license for the purpose of implementing" the relevant standard. ECF No. 793-6.

As an initial matter, the parties do not dispute that Qualcomm's assurances to TIA and ATIS constitute binding contracts. That position is consistent with the conclusions of several courts, including the Ninth and Federal Circuits. In *Microsoft II*, the Ninth Circuit affirmed the district court's conclusion that a company's "RAND declarations to the [SSO] created a binding contract." 696 F.3d at 884–85; *see also TCL Commc'n Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson*, No. 14-CV-341-JVS, 2018 WL 4488286, at *5 (C.D. Cal. Sept. 14, 2018) ("*TCL Commc'n*") (holding that under French law, ETSI's acceptance of a standard that incorporates a SEP "forms a contract which includes the patent holder's obligation to license").

In *Ericsson*, the Federal Circuit affirmed that Ericsson's FRAND commitments to license its SEPs under a SSO IPR policy were "binding" on Ericsson. 773 F.3d at 1209; *see also Realtek Semiconductor Corp. v. LSI Corp.*, 946 F. Supp. 2d 998, 1006 (N.D. Cal. 2013) (noting that the parties did not dispute that a SEP holder's letters of assurance to license its patents on FRAND terms created a binding obligation).

When other courts have interpreted SSO IPR policies, those courts have characterized the applicable contract terms as "the language of [the SEP holder's] statements to the [SSOs], as well as the relevant language in the [SSO] Policies." *Microsoft Corp. v. Motorola, Inc.*, 864 F. Supp. 2d 1023, 1032 n.6 (W.D. Wash. 2012). In this case, the Court need not separately consider the language of Qualcomm's written assurances to comply with the TIA and ATIS IPR policies because, as set forth above, Qualcomm's assurances parrot the language of the TIA and ATIS IPR policies. ECF No. 796-1; ECF No. 793-6.

That said, the Court must resolve one disputed issue about the applicable contract terms. Here, the FTC contends that the Court should treat the published guidelines to the TIA IPR policy ("TIA Guidelines") as part of the "terms of the contract" between Qualcomm and TIA. Mot. at 18. The FTC relies on *TCL Communication*, in which the district court, while interpreting a different IPR policy, stated that "the two relevant parts of the ETSI Directives are the ETSI IPR

Policy . . . and the ETSI Guide on IPRs." 2018 WL 4488286 at *6. However, the district court in *TCL Communication* did not state that the ETSI Guide was part of the IPR *policy* itself, or that the ETSI Guide was part of the agreed-upon contract terms. *Id.* Moreover, the *TCL Communication* court was applying French law, under which no "contract interpretation rules . . . are mandatory," and where it is "common to use extrinsic materials" to discover the intent of the parties. *Id.* at *5. The *TCL Communication* approach is not directly relevant to this case, which involves California contract law and different IPR policies.

Most important, the TIA Guidelines themselves establish that the TIA Guidelines are not part of the TIA IPR policy: "These guidelines serve as a companion document . . . and are not intended to substitute for the Policy itself but rather to provide a review of major changes and an explanation of the rationale behind some of these changes." ECF No. 792-2, Ex. 3 at 1 (introduction to 2014 TIA Guidelines). The Court agrees with the reasoning of the decisions limiting the contract terms to the SSO IPR policy and the SEP holder's commitment to follow the SSO IPR policy and license on FRAND terms. *See Apple, Inc. v. Motorola, Inc.*, 886 F. Supp. 2d 1061, 1083 (W.D. Wisc. 2012) (stating that the relevant terms of a company's FRAND commitment, under Wisconsin contract law, included the SSO's "policies and bylaws" and the company's written assurances to comply with those policies). As explained below, however, the TIA Guidelines are relevant extrinsic evidence of the TIA IPR policy's meaning even though the TIA Guidelines are not themselves part of the TIA IPR policy.

C. Analysis

Here, the Court must address the contractual scope of a SEP holder's FRAND commitments under the TIA and ATIS IPR policies. The FTC's motion for partial summary judgment asserts that both IPR policies require Qualcomm to license its SEPs to all applicants, including competing modem chip suppliers. Mot. at 17–21. For its part, Qualcomm contends the IPR policies contain limitations, such that Qualcomm is not required to license its SEPs to applicants, like modem chip suppliers, that only produce components of devices. Opp. at 14–18. Consistent with Ninth Circuit precedent, the plain text of the IPR policies, and the relevant extrinsic evidence, the Court concludes that the TIA and ATIS IPR policies require Qualcomm to license its SEPs to modem chip suppliers.

1. Precedent on Scope of FRAND Commitments

Ninth Circuit precedent establishes that Qualcomm's FRAND commitments include an obligation to license to all comers, including competing modem chip suppliers. It is undisputed that SSOs like TIA and ATIS "establish technical specifications to ensure that products from different manufacturers are compatible with each other." *Microsoft II*, 696 F.3d at 875. "Standards provide many benefits for technology consumers, including not just interoperability but also lower product costs and increased price competition." *Id.* at 876. Because it may be necessary to use patented technology to practice a given standard, "standards threaten to endow holders of standard-essential patents with disproportionate market power." *Id.*; *see also Ericsson*, 773 F.3d at 1209 ("Because the standard *requires* that devices utilize specific technology, compliant devices *necessarily* infringe certain claims in patents that cover technology incorporated into the standard.") (emphasis in original). A single standard can implicate "perhaps hundreds, if not thousands" of patents. *Ericsson*, 773 F.3d at 1209. To avoid giving SEP holders the power to prevent other companies from practicing the standard, SSOs maintain IPR policies that impose on SEP holders "an obligation to license IP rights on reasonable and nondiscriminatory terms." Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 Calif. L. Rev. 1889, 1913 (2002). SSO IPR policies "do not allow essential patent owners . . . to prevent competitors from entering the marketplace." *Microsoft Corp. v. Motorola, Inc.*, 871 F. Supp. 2d 1089, 1093 (W.D. Wash. 2012) ("*Microsoft I*") (district court order later affirmed in *Microsoft II*).

In *Microsoft II*, the Ninth Circuit first addressed the scope of a SEP holder's FRAND licensing commitments. At the outset, the Ninth Circuit stated that "SSOs requir[e] members who hold IP rights in standard-essential patents to agree to license those patents *to all comers* on terms that are 'reasonable and nondiscriminatory, or 'RAND.'" 696 F.3d at 876 (emphasis added). The Ninth Circuit repeated the same core principle three years later: a "SEP holder *cannot refuse* a license to a manufacturer who commits to paying the RAND rate." *Microsoft Corp. v. Motorola*

Inc., 795 F.3d 1024, 1031 (9th Cir. 2015) ("*Microsoft III*") (emphasis added).[4]

Qualcomm contends that despite the Ninth Circuit's clear statements about the scope of a SEP holder's FRAND commitments, *Microsoft II* and *Microsoft III* are not relevant to this case because the Ninth Circuit did not "consider whether any language in that Policy limited the scope of the obligation to license products that actually practiced the relevant standard." Opp. at 24.

However, Qualcomm ignores that the Ninth Circuit in *Microsoft II* was interpreting a SSO IPR policy with almost identical language as the TIA and ATIS IPR policies. Under the SSO IPR policy at issue in *Microsoft II*, the SEP holder promised to "grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to use the patented material necessary in order to manufacture, use, and/or sell implementations" of the relevant standard. 696 F.3d at 876; *see also id.* at 884 (characterizing the SEP holder's assurance as a promise to license to applicants "'to use the patented material necessary' to practice the ITU standards"). The Ninth Circuit emphasized that such IPR policy language "*admits of no limitations* as to who or how many applicants could receive a license . . . or as to which country's patents would be included." *Id.* (emphasis added). As a result, the Ninth Circuit concluded that the SEP holder could not refuse to license any of its SEPs, including its international SEPs. *Id.* The Ninth Circuit further characterized the SEP holder's FRAND promise as "sweeping." *Id.*

When the case returned to the Ninth Circuit in *Microsoft III*, the Ninth Circuit again affirmed that the FRAND promise means that a SEP holder "cannot refuse a license to a manufacturer who commits to paying the RAND rate." 795 F.3d at 1031. Those binding precedents are clear: a SEP holder that commits to license its SEPs on FRAND terms must license those SEPs to all applicants. Moreover, the Federal Circuit has also held that SSO IPR policies

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[4] In *Microsoft II* and *Microsoft III*, the Ninth Circuit concluded that the Ninth Circuit rather than the Federal Circuit had jurisdiction over the appeals because the "complaint sounds in contract," *Microsoft II*, 696 F.3d at 881, and was a "straight breach of contract action." *Microsoft III*, 795 F.3d at 1037. The Court thus applies Ninth Circuit precedent to the claim at issue in this motion, which also sounds in contract. Regardless, Federal Circuit precedent on the interpretation of SSO IPR policies is consistent with the Ninth Circuit's decisions.

require SEP holders to grant licenses to "an unrestricted number of applicants," and that such a FRAND commitment prohibits the SEP holder from refusing to license the SEP to others who wish to use the invention. *Ericsson*, 773 F.3d at 1230. Qualcomm is unable to identify *any* court that has made a contrary statement about the scope of a SEP holder's FRAND commitments.

a. IPR Policy Text

The IPR policies at issue in this motion are no different. Both the TIA and ATIS IPR policies include non-discrimination provisions that prohibit Qualcomm from distinguishing between types of applicants. Under the TIA IPR policy, a SEP holder promises to license its SEPs to "all applicants" on "terms and conditions that are reasonable and non-discriminatory." TIA IPR at 8. Under the ATIS IPR policy, a SEP holder must grant a SEP license to any applicant "under reasonable terms and conditions that are demonstrably free of any unfair discrimination." ATIS IPR at 10.

b. IPR Guidelines

Guidelines to the TIA IPR policy further reinforce how the Ninth Circuit's precedents compel the conclusion that Qualcomm's FRAND commitments prohibit Qualcomm from discriminating against modem chip suppliers. The TIA Guidelines "are intended to review the Policy, with an explanation of the rationale and some explanation of the intent" of the committee that drafted the TIA IPR policy. ECF No. 792-2, Ex. 3 at 2 ("TIA Guidelines"). Under California contract law, the Court must provisionally consider extrinsic evidence that "is relevant to show whether the contractual language is reasonably susceptible to a particular meaning." *Adams v. MHC Colony Park, L.P.*, 224 Cal. App. 4th 601, 620 (2014). Relevant extrinsic evidence may "include[] testimony as to the circumstances surrounding the making of the agreement . . . including the object, nature and subject matter of the writing . . . so that the court can place itself in the same situation in which the parties found themselves at the time of contracting." *Pac. Gas*, 69 Cal. 2d at 40 (internal quotation marks omitted). The TIA Guidelines, which state that the Guidelines explain the intent behind the drafting of the TIA IPR policy, are clearly relevant extrinsic evidence under the *Pacific Gas* standard.

The TIA Guidelines first explain that the TIA IPR Policy "seeks to make the IPR available on a reasonable and non-discriminatory basis for *all* that would use it to fashion products contemplated by the standard in question." TIA Guidelines at 1 (emphasis added). The TIA Guidelines also state that the IPR policy's non-discrimination provision "implies a standard of even-handedness." *Id.* at 4. Most significant, the TIA Guidelines specifically identify "a willingness to license all applicants except for competitors of the licensor" as an example of discriminatory conduct under the TIA IPR policy. *Id.* Thus, multiple provisions in the TIA Guidelines demonstrate that consistent with Ninth Circuit case law, Qualcomm's FRAND commitments under the instant IPR policies prohibit Qualcomm from discriminating against modem chip suppliers. Qualcomm has no response to the TIA Guidelines.

c. Stated Purposes of IPR Policies

Both IPR policies include statements of purpose that emphasize the pro-competitive principles behind the non-discrimination requirement, as explained by the Ninth Circuit. The TIA IPR policy is designed to "to encourage[] holders of intellectual property to contribute their technology to TIA's standardization efforts and enable competing implementations that benefit manufacturers and ultimately consumers." TIA IPR at 6. Similarly, the ATIS IPR policy aims "to benefit the public while respecting the legitimate rights of intellectual property owners." ATIS IPR at 8. The TIA Guidelines specifically explain that a SEP holder's FRAND commitment "prevents the inclusion of patented technology [in a standard] from resulting in a patent holder securing a monopoly in *any market* as a result of the standardization process." TIA Guidelines at 1 (emphasis added).

If a SEP holder could discriminate against modem chip suppliers, a SEP holder could embed its technology into a cellular standard and then prevent other modem chip suppliers from selling modem chips to cellular handset producers. *See* Lemley, *Intellectual Property Rights*, 90 Calif. L. Rev. at 1902 (stating that a company with a SEP "will effectively control the standard; its patent gives it the right to enjoin anyone else from using the standard"). Such discrimination would enable the SEP holder to achieve a monopoly in the modem chip market and limit

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competing implementations of those components, which directly contradicts the TIA IPR policy's stated purpose to "enable competing implementations that benefit manufacturers and ultimately consumers." TIA IPR at 6. *See Borg v. Transamerica Ins. Co.*, 47 Cal. App. 4th 448, 456 (1996) (holding that a court may not interpret a contract in a way that contradicts the contract's plain meaning). Qualcomm never attempts to explain how discrimination against modem chip suppliers is consistent with the stated purposes of the IPR policies.

d. Qualcomm's Own Practices

Qualcomm's own practices also contradict its current positions that the IPR policies permit Qualcomm to discriminate against component suppliers—including modem chip suppliers—and that modem chip suppliers never receive SEP licenses. Qualcomm concedes in its opposition brief that another modem chip supplier received a SEP license to produce modem chips. Opp. at 10. More important, Qualcomm itself has received such licenses to supply components such as modem chips, as the FTC demonstrates in evidence included with its reply brief. Ordinarily, the Court does not consider "new evidence . . . presented in a reply to a motion for summary judgment," unless the non-movant has an opportunity to respond. *Provenz*, 102 F.3d at 1483. However, the FTC's evidence is not offered to support a new argument but rather to rebut the claim first raised in Qualcomm's opposition that industry practice contradicts the FTC's interpretation of the IPR policies, and Qualcomm cannot plausibly claim surprise or prejudice from the FTC's citation to Qualcomm's own documents. *Apple, Inc. v. Samsung Elecs. Co., Ltd.*, 877 F. Supp. 2d 838, 857 (N.D. Cal.), *rev'd on other grounds*, 695 F.3d 1370 (Fed. Cir. 2012) (considering evidence in reply brief in part because the "vast majority of exhibits" were the non-movant's "own documents"). Qualcomm assumed the risk of having its own documents cited when Qualcomm took a position at odds with its own documents.

For example, in a Qualcomm presentation, Qualcomm stated that Qualcomm had received licenses "to manufacture and sell components." ECF No. 895-8, Ex. 15.[5] Qualcomm received

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[5] Qualcomm objects to Exhibit 15 on the basis that Qualcomm's own presentation is "irrelevant, confusing, and unfairly prejudicial." ECF No. 898 at 1. However, Qualcomm produced

"exhaustive licenses" from "[o]ver 120 companies." *Id.* In its opposition to the instant motion, Qualcomm cites testimony that the general "industry practice" is to license SEPs only to handset manufacturers, Opp. at 8–10, but none of those assertions are tethered to an interpretation of any IPR policy. Qualcomm's own extensive receipt of SEP licenses to supply modem chips rebuts any argument that a contrary industry practice is so "certain, uniform, . . . or generally known and notorious" as to be "regarded as part of the contract." *Webster v. Klassen*, 109 Cal. App. 2d 583, 589 (1952) (internal quotation marks omitted).

In addition, Qualcomm has emphasized in prior litigation that a SEP holder may not discriminate in licensing its SEPs. In that case, Ericsson sued Qualcomm for patent infringement and alleged that Qualcomm products, including two modem chips, infringed Ericsson's SEPs. ECF No. 893-2, Ex. 14 at 2.[6] Qualcomm argued in a motion for partial summary judgment that the TIA IPR policy—one of the very IPR policies at issue in this motion—requires Ericsson to license *any* patents "required to develop products compliant" with a given standard. *Id.* at 1. Qualcomm trumpeted the same non-discrimination principles it attempts to reject here, as Qualcomm argued that the TIA IPR policy "ensures that *all* industry participants will be able to develop, manufacture, and sell products compliant with the relevant standard without incurring the risk that patent holders will be able to shut down those operations." *Id.* at 4 (emphasis added). In an affidavit filed in support of that motion, Qualcomm's founder attested that Qualcomm licensed

Qualcomm's presentation, which is relevant to Qualcomm's contention that industry practice contradicts the FTC's interpretation, and clearly states that Qualcomm has received licenses to produce components. Moreover, Qualcomm's claim that Exhibit 15 contradicts the FTC's argument that Qualcomm does not license its SEPs to modem chip suppliers is incorrect. Rather, the presentation shows that Qualcomm has *received* SEP licenses for Qualcomm's modem chips. The Court therefore OVERRULES Qualcomm's objection.

[6] Qualcomm objects to the FTC's inclusion of Exhibit 14 under Federal Rule of Evidence 403 and under Federal Rule of Evidence 106, which states that "[i]f a party introduces all or part of a writing or recorded statement, an adverse party may require the introduction . . . of any other writing . . . that in fairness ought to be considered at the same time." ECF 898 at 2. Specifically, Qualcomm objects that the FTC "omits critical information about the posture of the case" that is contained in Ericsson's complaint. *Id.* However, the FTC included Ericsson's complaint as Exhibit 24, as Qualcomm acknowledges. *Id.* The writing is therefore available for "consider[ation] at the same time." Fed. R. Evid. 106.

its SEPs "to companies interested in developing [standard] compliant products" and that Ericsson assured Qualcomm that Ericsson would license "any patents whose use would be required for compliance" with the relevant standard. ECF No. 893-2, Ex. 27 ¶¶ 6–7. Importantly, in his deposition in the instant case, Qualcomm's founder explained that modem chips were among the products Qualcomm considered "compliant" with the relevant TIA standard. ECF No. 893-2, Ex. 1 at 116–18.

In addition, in a filing with the European Commission, amicus Nokia alleged that Qualcomm's termination of a modem chip license agreement "after having induced SSOs to base . . . standards on Qualcomm's technology" breached "Qualcomm's duty to license on FRAND terms" based on multiple IPR policies. ECF No. 893-2, Ex. 25 at 46. Even though Nokia argued that Qualcomm's FRAND commitment to license to a modem chip supplier was "unequivocal," Nokia now contends that the FTC's interpretations of Qualcomm's commitments under the TIA and ATIS IPR policies are "novel and very surprising." Nokia Amicus at 2.[7]

e. Nature of SEPs

Despite having SEP licenses for its own modem chips, Qualcomm argues that its FRAND obligations for SEPs extend only to device suppliers and not modem chip suppliers because only device suppliers "practice" or "implement" standards. However, that distinction not only violates the non-discrimination obligation, but also makes little sense. As Qualcomm's founder conceded and Qualcomm's own documents demonstrate, modem chips may be "compliant" with cellular standards. ECF No. 893-2, Ex. 1 at 116–18.

Also, contrary to Qualcomm's argument, neither IPR policy limits a SEP holder's FRAND commitment to those applicants who themselves "practice" or "implement" whole standards.

[7] Qualcomm objects to Exhibit 25 as "inadmissible hearsay." ECF No. 898 at 3. However, the FTC does not offer Nokia's filing for the truth of whether Qualcomm breached its FRAND obligations, but rather to demonstrate that Nokia *took the position* that Qualcomm had done so. *See* ECF No. 897-1 at 1. The Court therefore OVERRULES Qualcomm's objection. The Court also takes judicial notice of the court filing as a public record. *See Yuen*, 966 F. Supp. at 945 n.1 (taking judicial notice of filing before foreign judicial body).

Rather, the TIA IPR policy requires that the applicant desire to use the license "to the extent *necessary* for the practice of any or all of the Normative *portions* for the field use of use of practice of the Standard." TIA IPR at 8 (emphasis added). The TIA IPR policy expressly contemplates that a TIA standard may have "portions" or "elements," and that an applicant may receive a license as necessary to practice "any" portion of a TIA standard. *Id.* The ATIS IPR policy states that a license must be "*for the purpose* of implementing" a standard. ATIS IPR at 10 (emphasis added).

Here, Qualcomm concedes that Qualcomm owns SEPs that are infringed by typical modem chips. Opp. at 17. Any SEP is by definition necessary to practice or for the purpose of implementing a standard. As the Federal Circuit explained in *Ericsson*, because "compliant devices *necessarily* infringe certain claims in patents that cover technology incorporated into the standard," practice or implementation of the standard is impossible without licenses to *all* incorporated SEP technology. 773 F.3d at 1209 (emphasis in original). Thus, if a modem chip infringes a SEP, practice or implementation of the relevant standard would require a license to that SEP.

Moreover, undisputed evidence in Qualcomm's own documents demonstrates that a modem chip is a core component of the cellular handset, which only underscores how a SEP license to supply modem chips is for the purpose of practicing or implementing cellular standards and why Qualcomm cannot discriminate against modem chip suppliers. In an amicus brief filed in the Federal Circuit, Qualcomm characterized its own modem chips as "the heart of a cellphone." ECF No. 893-2, Ex. 8. Qualcomm's founder testified in a deposition that key cellular technologies were "implemented" in modem chips. ECF No. 893-2, Ex. 1 at 393–94. In Qualcomm's own Annual Report, Qualcomm stated that Qualcomm is a "leading developer and supplier" of circuits, including modem chips, "based on" the CDMA family of cellular standards. ECF No. 893-2, Ex. 5. Qualcomm also represents that Qualcomm's modem chips "perform the core modem functionality in wireless devices." *Id.* at 10. The foregoing evidence only reinforces how important the IPR policies' non-discrimination requirement is for modem chip suppliers and those who purchase modem chips.[8]

Lastly, two other items of extrinsic evidence that Qualcomm cites—an opinion of ANSI's Executive Standards Council Appeals Panel and statements about the IPR policy of the European Telecommunications Standards Institute ("ETSI")—do not satisfy the *Pacific Gas* standard for relevant extrinsic evidence. Neither is related to the "circumstances surrounding the making of the [TIA and ATIS IPR policies] . . . including the object, nature and subject matter of the writing . . . so that the court can place itself in the same situation in which the parties found themselves at the time of contracting." *Pacific Gas*, 69 Cal. 2d at 40. Regardless, the Appeals Panel rejected the argument that ANSI's patent policy "cedes unilaterally and unconditionally to patent holders the right to decide 'where on the value chain' they choose to license," which is consistent with the Ninth Circuit precedents on a SEP holder's non-discrimination obligations. ECF No. 871-1, Ex. 1 at 15.

For all of the above reasons, the Court agrees with the FTC that as a matter of law, the TIA and ATIS IPR policies both require Qualcomm to license its SEPs to modem chip suppliers. Because "after considering the language of the contract and any admissible extrinsic evidence, the meaning of the contract is unambiguous," the Court GRANTS the FTC's motion for partial summary judgment. *See Miller*, 454 F.3d at 990.

D. Evidentiary Motions

The parties have also fully briefed four evidentiary motions: (1) the FTC's motion to exclude Dr. Edward Snyder's expert testimony; (2) the FTC's motion to exclude Professor Aviv Nevo's expert testimony; (3) Qualcomm's motion to exclude Richard Donaldson's expert reports;

[8] Qualcomm does not object to any of the above exhibits, or otherwise dispute their authenticity. The Court takes judicial notice of Exhibit 4, which consists of undisputed information on Qualcomm's own website. *See Perkins*, 53 F. Supp. 3d at 1204–05 (taking judicial notice of undisputed information on public website, but not taking judicial notice of disputed information on public website). In addition, the Court may take judicial notice of Qualcomm's SEC filing, which is a public record. *See Kramer*, 937 F.2d at 944 (taking judicial notice of company's SEC filing). Lastly, the Court takes judicial notice of Qualcomm's amicus brief, which is a judicial record. *Black*, 482 F.3d at 1041 (taking judicial notice of court filing).

and (4) Qualcomm's motion to strike portions of Dr. Richard Akl's rebuttal expert report. None of the expert evidence the FTC and Qualcomm seek to exclude is relevant to the FTC's partial summary judgment motion. Therefore, the Court declines to address the parties' evidentiary motions at this juncture.

IV. CONCLUSION

For the foregoing reasons, the Court GRANTS the FTC's motion for partial summary judgment.

IT IS SO ORDERED.

Dated: November 6, 2018

Lucy H. Koh

LUCY H. KOH
United States District Judge

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,
Plaintiff,
v.
QUALCOMM INCORPORATED,
Defendant.

Case No. 17-CV-00220-LHK

ORDER DENYING QUALCOMM'S REQUEST TO INTRODUCE EVIDENCE OF POST-DISCOVERY EVENTS

Re: Dkt. Nos. 928, 929, 932, 933

On October 31, 2018, Plaintiff Federal Trade Commission ("FTC") and Defendant Qualcomm Inc. ("Qualcomm") filed briefs regarding Qualcomm's request to introduce evidence of post-discovery events. ECF Nos. 928, 929. On November 7, 2018, the parties filed response briefs regarding post-discovery evidence. ECF Nos. 932, 933. Having considered all the arguments raised in the parties' submissions, the relevant law, and the record in this case, and balancing the factors set forth in Fed. R. Evid. 403, the Court DENIES Qualcomm's request to introduce post-discovery evidence.

I. PROCEDURAL BACKGROUND

At the initial Case Management Conference ("CMC") on April 19, 2017, the Court set March 30, 2018, as the close of fact discovery, and a trial date beginning on January 4, 2019. ECF

No. 75. In the parties' November 8, 2017 Joint Case Management Statement ("JCMS"), Qualcomm proposed that the January 2019 trial relate only to liability and that, if necessary, the Court hold a separate proceeding on remedy. ECF No. 286 at 10 n.3. The Court rejected Qualcomm's proposal. ECF No. 314 at 4-5. In addition, the Court instructed the parties that any evidence related to post-discovery events must derive from full discovery and not "cherry picked data" or "cherry picked custodians." *Id.* at 26-27.

The March 30, 2018 fact discovery cut-off date remained the same throughout the case. However, pursuant to the parties' stipulations, the Court allowed limited out-of-time depositions due to unavailability of third-party witnesses. On February 20, 2018, the Court approved the parties request to extend the deadline for the deposition of former Qualcomm employee, Mr. Altman, due to Mr. Altman's planned travel to South America. ECF No. 580. On March 23, 2018, the Court approved the parties' proposal for out-of-time depositions of third-party witnesses from five companies. ECF No. 645. These depositions were to be completed before May 2018. *Id.* On April 6, 2018, the Court approved scheduling six out-of-time depositions, including former Qualcomm executive chairman and former board member Dr. Jacobs, former Qualcomm employee Mr. Aberle, and third-party Ericsson employees Mr. Zander and Ms. Petersson. ECF No. 678 at 1-2. These depositions were all to be completed by April 20, 2018. *Id.* The Court also approved scheduling Mr. Altman's deposition the week of May 21, 2018, following his return from South America. *Id.* at 2. In addition, the Court extended the deadline to file motions to compel fact discovery to May 18, 2018. *Id.*

In the July 18, 2018 JCMS, the parties notified the Court of a dispute over Qualcomm's addition, after the close of fact discovery, of three third-party witnesses to its list of likely trial witnesses. ECF No. 780-3 at 2. Neither party disputed that Qualcomm failed to disclose the identities of these witnesses during fact discovery. The Court treated this dispute as a request for out-of-time depositions and denied it because "allowing out-of-time depositions . . . at this late stage of the proceedings may negatively impact the case schedule and prejudice FTC." ECF No. 783 at 3.

United States District Court
Northern District of California

As to the introduction of updated evidence regarding post-discovery events, Qualcomm first raised the issue in the December 8, 2017 JCMS,[1] where it proposed "that the [p]arties should have the mutual opportunity to conduct a limited update of document and deposition discovery closer to the time of trial to ensure that the record contains necessary contemporaneous evidence." ECF No. 378 at 5. At that time, the parties stated that they "have agreed to meet and confer regarding the need for a further refresh of discovery closer to trial and the scope of any such refresh." *Id.* at 6. In the December 8, 2017 JCMS, FTC raised the concern that any additional discovery must be produced in a timely manner so as not to prejudice the FTC. *Id.* Qualcomm does not dispute FTC's statement that the parties last discussed the possibility of refreshing discovery in February 2018. ECF No. 914 at 10; ECF no. 928 at 2 n.2. Qualcomm did not raise this issue with the Court from December 9, 2017 through October 17, 2018. ECF Nos. 672, 705, 710, 763, 766, 780.

In the October 17, 2018 JCMS, the parties first notified the Court of the current dispute over Qualcomm's intention to introduce evidence of events that post-date the March 30, 2018 deadline for the close of fact discovery. ECF No. 914 at 7-17. During the October 24, 2018 CMC, the parties presented their views on the relevance of post-discovery events to any potential injunctive relief. ECF No. 921 at 50-60. The Court ordered the parties to submit further briefing on the issue. ECF No. 922. Accordingly, the parties submitted briefs on October 31, 2018, and responses on November 7, 2018. ECF Nos. 928, 929, 932, 933.

II. LEGAL STANDARD

The Court has broad discretion to manage the conduct of a trial and the evidence presented by the parties. *Navellier v. Sletten*, 262 F.3d 923, 941-42 (9th Cir. 2001). In addition, the Federal Rules of Evidence "confer broad discretion on the trial judge to exclude evidence on any of the grounds specified in Rule 403." *United States v. Hearst,* 563 F.2d 1331, 1349 (9th Cir. 1977); *see*

[1] The parties acknowledge that they discussed this issue in a December 1, 2017 meet and confer, prior to submitting the December 8, 2017 JCMS, but the parties dispute what was said during the meet and confer. *Compare* ECF No. 914 at 9 n.14 (FTC's description) *with id.* at 15 (Qualcomm's description).

also United States v. Olano, 62 F.3d 1180, 1204 (9th Cir. 1995) ("trial courts have very broad discretion in applying Rule 403" (quoting *Borunda v. Richmond*, 885 F.2d 1384, 1388 (9th Cir. 1988) (alteration omitted)). Fed. R. Evid. 403 provides that "[t]he court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence." The ruling below balances the factors set forth in Rule 403.

III. DISCUSSION

Qualcomm argues that events taking place after the close of discovery are directly relevant to current market conditions and therefore "[t]he Court cannot enter a forward-looking injunction without hearing evidence of important events occurring after the close of discovery." ECF No. 929 at 2. Specifically, Qualcomm argues that "there can be no ongoing violation of the FTC Act if Qualcomm does not currently have monopoly power in a relevant market for modem chips." ECF No. 929 at 2. Qualcomm argues that the Court should consider post-discovery events showing that (1) "major OEMs have substantially reduced or even ceased purchasing CDMA and so-called 'premium LTE' modem chips from Qualcomm," and (2) "Qualcomm and major OEMs have entered into several license agreements covering 5G products." ECF No. 929 at 3. Without consideration of these events, Qualcomm argues, any injunctive relief would be based on "speculation" as to Qualcomm's current market power rather than "actual evidence of current market conditions." ECF No. 933 at 1-2. As to any supplemental discovery required, Qualcomm argues that the parties could negotiate a targeted discovery protocol. ECF No. 933 at 3.

The FTC argues that evidence produced prior to the discovery cut-off shows that "there is a cognizable risk of recurrent violation of the FTC Act through Qualcomm's use of market power to weaken rivals," which is sufficient to warrant injunctive relief. ECF No. 928 at 1. The FTC challenges Qualcomm's request because (1) Qualcomm has not shown good cause to modify the trial schedule or re-open discovery; (2) it is too late to conduct meaningful additional discovery prior to trial, and therefore the FTC would be prejudiced by Qualcomm's request to introduce evidence of post-discovery events; and (3) the FTC's request for injunctive relief does not require additional discovery. In its response brief, the FTC also argues that the question of "what evidence would be sufficient for the Court to enter an injunction" is not currently before the Court. ECF No. 932 at 1.

A. Legal Standard

Injunctive relief should be granted if "there exists some cognizable danger of recurrent violation." *United States v. W.T. Grant Co.*, 345 U.S. 629, 633 (1953). In a case governed by the Federal Trade Commission Act ("FTCA"), "an injunction will issue only if the wrongs are ongoing or likely to recur." *Fed. Trade Comm'n v. Evans Prods. Co.*, 775 F.2d 1084, 1087 (9th Cir. 1985). Injunctive relief may be appropriate under this standard even when the unlawful conduct has ceased. *See id.* at 1088 ("Even though Evans' alleged violations have completely ceased, we must review whether those violations are likely to recur."); *see also Fed. Trade Comm'n v. Accusearch Inc.*, 570 F.3d 1187, 1201-02 (10th Cir. 2009) (concluding that the district court properly issued an injunction under the FTCA despite cessation of the unlawful conduct because of the possibility of recurrence); *Fed. Trade Comm'n v. Affordable Media, LLC*, 179 F.3d 1228, 1237 (9th Cir. 1999) (same); *Fed. Trade Comm'n v. Lake*, 181 F. Supp. 3d 692, 703 (C.D. Cal. 2016) (issuing an injunction where defendant's pattern of past unlawful conduct indicated a cognizable danger of recurrent violations).

The FTC brings its complaint against Qualcomm under § 5 of the FTCA, which prohibits "[u]nfair methods of competition in or affecting commerce." 15 U.S.C. § 45(a). "[U]nfair methods of competition" under the FTCA includes "violations of the Sherman Act." *Fed. Trade Comm'n v. Cement Inst.*, 333 U.S. 683, 693-94 (1948). In its Order Denying Motion to Dismiss, the Court concluded that the FTC adequately alleged that Qualcomm's conduct violates § 1 and § 2 of the Sherman Act. ECF No. 133 at 18. "Section 2 of the Sherman Act makes it unlawful for a firm to 'monopolize.'" *United States v. Microsoft Corp.*, 253 F.3d 34, 50 (D.C. Cir. 2001). "The offense of monopolization has two elements: '(1) the possession of monopoly power in the relevant market"; and (2) "the willful acquisition or maintenance of that power" through exclusionary conduct "as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.'" *Id.* (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966)); *see also McWane v. Fed. Trade Comm'n*, 783 F.3d 814, 828 (11th Cir. 2015) (applying these two elements in a case brought under § 5 of the FTCA). "Section 1 of the Sherman Act, 15 U.S.C. § 1, prohibits [e]very contract, combination . . . or conspiracy, in restraint of trade or commerce among the several States." *Allied Orthopedic Appliances, Inc. v. Tyco Health Care Grp. LP*, 592 F.3d 991, 996 (9th Cir. 2010).

B. Relevance of Post-Discovery Events to Injunctive Relief

The Court rejects Qualcomm's argument that post-discovery evidence of current market power is required. The legal standard for an injunction requires the FTC to show that "the wrongs are ongoing or likely to recur." *Evans Prods. Co.*, 775 F.2d at 1087. Qualcomm agrees that this is the proper standard, and it fails to identify anything in the standard that requires the Court to consider evidence of post-discovery events.

Qualcomm argues that the Court cannot rely upon "stale" evidence to support an injunction, but the cases that Qualcomm relies upon are distinguishable. In *Fed. Trade Comm'n v. AbbVie Inc.*, 329 F. Supp. 3d 98, 145 (E.D. Pa. 2018), the court denied injunctive relief where the evidence "[did] not establish that defendants have a pattern or practice" of conduct violating antitrust laws and generic versions of the drug in question had been on the market for over three years. In *Fed. Trade Comm'n v. Merch. Servs. Direct, LLC*, No. 13-CV-0279-TOR, 2013 WL 4094394, at *3 (E.D. Wash. Aug. 13, 2013), the court denied injunctive relief where there was insufficient evidence based on past violations to conclude that future violations were likely to occur. In reaching this conclusion, the court noted that the evidence submitted "[was] substantially outdated." *Id.*

In *United States v. Dish Network, LLC*, No. 09-3073, 2016 WL 29244 (C.D. Ill. Jan. 4, 2016), defendant had violated telemarketing laws over a multi-year period. In September 2015, less than four months before a January 2016 trial was set to begin and over three years after the close of fact discovery, defendant produced call records and audit reports for the purpose of showing its compliance with applicable laws. *Id.* at *2-3. The court held that plaintiffs would be "prejudiced by the admission of this evidence because they have never had the opportunity to depose anyone about the documents or ensure that the new procedures have been implemented." *Id.* at *9. The court explained that defendant "only produced a highly selective portion of the documents." *Id.* at *9. Nonetheless, "in an exercise of discretion," the court decided to bifurcate the trial, leaving the issue of the permanent injunction for later proceedings. *Id.* The court reopened discovery solely on the issue of the permanent injunction, but the court warned that "[c]ontinually producing newly-created evidence only serves to further delay this case and imposes an undue burden on the parties and the Court." *Id.* In addition, the court imposed sanctions on defendant for its failure to disclose the post-discovery evidence sooner, including payment of reasonable attorneys' fees and expenses related to the supplemental discovery. *Id.* While the court in *Dish Network* exercised its discretion to bifurcate the trial and allow additional discovery as to injunctive relief, it did not conclude that additional discovery was necessary for it to issue an injunction. In fact, the court explained that if defendant did not provide all the required supplemental discovery and pay plaintiffs' attorneys' fees, then the court would proceed without the additional evidence that defendant sought to introduce. *Id.*

Unlike the current case, the cases cited by Qualcomm involved delays of several years between the most up-to-date evidence and trial. In addition, in the cases cited by Qualcomm, courts concluded that post-discovery evidence showed a change from the defendant's past conduct that was relevant to whether unlawful conduct was "likely to recur." *Evans Prods. Co.*, 775 F.2d at 1087. As discussed below, Qualcomm seeks to introduce evidence related to changes in its market position, but Qualcomm does not argue that any of the evidence relates to a change in its own conduct with respect to licensing agreements or pricing of its products. Accordingly, regardless of whether any unlawful conduct is presently occurring, evidence of Qualcomm's past conduct is sufficient to show whether any violations are "likely to recur." *Evans Prods. Co.*, 775 F.2d at 1087.

None of the cases cited by Qualcomm support the proposition that the Court must consider evidence of post-discovery events prior to issuing an injunction. *Dish Network* specifically explained that continually producing new evidence would only burden the parties and the court. 2016 WL 29244, at *9. By their very nature, proceedings under the FTCA require courts to consider defendants' past conduct for evidence that "wrongs are ongoing or likely to recur." *Evans Prods. Co.*, 775 F.2d at 1087.

C. Fed. R. Evid. 403 Factors

The Federal Rules of Evidence "confer broad discretion on the trial judge to exclude evidence on any of the grounds specified in Rule 403." *Hearst*, 563 F.2d at 1349; *see also Navellier*, 262 F.3d 923, 941-42 (9th Cir. 2001) (explaining that the Court has broad discretion to manage the conduct of a trial and the evidence presented by the parties).

The Court finds that any probative value of the proposed post-discovery evidence is substantially outweighed by the danger of unfair prejudice to the FTC. *Dish Network*, which Qualcomm cites to the Court in support of Qualcomm's position that consideration of current conditions is necessary, explains why the FTC would be prejudiced by Qualcomm's attempt to introduce evidence of post-discovery events: "[plaintiffs] have never had the opportunity to depose anyone about the documents or ensure that the new procedures have been implemented." 2016 WL 29244, at *9.

The Court agrees with the FTC that the discovery required to test Qualcomm's assertions regarding evidence of post-discovery events "would have to include documents and testimony from multiple Qualcomm custodians involved in licensing and chip sales, as well as document and deposition discovery from third parties." ECF No. 928 at 3. Adding to the burden that the FTC would face, many of these third parties are located abroad. As explained above, the legal standard for injunctive relief does not require the sort of continuously updated discovery that Qualcomm proposes.

Moreover, the parties have been aware of the fact discovery cutoff date and trial date since the first CMC, ECF No. 75, and the Court has enforced that discovery cutoff throughout the case. In November 2017, Qualcomm proposed bifurcating the trial, and the Court rejected that proposal.

ECF No. 314 at 4-5. The Court explained, at that time, that any evidence related to post-discovery events must derive from "full discovery" and not "cherry picked data." *Id.* at 26-27. Thus, throughout the proceedings, the parties have been aware of the Court's intention to maintain the discovery cutoff date and to hold a single trial as to liability and remedy. The Court's Order here is consistent with its past orders with regards to discovery and trial management.

In its response brief, Qualcomm states that "Qualcomm does not seek to reopen discovery." ECF No. 933 at 1. Rather, "Qualcomm asks only that the Court consider evidence of current market conditions." ECF No. 933 at 1. Qualcomm does not explain how it proposes to have the Court consider evidence of current market conditions without reopening discovery.

D. Specific Categories of Discovery

Qualcomm seeks to introduce documents related to two specific categories of post-discovery events. First, Qualcomm seeks to introduce "[u]pdated evidence of OEM procurement decisions," especially as related to the fact that Apple now sources modem chips exclusively from Intel. ECF No. 929 at 3-4. Qualcomm argues that this evidence shows that "it does not, and is not about to, have power in any market alleged by the FTC." ECF No. 933 at 4. Second, Qualcomm seeks to introduce post-discovery evidence of license agreements covering 5G products. ECF No. 929 at 3. Qualcomm argues that these "agreements are highly important because they were executed at a time when Qualcomm does not sell 5G chips commercially and thus cannot have any monopoly power in 5G chips." *Id.* at 4. Qualcomm states that it produced ten post-discovery agreements to the FTC before the end of expert discovery, and that the expert report of Dr. Aviv Nevo referred to two of the recent 5G agreements. ECF No. 933 at 3.

Qualcomm does not argue that any post-discovery evidence shows a change in Qualcomm's own business conduct. All of the proposed evidence relates to alleged shifts in Qualcomm's market power. Moreover, the Court finds that some of this evidence is already in the record. The Court agrees with the FTC that "Apple's decision to use Intel chips was made before the close of discovery and is the subject of existing discovery." ECF No. 928 at 3. In addition, as discussed above, the Court approved several out-of-time depositions which extended through May

2018, roughly 7 months before the January 4, 2019 trial. During those 7 months, this Court has ruled on at least one discovery motion, one objection to Magistrate Judge Cousin's discovery order, one summary judgment motion, multiple *Daubert* motions, multiple motions in limine, and pretrial motions. The time required to rule on such motions will always necessitate some delay between fact discovery cutoff and trial. The Court finds that the 7 month delay in this case was reasonable and necessary.

At best, the categories of evidence identified by Qualcomm would show some shift in Qualcomm's market power since the close of discovery. By necessity, the evidence at trial will never be fully up-to-date following the cutoff for discovery. As discussed above, the Court can properly issue an injunction if the evidence already in the record shows that unlawful conduct is "likely to recur." *Evans Prods. Co.*, 775 F.2d at 1087. The Court concludes that Qualcomm fails to identify any post-discovery evidence that would be necessary for the Court to determine whether unlawful conduct is likely to recur. Accordingly, as discussed above, any probative value of the specific evidence proposed by Qualcomm is outweighed by the risk of prejudice to the FTC.

IV. CONCLUSION

For the foregoing reasons, the Court DENIES Qualcomm's request to introduce evidence of post-discovery events. The Court ORDERS as follows:

1. The parties may only seek to introduce evidence produced on or before the March 30, 2018 fact discovery cutoff and the testimony from the limited authorized out-of-time depositions discussed on page 2 of this order.
2. The January 2019 trial will address both liability and remedy.

IT IS SO ORDERED.

Dated: December 13, 2018

Lucy H. Koh

LUCY H. KOH
United States District Judge

IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,	)	CV-17-00220-LHK
	)	
PLAINTIFF,	)	SAN JOSE, CALIFORNIA
	)	
VS.	)	NOVEMBER 15, 2017
	)	
QUALCOMM INCORPORATED,	)	PAGES 1-30
	)	
DEFENDANT.	)	
	)	
	)	
________________________________	)	

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE LUCY H. KOH
UNITED STATES DISTRICT JUDGE

A P P E A R A N C E S:

FOR THE PLAINTIFF: BY: JENNIFER MILICI
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CERTIFICATE NUMBER 13185

PROCEEDINGS RECORDED BY MECHANICAL STENOGRAPHY
TRANSCRIPT PRODUCED WITH COMPUTER

SAN JOSE, CALIFORNIA NOVEMBER 15, 2017

P R O C E E D I N G S

(COURT CONVENED AT 2:26 P.M.)

02:26:55 THE CLERK: YOUR HONOR, CALLING CASE 17-CV-00220. FEDERAL TRADE COMMISSION VERSUS QUALCOMM INCORPORATED.

02:27:03 COUNSEL, PLEASE COME FORWARD AND STATE YOUR APPEARANCES.

02:27:13 MS. MILICI: JENNIFER MILICI FOR THE FEDERAL TRADE COMMISSION, WITH MY COLLEAGUE ELIZABETH GILLEN.

02:27:24 MR. BORNSTEIN: GOOD AFTERNOON, YOUR HONOR.

02:27:26 GARY BORNSTEIN FOR QUALCOMM, AND I'M JOINED BY BOB VAN NEST AND YONATAN EVEN.

02:27:33 MR. VAN NEST: GOOD AFTERNOON, YOUR HONOR.

02:27:36 THE COURT: OKAY. GREAT. NOW I HAVE EVERYBODY.

02:27:39 ALL RIGHT. GOOD AFTERNOON.

02:27:41 OKAY. WELCOME TO EVERYBODY. IT LOOKS LIKE THERE ARE JUST THREE ISSUES, SOME OF THEM I'M NOT FULLY CLEAR ON.

02:27:50 SO THE PARTIES PREVIOUSLY AGREED TO EXCHANGE PRIVILEGE LOGS ON DECEMBER 19TH. SO I WASN'T SURE WHY QUALCOMM WANTS THE FEDERAL TRADE COMMISSION TO PRODUCE ITS PRIVILEGE LOGS BY NOVEMBER 22ND. AND DOES THAT ALSO APPLY TO QUALCOMM? OR YOU WANT IT TO BE UNILATERAL?

02:28:08 MR. BORNSTEIN: WELL, YOUR HONOR, WE HAD NOT AGREED ON A SPECIFIC DATE FOR EACH PARTY'S LOG. WE HAD AGREED TO A DECEMBER 19TH DATE FOR THE PRODUCTION OF QUALCOMM'S LOG. THE FTC PRODUCTION, ITSELF, IS ONLY ABOUT 3500 DOCUMENTS OR SO.

AND SO WE THOUGHT IT WAS REASONABLE FOR -- AND THEY HAVE COMPLETED, SUBSTANTIALLY COMPLETED, THE PRODUCTION OF THEIR DOCUMENTS.

SO WE THOUGHT IT WAS REASONABLE FOR THEM TO NOT SIT AND WAIT TO GIVE US THE LOG. SO WE REQUESTED THE NOVEMBER 22ND DATE.

THE COURT: I DON'T KNOW, NORMALLY THOSE ARE MUTUALLY EXCHANGED SO IT JUST SEEMS -- ANYWAY, DID YOU HAVE A RESPONSE?

MS. MILICI: I DID. THANK YOU, YOUR HONOR.

THAT WAS NOT OUR UNDERSTANDING OF THE AGREEMENT. AND I BELIEVE IN OUR LAST CASE MANAGEMENT STATEMENT WE EVEN REFERENCED AN AGREEMENT TO EXCHANGE PRIVILEGE LOGS.

SO THAT WAS OUR REACTION AS WELL IS THAT WE HAD AN AGREEMENT FOR MUTUAL EXCHANGE ON DECEMBER 19TH, AND WE HAVE NOT BEEN TOLD ANY REASON BY QUALCOMM FOR WHY IT NEEDS TO MODIFY THAT AGREEMENT OR ANY JUSTIFICATION TO MODIFY.

THE COURT: GIVE ME JUST A MOMENT, PLEASE. WHERE IS THAT? I'M LOOKING AT THE SEPTEMBER 6, 2017, JOINT CASE MANAGEMENT STATEMENT. I WAS UNDER THE IMPRESSION THAT IT WAS A MUTUAL EXCHANGE.

MS. MILICI: SORRY, I CAN'T FIND IT RIGHT THIS SECOND, BUT THERE WAS A REFERENCE THAT THE PARTIES HAD AGREED TO DISCUSS A MUTUAL DATE FOR THE EXCHANGE OF PRIVILEGE LOGS. AND WE SUBSEQUENTLY DID AGREE TO DECEMBER 19TH.

THE COURT: OKAY. WELL, I DON'T SEE ANY REASON FOR

THAT NOT TO BE A MUTUAL EXCHANGE. SO THEY WILL BE EXCHANGED ON THE 19TH OF DECEMBER.

LET'S GO TO THE OTHER ISSUES, PLEASE.

OKAY. I GUESS THE EASIER ONE WOULD BE THE TRIAL ISSUE. THERE'S NO BIFURCATION OF ISSUES. I'M GOING TO EXTEND THE LENGTH OF TRIAL TO TEN DAYS, AND WE CAN REVISIT LATER WHETHER IT NEEDS TO GO BEYOND THAT. SOUNDS LIKE IT'S STILL FAIRLY EARLY.

MR. BORNSTEIN: SO, YOUR HONOR, I APPRECIATE THE EXTRA TIME.

I WOULD JUST LIKE TO MAKE SURE, AND IT SOUNDS LIKE WHAT YOUR HONOR IS SAYING IS THAT THERE WILL BE AN OPPORTUNITY FOR US TO HAVE FURTHER DISCUSSION WITH THE COURT AT SOME POINT, SHOULD WE THINK IT IS NECESSARY.

I'M VERY MINDFUL THAT YOUR HONOR IS VERY CAREFUL WITH YOUR SCHEDULE, AND I JUST WOULD LIKE TO AVOID US GETTING INTO A POSITION WHERE THE PARTIES AGREE AND WANT TO MAKE A PRESENTATION TO THE COURT ABOUT EXTRA TIME AND THE COURT JUST DOESN'T HAVE ANYTHING AVAILABLE, WHICH IS WHY WE RAISED IT THIS EARLY.

THE COURT: WELL, I'M NOT GOING TO BIFURCATE, I'VE NEVER BIFURCATED EVER. I'M NOT GOING TO MAKE AN EXCEPTION TO THAT FOR THIS CASE.

I MEAN, IT SOUNDS LIKE YOU WANT 15 DAYS FOR LIABILITY AND THEN YOU ARE GOING TO WANT, I DON'T KNOW HOW MANY DAYS FOR

DAMAGES AND WHAT NOT, AND I'M NOT GOING TO AGREE TO THAT.

MR. BORNSTEIN: I UNDERSTAND THE COURT'S RULING ON THE BIFURCATION ISSUE.

WE DO HAVE, THOUGH, OBVIOUSLY A VERY SIGNIFICANT AMOUNT OF EVIDENCE THAT IS GOING TO NEED TO BE PRESENTED, AND I JUST WANT TO MAKE SURE, YOUR HONOR, THAT WE HAVE ADEQUATE TIME TO PRESENT OUR DEFENSE.

IF WE HAVE A TEN-DAY TRIAL, THAT'S FIVE DAYS FOR US AND SOME PORTION OF THAT, MAYBE TWO DAYS IS DEVOTED TO CROSS-EXAMINATION OF THE FTC'S WITNESSES, AND OPENINGS AND CLOSINGS, IF YOUR HONOR WANTS THEM.

SO THAT LEAVES US THREE DAYS TO PUT ON OUR QUALCOMM FACT WITNESSES, ANY THIRD PARTY FACT WITNESSES AND EXPERTS. IT STRIKES ME THAT THAT WOULD BE A VERY TIGHT TIME FRAME FOR US TO BE ABLE TO PRESENT AN ADEQUATE DEFENSE, BUT I APPRECIATE THE EXTRA TIME THE COURT HAS ARTICULATED JUST NOW. AND AS LONG AS THE COURT IS WILLING FOR US TO COME BACK AND REVISIT THIS AT SOME POINT IN THE FUTURE, I DON'T SEE ANY NEED TO PRESS THE ISSUE CURRENTLY, IF THE COURT IS NOT PREPARED TO GO FURTHER.

THE COURT: WELL, THERE ARE GOING TO BE VERY TIGHT TIME LIMITS ON OPENING AND CLOSING, IF IT'S NECESSARY, OR YOU MAY DECIDE YOU JUST WANT TO SUBMIT BRIEFING IN LIEU OF ACTUAL ORAL ARGUMENT, AND YOU MAY WANT TO DO THAT AS WELL FOR OPENING, I'M NOT SURE, THAT ACTUALLY MAY BE MORE HELPFUL TOO.

SO FOR TEN DAYS, THAT'S ABOUT ALMOST 55 HOURS OF

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,	)	C-17-00220 LHK
	)	
PLAINTIFF,	)	SAN JOSE, CALIFORNIA
	)	
VS.	)	JANUARY 8, 2019
	)	
QUALCOMM INCORPORATED, A DELAWARE CORPORATION,	)	VOLUME 3
	)	
	)	PAGES 408-636
DEFENDANT.	)	
	)	**SEALED PAGES 414 - 419**

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE LUCY H. KOH
UNITED STATES DISTRICT JUDGE

A P P E A R A N C E S:

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IRENE RODRIGUEZ, CSR, CRR, RMR
CERTIFICATE NUMBER 8074

PROCEEDINGS RECORDED BY MECHANICAL STENOGRAPHY
TRANSCRIPT PRODUCED WITH COMPUTER

MODEM CHIPS?
A. YES, THEY ARE.
Q. WHAT ARE SOME EXAMPLES OF POSITIONS THAT YOU'VE HELD AT SKYWORKS AND INTEL?
A. I STARTED AS A SILICON ENGINEER AND THEN I MOVED INTO SYSTEM ENGINEERING FOR THE PHYSICAL LAYER. AND THEN FROM THERE, I MOVED INTO LEADERSHIP AND A MANAGEMENT POSITION AND UP TO EXECUTIVE POSITIONS.
WHEN I STARTED INTO MANAGEMENT, IT WAS FIRST ENGINEERING, AND THEN IT GREW INTO SORT OF ENGINEERING, BUSINESS, CUSTOMERS, AND SO ON. SO GM.
Q. HAVE YOU PERSONALLY PARTICIPATED IN DISCUSSIONS WITH OEM'S ABOUT COMPONENT SALES?
A. YES, I HAVE.
Q. AND IN YOUR EXPERIENCE HOW DO COMPONENT SUPPLIERS TYPICALLY CHARGE FOR THEIR PRODUCTS?
A. TYPICALLY WE -- BASICALLY THE CUSTOMER TELLS US, LIKE WE, WE BUILD WHAT THEY REQUIRE, THE PRODUCTS THAT THEY WANT.
ONCE WE BUILD THEM ON THE SCHEDULE THAT'S AGREED UPON, WE DELIVER TO THEM, AND OBVIOUSLY THERE'S ALSO A PRICING NEGOTIATION. SO WE AGREE ON THE PRICE, AND WE DELIVER, AND WE GET PAID, AND THEN THEY ARE FREE TO USE. AND THERE MAY BE SUPPORT, ONGOING SUPPORT.
Q. NOW, DO THE COMPONENT SUPPLIERS YOU WORKED FOR EVER CHARGE FOR PATENT ROYALTIES?

A. NO.
Q. ARE YOU AWARE OF ANY COMPANY, ANY COMPONENT SUPPLIER THAT CHARGES FOR PATENT ROYALTIES FOR THE USE OF THOSE COMPONENTS?
A. NO, EXCEPT FOR ONE, QUALCOMM.
Q. LET'S SET ASIDE QUALCOMM FOR A MOMENT.
FOR ALL THE OTHER SEMICONDUCTOR, OR ALL THE OTHER COMPONENT SUPPLIERS, WHAT DOES THE ALL-IN PRICE OF THAT COMPONENT SALE CONSIST OF?
A. IT INCLUDES EVERYTHING, THE PHYSICAL PRODUCT AND ALL OF THE VALUABLES AND I.P., INCLUDING SOFTWARE, HARDWARE, AND THE SUPPORT THAT'S EMBEDDED, ESSENTIALLY. THAT'S THE ALL-IN PRICE.
Q. SO, FOR INSTANCE, DOES INTEL CHARGE SEPARATE ROYALTIES FOR USING ITS MODEM CHIPS?
A. NO, WE DO NOT.
Q. LET'S MOVE ON TO QUALCOMM THEN.
WHAT'S YOUR PERSONAL EXPERIENCE IN COMPETING AGAINST QUALCOMM?
A. I'VE BEEN COMPETING WITH THEM FOR A LONG TIME AT DIFFERENT COMPANIES, AS I SAID EARLIER. AND THE DIFFERENCE IS THAT THEY HAVE -- THEIR ALL-IN PRICE INCLUDES TWO COMPONENTS, THE, SORT OF THE CHIP PRICE, WE CALL IT, PLUS THE ROYALTY ON TOP OF IT.
Q. SO IN YOUR EXPERIENCE HOW DOES COMPETING AGAINST QUALCOMM COMPARE WITH COMPETING AGAINST OTHER COMPONENT SUPPLIERS?
A. IT'S TOUGH AND VERY DIFFERENT BECAUSE WITH OTHER, OTHER COMPONENT SUPPLIERS OR COMPETITORS, IT'S ESSENTIALLY A BATTLE

OF FEATURES AND PRICE AND THAT'S IT AND YOU COMPETE BASED ON THAT AND WHOEVER MAKES IT, MAKES IT.

WHEREAS WITH QUALCOMM, IT'S DIFFERENT BECAUSE OF THE BUSINESS MODEL, WHICH MAKES IT A VERY DIFFICULT LEVEL PLAYING FIELD. IT'S PRETTY MUCH VERY TOUGH TO COMPETE IN THAT, VERY UNFAIR.

Q. LET'S BREAK DOWN THAT BUSINESS MODEL A LITTLE BIT.

SO TO YOUR KNOWLEDGE DOES QUALCOMM CHARGE CUSTOMERS FOR THE PRICE OF THE MODEM CHIP ITSELF?

A. YES, TO MY KNOWLEDGE, THEY DO.

Q. AND TO YOUR KNOWLEDGE DOES QUALCOMM CHARGE A PATENT ROYALTY FOR USING THOSE MODEM CHIPS?

A. YES, THEY DO.

Q. NOW, YOU'RE NOT A LAWYER, ARE YOU?

A. NOPE.

Q. ARE YOU AN EXPERT IN THE LAW OF PATENT EXHAUSTION?

A. ABSOLUTELY NOT.

Q. SO LET ME ASK YOU FROM A BUSINESS PERSPECTIVE, APART FROM QUALCOMM, ARE YOU AWARE OF ANY OTHER COMPANIES THAT SELL A MODEM CHIP AND THEN COLLECT ROYALTIES ON THAT SAME MODEM CHIP?

A. NO, I AM NOT.

Q. SO THEN WHAT IS THE ALL-IN COST OF A MODEM CHIP FROM QUALCOMM CONSIST OF?

A. IT'S THE, THE SINGLE BUCKET, WHICH IS THE SUM OF THE CHIP PRICE, PLUS THE ROYALTY.

Q. NOW, TO YOUR KNOWLEDGE DOES QUALCOMM ALSO SEEK TO COLLECT ROYALTIES FOR THE USE OF OTHER COMPANIES' CHIPS BY OEM'S?

A. YES, THEY DO.

Q. WHAT ARE THE IMPLICATIONS OF THAT PRACTICE FOR THE ALL-IN PRICE OF INTEL CHIPS?

A. FOR THE INTEL CHIPS, OR INTEL PRODUCT, YOU -- WE BASICALLY HAVE THE CHIP PRICE, AND THEN WE KNOW THAT WHAT HAPPENS AFTERWARDS, WITHOUT US AT THE TABLE, IS THAT THERE'S A QUALCOMM ROYALTY THAT IS ADDED TO THAT.

AND SO THE FINAL ALL-IN PRICE FOR THE CUSTOMER IS OUR CHIPSET PRICE, PLUS THE QUALCOMM ROYALTY.

Q. AND HOW DOES THAT AFFECT INTEL?

A. IT'S, IT'S A VERY DIFFICULT SITUATION. I MEAN, IT'S -- IT'S CREATED -- FIRST OF ALL, NOBODY ELSE DOES THAT IN THE INDUSTRY.

SECOND OF ALL, YOU HAVE YOUR CUSTOMER THAT YOU'RE USED TO A BUSINESS WHERE YOU BASICALLY BUILD THE PRODUCT THAT THEY WANT ON THE SCHEDULE THAT THEY WANT AT THE PRICE YOU AGREED UPON AND YOU GIVE THEM THE PRODUCT AND THEY PAY YOU FOR THE USE OF THAT PRODUCT.

BUT NOW WHAT HAPPENS IS IT GETS BROKEN DOWN INTO TWO STEPS BECAUSE YOU HAVE YOUR PRODUCT, YOUR SELLING PRICE, AND THEN YOU KNOW THAT THERE'S SOME OTHER NEGOTIATION WITH A COMPETITOR THAT IS TRYING TO DISLODGE YOU TO BEGIN WITH THAT CONTROLS A SIGNIFICANT PORTION OF YOUR PRICING THROUGH THE ROYALTY.

Q. IF QUALCOMM WERE ABLE TO SHIFT THE COST FROM ITS PATENT ROYALTY TO ITS MODEM SHIP OR SHIFT THE COST OF THE MODEM CHIP TO THE PATENT ROYALTY, WOULD THAT HAVE IMPLICATIONS FOR INTEL'S COMPETITIVENESS WITH QUALCOMM?

A. YEAH. SO IF I MAY ELABORATE A LITTLE BIT?

Q. SURE.

A. I THINK THE BEST WAY TO GO THROUGH THIS IS SORT OF IT -- I'M GOING TO START ON THE QUALCOMM SIDE.

SO FIRST OF ALL, WE'RE BOTH COMPETING FOR THE SOCKET, RIGHT? THAT'S THE PREMISE, MEANING FOR THE CUSTOMER.

SO ON THE QUALCOMM SIDE, TO MY EXPERIENCE AND TO MY KNOWLEDGE THERE IS AN ALL-IN PRICE AND YOU HAVE -- FIRST OF ALL, THE CUSTOMER IS DEALING WITH THE SITUATION WHERE NOBODY ELSE DOES THIS, ONLY QUALCOMM.

SO NOW THERE IS THIS CHIP PRICE, AND ON TOP OF IT THERE'S THIS ROYALTY PRICE. FOR THEM, QUALCOMM, IT DOESN'T REALLY MATTER BECAUSE BOTH MONIES ARE THE ALL-IN PRICE AND GO TO THEM AND THEY CAN SHIFT THE PRICE FROM CHIPSET TO ROYALTY, WHICH THEN UNDERCUTS ME AS THE COMPETITOR.

AND BY THE WAY, IT'S NOT LIKE IT RESULTS INTO A LOWER PRICE FOR THE CUSTOMER.

THEN YOU COME ON THE INTEL SIDE AND YOU HAVE THE CHIPSET PRICE, AND THEN BEHIND, MEANING WE ARE NOT IN THE ROOM, YOU HAVE BASICALLY THE CUSTOMER NEGOTIATING WITH QUALCOMM, WHO'S TRYING TO UNDERCUT US TO BEGIN WITH, ON THE ROYALTY AND THAT

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,	)	C-17-00220 LHK
	)	
PLAINTIFF,	)	SAN JOSE, CALIFORNIA
	)	
VS.	)	JANUARY 11, 2019
	)	
QUALCOMM INCORPORATED, A DELAWARE CORPORATION,	)	VOLUME 4
	)	
	)	PAGES 637-857
DEFENDANT.	)	
	)	SEALED PAGES 739 - 740

TRANSCRIPT OF PROCEEDINGS
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UNITED STATES DISTRICT JUDGE

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PROCEEDINGS RECORDED BY MECHANICAL STENOGRAPHY
TRANSCRIPT PRODUCED WITH COMPUTER

TO CROSS-LICENSE ITS I.P. BACK TO QUALCOMM, WHICH WE FOUND UNSETTLING.

Q. WHAT WAS YOUR REACTION TO THIS?

A. WE WERE TAKEN ABACK. WE DIDN'T EXACTLY KNOW WHAT TO MAKE OF IT.

BUT WE KNEW THAT WE WEREN'T GOING TO CROSS-LICENSE ALL OF OUR I.P. BACK TO QUALCOMM. WE WERE SIMPLY TRYING TO BUY A CHIP.

SO AT THIS POINT WE ESSENTIALLY ELIMINATED QUALCOMM FROM FURTHER CONSIDERATION. WE NEEDED TO MAKE A CHIP DECISION, AND WE KNEW THIS WAS GOING TO TAKE TOO LONG TO UNRAVEL.

Q. HAS ANY OTHER MODEM CHIP SUPPLIER DEMANDED THAT APPLE ENTER INTO A LICENSE BEFORE SENDING ENGINEERING SAMPLES TO APPLE?

A. NO, NO NEVER.

Q. HAVE YOU EVER HAD ANY COMPONENT SUPPLIER IN THE IPHONE MAKE SUCH A DEMAND?

A. ACTUALLY, YES. I CAN THINK OF ONE INSTANCE A COUPLE OF YEARS BACK, THE REASON I RECALL THIS ONE, I HAPPENED TO BE ON VACATION DURING A DATE THAT NXP SEMICONDUCTOR HAD A MEETING WITH MY TEAM AND CAME IN AND SAID THAT THEY HAD A LICENSING REQUIREMENT FOR THEIR NFC CHIP.

SO I RECALL BEING REALLY TAKEN ABACK BY THAT, AND SO DESPITE THE FACT THAT I WAS ON VACATION THAT DAY, I CALLED THEIR CEO THAT VERY DAY AND WE QUASHED IT. WE TOLD THEM THAT

IF THEY WANTED MORE MONIES FROM APPLE, THEY SHOULD PRICE IT INTO THEIR HARDWARE. AND IF THEIR HARDWARE WERE COMPETITIVE, WE WOULD CONTINUE TO BUY IT. IF WE WERE UNCOMPETITIVE, WE WOULD GO TO SONY OR SOMEONE ELSE. THEY WITHDREW THEIR LICENSE THAT DAY. WE QUASHED IT. OTHER THAN THAT, I CAN'T THINK OF ANOTHER INSTANCE.

Q. HAVE YOU EVER HAD A SUPPLIER REQUEST A CROSS-LICENSE TO APPLE'S I.P. BEFORE THEY WOULD AGREE TO SEND ENGINEERING SAMPLES TO APPLE?

A. THIS IS THE ONLY ONE THAT I'VE EVER PERSONALLY SEEN.

Q. DID APPLE ENTER INTO A LICENSE AGREEMENT WITH QUALCOMM?

A. NO. TO THIS DATE, WE'VE NOT ENTERED INTO A LICENSE AGREEMENT WITH THEM.

Q. WHY NOT?

A. THERE HAVE BEEN A NUMBER OF STUMBLING BLOCKS. THE BIGGEST ONE IS WE DON'T UNDERSTAND WHY, IN ORDER TO BUY A COMPONENT FROM THEM, WE HAVE TO ENTER INTO A LICENSING AGREEMENT THAT CROSS-LICENSES ALL OF APPLE'S I.P. BACK TO THEM. WE SIMPLY DON'T UNDERSTAND WHY THAT'S FAIR OR WHY IT'S IN ANYONE'S BEST INTEREST, OTHER THAN QUALCOMM.

Q. I'D LIKE YOU TO TURN TO TAB 3 IN YOUR BINDER, PLEASE. THIS IS EXHIBIT CX 0507.

A. YES.

Q. THIS IS AN E-MAIL FROM QUALCOMM TO YOU DATED SEPTEMBER 11TH, 2006.

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NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

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	)	
QUALCOMM INCORPORATED, A DELAWARE CORPORATION,	)	VOLUME 5
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	)	PAGES 858-1111
DEFENDANT.	)	**SEALED PAGES 946-949, 1004, 1024-1042, 1081-1083**

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OWNER.

AND SO THAT WOULD BE A DOWNSIDE FOR A PATENT OWNER.

Q. AND IN A TYPICAL NEGOTIATION COVERING STANDARD ESSENTIAL PATENTS, WHAT EFFECT WOULD YOU EXPECT THIS TO HAVE ON THE RATE THAT PARTIES MIGHT NEGOTIATE?

A. I THINK THE RATE MOST LIKELY WOULD BE LOWER GIVEN THE CHANGES AND APPLICATION OF DAMAGES LAW.

Q. SO NOW THAT YOU'VE WALKED US THROUGH WHAT A TYPICAL NEGOTIATION LOOKS LIKE, CAN YOU PLEASE EXPLAIN HOW QUALCOMM'S NEGOTIATIONS ARE DIFFERENT?

A. WELL, THE BOTTOM LINE IS IN THE NEGOTIATIONS THAT QUALCOMM HAD WHERE THEY SUPPLIED CHIPS THAT WERE COMMERCIALLY NECESSARY FOR THE LICENSEE TO CONTINUE IN BUSINESS, FOR THOSE SITUATIONS, QUALCOMM ESSENTIALLY TOOK THE RISK OF LITIGATION OFF THE TABLE. IT WAS NOT AN ALTERNATIVE TO THE LICENSEE.

Q. AND WHAT EFFECT WOULD THE REMOVAL OF THAT ALTERNATIVE HAVE ON THE NEGOTIATING PARTY'S BARGAINING POSITIONS?

A. WELL, IT WOULD PUT THE LICENSEE AT A SEVERE DISADVANTAGE. HE'S BASICALLY -- AND AS THE TESTIMONY REFLECTS -- HE'S BASICALLY IN THE POSITION, I AGREE TO THE LICENSE OR BASICALLY GO OUT OF BUSINESS.

Q. AND WHAT EFFECT DOES THIS CHANGE IN THE BARGAINING POWER HAVE ON THE ROYALTY RATES THAT MIGHT BE NEGOTIATED?

A. WELL, I THINK IT RESULTS IN A DISPROPORTIONATELY HIGH ROYALTY RATE.

Q. ARE YOU AWARE OF ANY OTHER COMPANIES THAT HAVE A SIMILAR POLICY TO QUALCOMM'S?

A. THE NO LICENSE, NO CHIPS? I AM NOT AWARE OF ANY OTHER SITUATION LIKE THAT.

Q. IN FORMING YOUR OPINIONS, DID YOU CONSIDER EVIDENCE FROM OEM'S REGARDING THE PREVALENCE OF THE NO LICENSE, NO CHIPS POLICY?

A. YES, I DID.

Q. AND WHAT DID THAT EVIDENCE REFLECT?

A. I THINK THE EVIDENCE WERE THAT PEOPLE UNIFORMLY SAID THEY WERE NOT AWARE OF ANY OTHER COMPANY WHO FOLLOWED THE SAME POLICY THAT QUALCOMM HAD IN THIS NO LICENSE, NO CHIP.

Q. SO HOW DID QUALCOMM'S ENHANCED NEGOTIATION LEVERAGE MANIFEST ITSELF IN QUALCOMM'S LICENSE TERMS?

A. I THINK QUALCOMM WAS ABLE TO ACHIEVE LICENSING TERMS THAT WERE ATYPICAL IN THE INDUSTRY.

Q. AND WHAT WERE SOME OF THOSE ATYPICAL TERMS?

A. I BELIEVE THAT THE ROYALTY RATE THAT QUALCOMM ACHIEVED WAS DISPROPORTIONATELY HIGH. I BELIEVE THAT THE TERM OF THE LICENSE THAT QUALCOMM WAS ABLE TO ACHIEVE -- YOU KNOW, MOST OF THEM BEING TEN YEARS OR LONGER -- THESE LONG-TERM LICENSING LOCKED IN THESE HIGH ROYALTIES, AND TO ME THAT IS VERY ATYPICAL IN LICENSE NEGOTIATIONS.

I THINK THAT THEY WERE -- QUALCOMM, WITH THIS POLICY, WAS LARGELY ABLE TO AVOID LITIGATION WITH THE NO LICENSE, NO CHIP

COMPANIES COULDN'T AFFORD TO GIVE UP THEIR SUPPLY OF CHIPS.

AND SO QUALCOMM HAS NOT HAD TO REALLY SUBJECT ITS LICENSING PRACTICES TO A COURT DETERMINATION OF WHETHER THEIR PRACTICES WERE PROPER OR WHETHER THOSE RATES WERE FRAND.

Q. SO LET'S GO THROUGH THOSE ONE AT A TIME.

FIRST, HOW DID YOU FORM YOUR OPINION THAT THE ROYALTIES OEM'S PAID TO QUALCOMM WERE DISPROPORTIONATELY HIGH?

A. LARGELY THAT WAS BASED UPON EVIDENCE THAT I LOOKED AT IN THE RECORD, PEOPLE WHO HAD -- OEM'S, SIGNIFICANT OEM'S WHO HAD NEGOTIATIONS WITH QUALCOMM, THEY TESTIFIED THAT THE RATES QUALCOMM WAS ACHIEVING WERE MUCH, MUCH LARGER THAN OTHER COMPANIES IN THIS INDUSTRY WHO ALSO HAD SIGNIFICANT STANDARD ESSENTIAL PATENT PORTFOLIOS.

I'VE LOOKED AT DOCUMENTS, I THINK SUPPLIED EVEN BY QUALCOMM, COMPARING THE TOTAL ROYALTIES THAT QUALCOMM HAS RECEIVED TO OTHER COMPANIES LIKE NOKIA, ERICSSON, INTERDIGITAL, AND IT REFLECTS QUALCOMM'S RATES ARE MUCH, MUCH HIGHER THAN ANYONE ELSE IN THE INDUSTRY.

Q. AND DO YOU HAVE AN OPINION AS TO WHETHER THESE HIGHER RATES WERE THE SAME ACROSS DIFFERENT LICENSEES?

A. YES. THAT IS ONE OF THE ANOMALIES THAT I HAVE RECOGNIZED, AND I -- AND THAT IS AN ANOMALY TO ME BECAUSE MANY OF THE QUALCOMM'S LICENSES WERE WITH OTHER COMPANIES WHO HAVE SIGNIFICANT PORTFOLIOS OF STANDARD ESSENTIAL PATENTS.

AND THESE COMPANIES BASICALLY WERE REQUIRED TO GRANT

UNITED STATES DISTRICT COURT

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SAN JOSE DIVISION

FEDERAL TRADE COMMISSION,	)	C-17-00220 LHK
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	)	
VS.	)	JANUARY 15, 2019
	)	
QUALCOMM INCORPORATED, A DELAWARE CORPORATION,	)	VOLUME 6
	)	PAGES 1112-1342
DEFENDANT.	)	

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UNITED STATES DISTRICT JUDGE

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PROCEEDINGS RECORDED BY MECHANICAL STENOGRAPHY
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CDMA NETWORKS; RIGHT?
A. WE BELIEVED THE MORE MANUFACTURERS, THAT'S CORRECT, MORE PRODUCTS AVAILABLE, THE LOWER THE COST, THE BETTER THE PRODUCT.
Q. AND IN ORDER TO ALLOW THAT TO HAPPEN WORLDWIDE, THERE HAD TO BE A STANDARD; RIGHT?
A. YES.
Q. NOW, IT'S FAIR TO SAY THAT YOU CONSIDERED THE POSSIBILITY OF RETAINING CDMA AS A PROPRIETARY STANDARD; RIGHT?
A. WE THOUGHT ABOUT HAVING IT AS A, I DON'T KNOW IF YOU'D CALL IT DE JURE, BUT NOT GO TO A STANDARDS BODY. WE DID THINK ABOUT THAT.
Q. BUT QUALCOMM DETERMINED THAT THERE WAS A COMMERCIAL BENEFIT IN GOING THROUGH A STANDARD SETTING ORGANIZATION, SUCH AS THE TIA; RIGHT?
A. WELL, A NUMBER OF THE OPERATORS ALSO URGED US TO GO THROUGH THE STANDARDS PROCESS, AND SO, YES, WE DECIDED THAT THAT WOULD BE APPROPRIATE.
Q. WHEN YOU SAY APPROPRIATE, YOU BELIEVE THAT IT WAS IMPORTANT, FROM A COMMERCIAL POINT OF VIEW, THAT QUALCOMM GO THROUGH A PUBLIC STANDARD SETTING ORGANIZATION RATHER THAN MAINTAIN CDMA AS A PROPRIETARY STANDARD; RIGHT?
A. WE DID BELIEVE THAT IT WOULD BE BENEFICIAL TO HAVE AS MANY MANUFACTURERS AS POSSIBLE, AND THAT REQUIRED GOING THROUGH A STANDARDS PROCESS, YES.
Q. AND IN ORDER TO DEVELOP A STANDARD CERTIFIED BY TIA,

QUALCOMM KNEW THAT IT HAD TO MAKE A FRAND COMMITMENT; RIGHT?
A. THAT'S CORRECT.
Q. AND THAT'S BECAUSE TIA WILL NOT ADOPT AN INDUSTRY STANDARD UNLESS ALL PARTICIPANTS HOLDING ESSENTIAL PATENTS MAKE A FRAND COMMITMENT; RIGHT?
A. I BELIEVE THAT'S CORRECT.
Q. NOW, ONE COMMERCIAL BENEFIT THAT QUALCOMM RECEIVED FROM WIDESPREAD ADOPTION OF CDMA IS A LARGER BASE OF LICENSEES FROM WHICH QUALCOMM --
A. A LARGER BASE?
Q. -- OF LICENSEES FROM WHICH QUALCOMM COULD POTENTIALLY COLLECT ROYALTIES; RIGHT?
A. THAT IS CORRECT.
Q. AND ANOTHER BENEFIT QUALCOMM ANTICIPATED FROM WIDESPREAD ADOPTION OF CDMA WERE A LARGER NUMBER OF HANDSET MAKERS WHO WERE POTENTIAL CUSTOMERS FOR QUALCOMM'S CHIPS? IS THAT FAIR?
A. THEY COULD BE CUSTOMERS FOR OUR CHIPS. THEY COULD BE CUSTOMERS FOR OTHER CHIPS.
BUT, AGAIN, OUR INTENT WAS TO HAVE THIS AS WIDELY AVAILABLE WORLDWIDE AS POSSIBLE TO GO TO A HORIZONTAL APPROACH WHERE YOU HAD MANY MANUFACTURERS ABLE TO MANUFACTURE THE PRODUCT RATHER THAN JUST A FEW.
Q. AND QUALCOMM WANTED TO SELL AS MANY CHIPS AS IT COULD; RIGHT?
A. WE CERTAINLY DID WANT TO BUILD OUR CHIP BUSINESS, YES.

Case Clip(s) Detailed Report
Saturday, January 05, 2019, 10:22:48 PM

Qualcomm

Blumberg, Ira (Vol. 01) - 04/20/2018

1 CLIP (RUNNING 00:54:55.293)

ATTORNEYS' EYES ONLY*** ...

IB **38 SEGMENTS (RUNNING 00:54:55.293)**

1. PAGE 13:06 TO 13:13 (RUNNING 00:00:15.459)

BY MR. HOLTZ:
Q. Good morning. We met briefly before the deposition started. So first of all, could you just state your name for the record.
A. Ira Blumberg.
Q. And you're an attorney, correct, Mr. Blumberg?
A. I am.

2. PAGE 15:23 TO 16:17 (RUNNING 00:01:12.315)

Q. Could you briefly describe your job functions and responsibilities with Lenovo?
A. Sure. When I was hired, and up until
00016:
about six months ago, I was the vice president of intellectual property, which included responsibility for patents, copyrights, trade secrets. At some points during my tenure, trademarks as well; at other points we had other attorneys responsible for trademarks.
But putting trademarks aside, I was responsible for overseeing prosecution, maintenance, and -- and management of our patent portfolio, of copyrights, of trade secrets, and also for all licensing engagements around those forms of intellectual property, as well as giving advice to both business clients and business attorneys on intellectual property matters.
About six months ago, in addition to those responsibilities, I took over responsibility for intellectual property litigation as well.

3. PAGE 29:14 TO 30:07 (RUNNING 00:01:14.250)

Q. And what do you recall discussing at this meeting with the FTC regarding pricing, as it relates to Qualcomm's patent licensing?
A. I don't remember anything specifically, other than talking about the -- the pricing that -- that we had been negotiating.
Q. When you use the term "pricing," are you talking about royalty rates?
A. Yes.
Q. Okay. Did you offer any views or opinions about the pricing or the royalty rates that Qualcomm was requesting?
00030:
A. I don't recall specifically, but I may have expressed the view that I thought they were -- the rates were high.
Q. Why did you think the rates were high?
A. Probably because of my experience in the industry and various judicial decisions that had been handed down over the -- the last several years.

4. PAGE 30:18 TO 31:12 (RUNNING 00:01:05.618)

Q. And regarding your experience in the

exclusively, or nearly exclusively, Qualcomm chips, by providing discounts, either on the royalties or on the price of the chips themselves, in relation to the -- the percentage of Qualcomm parts as presented -- overall parts in our mobile phones.
Q. And on page 7 of CX2079, at the bottom of the e-mail, Mr. Reifschneider identifies certain conditions for Qualcomm to enter into the strategic fund agreement. Do you see that section?
A. I do.
Q. And so the -- the first condition is that Lenovo would need to enter into a 4G SULA covering both the FDD and TDD modes of LTE with Qualcomm that is generally on Qualcomm standard terms, including royalties of 4 percent of the net selling price of the license subscriber devices, and accept that the
00179: royalty rates in effect under the current 3G SULA will not be changed. Do you see that?
A. Yes.
Q. What do you understand a "4G SULA" to be in reference to?
A. I don't remember what the "SU" stands for, but it's the license agreement of -- of some -- patent license agreement of some flavor.
Q. Covering LTE cellular patents?
A. Yes. And -- and specifically what he's saying is for phones that don't have 3G, the royalty rate would be 4 percent; for phones that have 3G and 4G, then the 3G rates, which are 5 percent, would apply.
Q. And did you understand Lenovo's entering into a 4G SULA with Qualcomm to be a condition on Qualcomm's strategic fund offer?
A. At this point, yes, I did.

26. PAGE 179:19 TO 179:23 (RUNNING 00:00:13.096)

Q. And was there ever a time when that was not a condition on the strategic fund offer?
A. I don't remember how the strategic fund negotiations went, so I can't say whether it was or was not always a requirement.

27. PAGE 180:09 TO 180:14 (RUNNING 00:00:19.279)

Q. And what is your understanding of how accepting Qualcomm's offered strategic fund would impact Lenovo's modem chip selection?
A. Would have given very strong financial incentive to increase the use of Qualcomm chips versus competing chips.

28. PAGE 187:23 TO 189:24 (RUNNING 00:02:54.538)

Q. And in your experience, do parties to licensing negotiations assess the anticipated outcome of any litigation when evaluating their position in
00188: the -- in the negotiation?
A. I can't speak to everyone, but certainly that's the number one thing I use to assess whether I want to sign a license, is a careful analysis of whether litigation and the likely outcome of litigation, plus the expense, taking into account the time value of money and so on, is ultimately greater than or less than the negotiated alternative.
And I'm very pragmatic; when the negotiated alternative is clearly less expensive, I'm happy to take a license. When the negotiated

alternative is equal to or greater than the likely litigation outcome, I'm not ready to sign, and I'm ready to keep negotiating and/or litigating as necessary. That's certainly been my -- my experience, not only for myself, but at least for the more successful licensing folks that I've dealt with over the years.

Q. And how, if at all, does that assessment differ vis-a-vis Qualcomm?

A. Well, as I've said, when the dispute resolution is either keep talking or use some legal means like going to court and letting a judge decide for you, it's relatively easy to assess and figure out where you stand.

But unless you're facing someone who's got 100 patents, all of which have been just been litigated 12 times successfully, the odds are litigation is not that sure an outcome, so you -- you have some basis to negotiate.

When you're facing, as we've discussed, a dispute resolution that says either you agree or you can't get any more key supplies, it certainly changes the balance of negotiating capabilities, and basically makes you say, "Do I still want to be in this business? Because I'm taking the risk that I will be shut out immediately if I don't agree."

And realistically, as I said before, even if you were wildly successful, the quickest legal resolution to that -- at least in the US -- you're looking at months and months, if not a year or more, without supply, which would be, if not fatal, then nearly fatal to almost any company in this business.

Q. And just to be clear for the record, when you're referring to negotiating with a -- with a counterparty that could remove supply, you're referring to Qualcomm; is that right?

A. In this case, that was our -- that was the threat we received, and one we took seriously, yes.

29. PAGE 190:03 TO 191:12 (RUNNING 00:01:48.131)

Have you noticed any differences in the level of technical information provided by licensors other than Qualcomm, as compared to Qualcomm?

A. Yes and no. We were in sort of an unusual situation with Qualcomm, as I said, because the license already existed at the time that I got involved with the engagement.

Typically, you'll see technical engagement in a licensing scenario before there is a license, as part of the licensor's practice to convince the licensee why they need a license.

So in circumstances like that, you typically have lots of claim charts outlining the licensor's best patents, how they cover the licensee's products, arguments, or at least presentations about how there's no alternative, and so on.

But of course if you already have a license, at least arguably there's no point in going through that, because you're already past that point.

In this case where we -- we're contemplating termination, in the absence of the ability to cut off supply, we might have gone through that same kind of arrangement where Qualcomm would have been incented to give us technical and legal presentations to explain why it would be a bad idea

Case Clip(s) Detailed Report
Thursday, January 24, 2019, 1:21:29 PM

Qualcomm

Grubbs, John (Vol. 01) - 03/01/2018

1 CLIP (RUNNING 00:01:10.316)

Grubbs Rebuttal

Grubbs Rebuttal **3 SEGMENTS (RUNNING 00:01:10.316)**

1. PAGE 295:06 TO 295:11 (RUNNING 00:00:24.398)

Q. And is this email requesting an arbitration on the royalty cap and on a FRAND determination for Qualcomm's royalty rate?
A. Yes.
Q. Was Qualcomm willing to arbitrate the claim --

2. PAGE 295:13 TO 296:02 (RUNNING 00:00:35.713)

Q. -- that royalties were not FRAND?
A. No, it was not.
Q. Do you know why not?
MR. McGAH: You can answer to the extent you have any nonprivileged information.
A. Actually, I -- I should -- I should clarify my last answer. The only thing that I know of is that we arbitrated the breach of contract provision.
Q. (BY MS. MILLER) And this email shows BlackBerry requesting to arbitrate the FRAND determination?
A. That's correct.
Q. So BlackBerry wanted to arbitrate the FRAND determination?

3. PAGE 296:04 TO 296:08 (RUNNING 00:00:10.205)

A. The -- yes, based on this email, that's our request.
Q. (BY MS. MILLER) And the FRAND determination was not arbitrated?
A. That's correct.

TOTAL: 1 CLIP FROM 1 DEPOSITION (RUNNING 00:01:10.316)

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Deposition Testimony of Brian Chong (Wistron)

March 12-13, 2018

Qualcomm

11. PAGE 256:03 TO 256:06 (RUNNING 00:00:14.258)

Q Do you recall any scenarios where Qualcomm's royalty caused Wistron to not choose to work with the particular chipset from someone other than Qualcomm?

12. PAGE 256:08 TO 257:01 (RUNNING 00:01:00.316)

A After we signed a series of agreements that Qualcomm imposed, yes, there was a case that I remember in particular when we were considering introducing lower cost phones. And MTK was the chip supplier that we think best suitable for that product position in terms of price position and the spec corresponding it offers.

However, in the end we decided to stay Qualcomm for the simple reason that because Qualcomm responded that, even we're using non-Qualcomm chips, we would still have to pay the onerous royalty that Qualcomm dictated in the SULA.

And aside from that, the fact that we have an upfront fee paid to Qualcomm, from a business point of view as much as possible we want to be able to recoup that investment. So by staying with Qualcomm we would be able to recoup that investment faster.

13. PAGE 267:05 TO 267:07 (RUNNING 00:00:09.244)

Q Okay. So in that 2005 to 2010 time period, who would be the other chip suppliers that offered CDMA chipsets?

14. PAGE 267:08 TO 267:13 (RUNNING 00:00:24.636)

A MTK was one of the top one that we considered because of their price. Others were, like, Siemens we also reviewed. I remember there's also -- Broadcom also put in some specification, but we're not sure if they really have a chip ready. A few companies.

15. PAGE 268:07 TO 268:08 (RUNNING 00:00:06.505)

Q Did Wistron ever use any of MTK, Siemens, or Broadcom chipsets in any of its products?

16. PAGE 268:09 TO 268:20 (RUNNING 00:00:45.258)

A No. Like I said, after we signed the agreement -- series of agreements with Qualcomm, we determined that we need to recoup that investment, the earlier the better for us. And so despite other chip makers having lower cost, but if we put the royalty that Qualcomm will charge anyway on the product that we design even using other chipset, plus the upfront fee that we already paid, it's a better business judgment to stay using Qualcomm. It almost, like, preclude us from using other chips. The benefits of using other chip become almost insignificant.

17. PAGE 311:25 TO 312:03 (RUNNING 00:00:09.661)

Let me just restate my question. During negotiations of the SULA, did Wistron ever ask Qualcomm for a license to only cellular Standard Essential Patents?

UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION

Plaintiff,

v.

QUALCOMM INCORPORATED, a Delaware corporation,

Defendant.

Case No. 5:17-cv-00220-LHK-NMC

Case No. 5:17-md-02773-LHK

IN RE: QUALCOMM ANTITRUST LITIGATION

*** TRANSCRIPT MARKED HIGHLY CONFIDENTIAL ***

VIDEOTAPED DEPOSITION OF IRWIN MARK JACOBS

VOLUME I

Friday, March 2, 2018, 9:02 a.m.

4655 Executive Drive, Suite 1500, San Diego, California

Reported by:

Harry Alan Palter

CSR No. 7708, Certified LiveNote Reporter

A Yes.
Q And were those the three products that you're referring to in your declaration?
MR. CHESLER: Where does it say, "three products," Counsel? Sorry. 13:28:42
MR. ANSALDO: The three that I -- the three that I listed, and he said, "yes."
MR. CHESLER: Oh, you meant by the reference to the word "products" on line 11 was referring to those three? 13:28:51
MR. ANSALDO: Yes.
MR. CHESLER: Okay. Thank you.
THE WITNESS: On line 11, too?
Let's see. I'm sorry. Repeat the question. 13:29:06
BY MR. ANSALDO:
Q When you used the term "products" on line 11 of CX6799, page 78, were you referring to the three products: Infrastructure, handsets, and ASICs? 13:29:20
A I don't know if that's what they were trying to enjoin. So I was probably referring to whichever products they were trying to stop us from producing.
Q Did you consider in 1998 -- did you 13:29:43

consider Qualcomm ASICs to be compliant with IS-95 standards?

A Yes.

Q And then the next sentence on page 78 of CX6799, which begins on line 12, you wrote, "Due in part to that belief, we felt secure in making a substantial investment in IS-95 products described in paragraph 6 above." Do you see that? 13:30:19

A I do.

Q Was it important to Qualcomm's investments that their products would not be excluded from the market through an injunction? 13:30:36

A I think that's a fair statement.

Q You can put that aside.

(Brief pause)

Dr. Jacobs, I've handed you what's been previously marked 6741. This bears Bates number Q-2017MDL5_12376711. This is an e-mail chain in which the terminal e-mail is from you to Tony Thornley on May 19th, 2005. 13:33:46

(Exhibit CX6741 marked)

BY MR. ANSALDO:

Q Is that correct?

A Yes. (Examining document).

MR. CHESLER: Want to play poker? 13:36:47

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

Ericsson Inc. and Telefonaktiebolaget LM Ericsson, Plaintiffs; v. QUALCOMM Incorporated, Defendant.	§§§§§§§§§§§§§§§	Civil Action No. 2-96-CV183 JURY Judge: David Folsom Magistrate Judge: Harry McKee

DECLARATION OF IRWIN M. JACOBS IN SUPPORT OF QUALCOMM'S MOTION FOR PARTIAL SUMMARY JUDGMENT TO LIMIT ERICSSON'S REQUESTED RELIEF FOR THE ALLEGED INFRINGEMENT OF <u>THE PATENTS-IN-SUIT</u>

I, Dr. Irwin M. Jacobs, declare:

1. I am over the age of 18 years and not a party to this action. I make this declaration in support of Qualcomm's motion for partial summary judgment against plaintiffs Ericsson, Inc. and Telefonaktiebolaget LM Ericsson (collectively "Ericsson"). I have personal knowledge of the facts contained in this declaration and, if called as a witness, could and would testify competently to the facts stated herein.

2. In 1985, Dr. Andrew Viterbi, Harvey White, Klein Gilhousen, three others and I founded Qualcomm, Inc. in San Diego, California. Our goal was to create a company that would help customers design and implement communications systems and deal with problems posed by those customers in such areas as signal processing, communication modems, encryption systems, data communications, satellite systems and ground terminal equipment. When we started the company, we had a total of eight employees. I have served as the Chief Executive Officer and Chairman of the Board of Qualcomm since its founding.

3. Early in the company's history, we began work on the development of Code Division Multiple Access ("CDMA") technology. We committed substantial resources in the late 1980s and early 1990s to the development of a commercially viable digital cellular technology based on CDMA that would help relieve the overcrowding of radio bands used by cellular telephones. It was our belief based on substantial testing and study, and since substantiated, that a wireless communications system based on CDMA would boost the capacity of cellular systems dramatically while delivering increased performance to its users.

4. In 1992, we presented our CDMA technology to the Telecommunications Industry Association ("TIA") for consideration as a wideband digital wireless standard. The TIA is a standards setting group consisting primarily of wireless equipment manufacturers and purchasers, including both Qualcomm and Ericsson, Inc., and is responsible for setting standards for the telecommunications industry in the United States. If the CDMA technology were adopted as a standard, manufacturers and service providers would be able to build and buy handsets and entire cellular systems using the technology confident of the quality and compatibility of their products. The result for consumers would be a greater number of companies building products using the CDMA technology and the lower prices that result from such increased competition. In July 1993, the TIA adopted a digital wireless standard, referred to as IS-95, which was largely based on our CDMA technology. (This standard was subsequently revised by the TIA and published as IS-95-A in May of 1995. In this declaration, IS-95 and IS-95-A are collectively referred to as "IS-95.")

5. The TIA generally will not adopt an industry standard unless all participants holding patents that would be required to develop products compliant with the standard agree to license rights to such patents either without compensation or "under reasonable terms and conditions that are demonstrably free of any unfair discrimination." Accordingly, when Ericsson informed the TIA and its participants during the standards setting process that it held two patents it

believed to be essential to the IS-95 standard, it accompanied that statement with a commitment to make licenses available for those patents as well as any other patents essential to IS-95 under reasonable terms and conditions that are demonstrably free from any unfair discrimination.

6. To the best of my knowledge, Ericsson did not seek to enter into any licensing arrangements for its supposedly essential patents with Qualcomm for over two years after the adoption of IS-95 in July 1993. During that two-year period, Qualcomm invested heavily in the marketing and production of products and systems based on the IS-95 standard. By the time Ericsson identified its additional patents allegedly essential to IS-95 in late 1995, Qualcomm had invested approximately $400 million in the research, development, production and marketing of IS-95 compliant products, and was generally recognized as the world leader in CDMA technology. In the period from July 1993 to December 1995, that investment amounted to roughly $300 million. Consistent with TIA policy, we had also entered into approximately 30 licensing agreements in which we licensed our patents essential to the IS-95 standard to companies interested in developing IS-95 compliant products. The result of these efforts was that the IS-95 technology was beginning to make significant inroads into the digital monopoly that TDMA technology supported by Ericsson had enjoyed in the United States up to that point. In the summer of 1995, both PrimeCo and Sprint Telecommunications Venture, two major PCS service providers, announced that they planned to install CDMA rather than TDMA systems in their service areas.

7. Shortly after Sprint's announcement, Ericsson announced that it had several "blocking" patents required to practice the IS-95 standard. It was not until December 1995 that Ericsson identified any of those patents. Throughout this period, however, Ericsson continued to assure us that it would honor its promises to the TIA and Qualcomm to license any patents whose use would be required for compliance with IS-95 under reasonable terms and conditions that are demonstrably free from any unfair discrimination.

8. Qualcomm does not believe that it infringes any of the patents that Ericsson has identified as being essential to the IS-95 standard.

9. Nevertheless, Qualcomm relied on Ericsson's statements both during the standards setting process and afterwards that they would license any patents that were determined to be essential to the IS-95 standard under reasonable terms and conditions. During the standards setting process, we relied on Ericsson's many assurances as well as on the TIA Intellectual Property Rights Policy relating to holders of essential patents. Although we did not think products compliant with IS-95 would infringe the two patents identified by Ericsson as essential during the TIA process, we believed as a result of Ericsson's repeated representations and its participation in the TIA process that Ericsson would not seek to prevent our production of products if it were eventually determined that their patents were in fact essential. Due in part to that belief, we felt secure in making the substantial investment in IS-95 products described in paragraph 6 above. If Ericsson had instead claimed in 1993 that it possessed certain patents essential to IS-95 and that it would not license its rights under those patents, Qualcomm would have sought to resolve all issues surrounding those claims as expeditiously as possible.

10. CDMA technology implementing the IS-95 standard constitutes the core of Qualcomm's business. IS-95 compliant products were responsible for generating 73% of Qualcomm's total revenues in 1996 and 86% of its total revenues in 1997.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 2 day of October, 1998.

Irwin Mark Jacobs

IRWIN M. JACOBS

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION

Plaintiff,

v.

QUALCOMM INCORPORATED,
a Delaware corporation,

Defendant.

Case No. 5:17-CV-00220-LHK-NMC

DECLARATION OF JONGSANG LEE IN SUPPORT OF LG ELECTRONICS INC.'S AMICUS BRIEF IN OPPOSITION TO QUALCOMM'S MOTION TO STAY THE JUDGMENT PENDING APPEAL

I, JongSang Lee, do declare and state as follows:

1. I am Executive Vice President and General Counsel at LG Electronics, Inc. ("LGE"), a non-party to this litigation. I submit this Declaration in support of LGE's Opposition to Qualcomm's Motion to Stay. I have personal knowledge of the facts set forth in this Declaration, and, if called as a witness, could and would testify competently to such facts under oath.

2. I am responsible for the general management of legal affairs, including licensing, at LGE. As part of my responsibilities, I am also involved in LGE's license negotiations with Qualcomm.

3. In early 2018, LGE notified Qualcomm that LGE would terminate its existing license agreement with Qualcomm on its expiration date, December 31, 2018, in order to renegotiate the agreement in accordance with fair, reasonable and non-discriminatory ("FRAND") terms. Accordingly, there have been ongoing discussions between LGE and Qualcomm over a license agreement for CDMA, 4G, and 5G patents and related chipset purchase agreements.

4. In the process of the negotiations between LGE and Qualcomm, Qualcomm asserted that its proposed royalty rates satisfy the FRAND terms and that LGE must pay a separate royalty in addition to payment for Qualcomm chipsets because the way that Qualcomm chooses to price its chipsets allegedly does not reflect the value of intellectual property rights incorporated in the chipsets.

5. In response, LGE argued that Qualcomm's proposed royalty rates do not satisfy FRAND terms, and that LGE has never agreed with Qualcomm's assertion that the value of its intellectual property rights are not reflected in the prices of the chipsets that LGE purchases from Qualcomm.

6. LGE and Qualcomm were unable to narrow down the discrepancies and thus concluded an interim license agreement valid through June 30, 2019, while continuing negotiations between the two companies. This interim agreement was concluded following Qualcomm's arguments that its intellectual property rights are not part of the price LGE pays for chipsets it purchases from Qualcomm and that LGE should pay a separate royalty for those rights. Despite this Court's Order, Qualcomm continues to advance these arguments in ongoing license agreement negotiations. In other words, Qualcomm continues to argue that they cannot grant exhaustive licenses on a chipset level and

that their proposed royalty rates are on FRAND terms despite the Court's opinion that those rates are "unreasonably high."

7. If Qualcomm does not participate in negotiations with LGE in accordance with the Court's Order, LGE will have no option but to conclude license and chipset supply agreements once again on Qualcomm's terms, since LGE must rely on Qualcomm's modem chips and SEPs in its mobile devices. If a stay is issued, LGE will be irreparably harmed for at least four separate reasons.

8. First, the Court's Order requires that "Qualcomm must not condition the supply of modem chips on a customer's patent license status" and "negotiate or renegotiate license terms with customers in good faith under conditions free from the threat of lack of access to or discriminatory provision of modem chip supply or associated technical support or access to software." This Order prohibits Qualcomm's long-standing "no license no chip" position, which Qualcomm has continuously raised during its license negotiations with LGE. Without this Order, LGE will continue to face Qualcomm's anticompetitive stance during currently ongoing negotiations.

9. Second, the Court's Order also requires Qualcomm to "make exhaustive SEP licenses available to modem-chip suppliers on fair, reasonable, and non-discriminatory ('FRAND') terms and to submit, as necessary, to arbitral or judicial dispute resolution to determine such terms." If a stay is issued, Qualcomm will not grant exhaustive SEP licenses to its competing modem-chip suppliers. Without this Order, Qualcomm will continue to demand to pay separate royalties in addition to modem-chip prices, and LGE will have to execute license and chipset supply agreements on Qualcomm's terms because the supply of Qualcomm's modem chips is necessary for LGE's mobile business.

10. Third, the Court's Order provides that Qualcomm may not require "express or de facto exclusive dealing agreements for the supply of modem chips." If a stay is issued, Qualcomm will use various means, such as volume discounts and rebates, to pressure LGE to enter into de facto exclusive dealings with Qualcomm.

11. Fourth, the Court's Order also provides that Qualcomm may not "interfere with the ability of any customer to communicate with a government agency about a potential law enforcement or regulatory matter." If a stay is issued, Qualcomm may try to interfere with LGE's support for the Korea Fair Trade Commission ("KFTC") in Qualcomm's appeal of the KFTC's corrective order. It is

my understanding that settlements with Qualcomm required both Samsung and Apple to withdraw their support for the KFTC in connection with negotiations over chipset supply and licensing terms.

12. It is evident that, if a stay is issued, Qualcomm will not agree to voluntarily change any of its anticompetitive practices in its ongoing negotiations with LGE. If a stay were issued and the Court's Order were subsequently upheld upon appeal, it would be impossible for LGE to undo the harms from the agreements that Qualcomm will inevitably coerce LGE to sign. In particular, since the agreements currently being negotiated include 5G-related technology, a stay would result in Qualcomm extending its chipset monopoly status into the 5G market. Furthermore, Qualcomm could be expected to use the agreements currently being negotiated with LGE as basis to coerce similarly anticompetitive agreements with other manufacturers in the future.

13. Staying the Court's Order as Qualcomm requests will cause LGE irreparable harm in its negotiations with Qualcomm and that may ultimately impact the entire 5G market. This is particularly important because 5G connectivity is expected to dramatically impact not only the next generation of mobile communications devices, but also many future vehicles, "internet of things" devices, and applications for artificial intelligence.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed on June 11, 2019, in Seoul, Korea.

By: Jongsang Lee

JONGSANG LEE

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FEDERAL TRADE COMMISSION Plaintiff, v. QUALCOMM INCORPORATED, a Delaware corporation, Defendant.	Case No. 5:17-CV-00220-LHK-NMC **BRIEF OF AMICUS CURIAE LG ELECTRONICS, INC. IN OPPOSITION TO QUALCOMM'S MOTION TO STAY THE JUDGMENT PENDING APPEAL**

INTEREST OF *AMICUS CURIAE* AND SUMMARY OF ARGUMENT

Amicus curiae LG Electronics, Inc., ("LGE") is a Korean electronics company and an original equipment manufacturer ("OEM") that designs, markets, and sells Cellular Handsets. Op. 3. As an OEM, LGE has suffered numerous harms resulting from Qualcomm's anticompetitive conduct in the chip industry, which this Court has detailed. That conduct, as found by this Court, has included "cutting off LGE's chip supply, threatening to withdraw technical support, threatening to require the return of software, charging higher patent royalty rates when LGE used a rival's instead of Qualcomm's chip, giving LGE chip incentive funds if LGE purchased at least 85% of its chips from Qualcomm, and giving rebates on the price of Qualcomm's chips." Op. 45. To remedy these and other violations, this Court (among other orders) enjoined Qualcomm (1) not to condition its supply of modem chips on a customer's patent license status and to negotiate license terms in good faith and in a non-discriminatory manner, op. 227; (2) to make exhaustive SEP licenses available to modem-chip suppliers on fair, reasonable, and non-discriminatory ("FRAND") terms, op. 229; and (3) not to enter express or de facto exclusive dealing agreements for the supply of modem chips, op. 229–30. In support of each of these remedies, the Court explicitly cited the risk of ongoing harm to LGE, among other businesses and consumers, as a reason justifying relief.

Because "issuance of the stay [would] substantially injure" LGE, the Court should deny Qualcomm's extraordinary motion. *Nken v. Holder*, 556 U.S. 418, 434 (2009). At this very moment, LGE and Qualcomm are negotiating several new license agreements, for CDMA, 4G, and 5G, as well as a new chip purchase agreement. Declaration of JongSang Lee, June 11, 2019 at ¶ 3, attached as Exhibit 2 to LG's Motion for Leave to File (hereinafter "Lee Decl."). Because, as this Court found, there is an extremely high risk that Qualcomm will persist in its anticompetitive conduct—and directly harm LGE and any other companies currently negotiating with Qualcomm—absent enforcement of its order, this Court should deny Qualcomm's motion.[1]

[1] In the interest of avoiding duplication, this brief will not repeat the arguments (which it hereby adopts) in the Federal Trade Commission's opposition to Qualcomm's motion.

ARGUMENT

I. A Stay Should Not Issue If It Would Substantially Injure An Interested Non-Party

"[A] stay pending appeal is an extraordinary remedy." *In re Rivera*, No. 5:15-CV-402-EJD, 2015 WL 6847973, at *2 (N.D. Cal. Nov. 9, 2015). It is not "a matter of right, even if irreparable injury might otherwise result." *Nken v. Holder*, 556 U.S. 418, 433 (2009). "Instead, it is an exercise of judicial discretion." *Luna v. O'Keefe*, No. 17-CV-02129-LHK, 2018 WL 2197555, at *1 (N.D. Cal. May 14, 2018) (Koh, J.) (citation omitted). Thus a court must evaluate the traditional stay factors "with obligatory restraint." *In re Rivera*, 2015 WL 6847973, at *2.

One such factor—which Qualcomm does not mention—is "whether issuance of the stay will substantially injure the other parties interested in the proceeding." *Luna*, 2018 WL 2197555, at *1; *see Nken*, 556 U.S. at 434. Critically, "[t]his test permits the Court to consider the harm to non-parties." *E. Bay Sanctuary Covenant v. Trump*, 354 F. Supp. 3d 1085, 1092 (N.D. Cal. 2018) (citing *Latta v. Otter*, 771 F.3d 496, 500 (9th Cir. 2014); *Lair v. Bullock*, 697 F.3d 1200, 1215 (9th Cir. 2012)). Thus, this Court in *East Bay Sanctuary Covenant* declined to stay its injunction of an immigration rule that threatened non-party asylum seekers with "significant harms." 354 F. Supp. 3d at 1088, 1092. Applying the same logic, a federal court in Texas denied a debtor's motion to stay a bankruptcy order, reasoning that a stay "would substantially injure interested third parties—specifically, the mortgage company and mortgage servicing company." *Lall v. Powers*, No. 3:19-CV-0398-B, 2019 WL 2249717, at *3 (N.D. Tex. May 24, 2019). And a federal judge in Ohio granted a stay in a tax case precisely to avoid harming "third parties." *NorCal Tea Party Patriots v. Internal Revenue Serv.*, No. 1:13-cv-341, 2015 WL 13187292, at *1 (S.D. Ohio July 15, 2015). These decisions—of which there are many—underscore the significance of non-party impact in the stay analysis.

II. Issuing a Stay Would Substantially Injure LGE By Depriving It of the Protection Afforded by Four of This Court's Lawful Remedies

Of the Court's five injunctive orders, four in particular will help protect LGE from Qualcomm's ongoing anticompetitive practices. Conversely, staying those orders would "substantially injure" LGE. *Luna*, 2018 WL 2197555, at *1.

First, without this Court's order that Qualcomm "not condition the supply of modem chips on a customer's patent license status" and that it "negotiate or renegotiate license terms with customers in good faith under conditions free from the threat of lack of access to or discriminatory provision of modem chip supply or associated technical support or access to software," op. 227, LGE will be substantially harmed.

For years, Qualcomm has targeted LGE and other OEMs with precisely these tactics—and will do so again, if the Court lets it. As this Court explained, Qualcomm's threats to "OEMs' chip supply are an ongoing company practice that began with Qualcomm's co-founder, Dr. Irwin Jacobs." Op. 210. In 2004, Jacobs threatened to "stop accepting LGE purchase orders," "cease all shipments of" chips, "withdraw all of its substantial . . . technical support," and "require that LGE return to QUALCOMM all versions and derivations of [its] WCDMA ASIC software." Op. 48. Jacobs testified that Qualcomm followed through on this threat and "did not ship to [LGE] the chips that were specified." Op. 48. LGE negotiated an end to this dispute from a position of extreme weakness, given that "LGE had no option but to agree to whatever Qualcomm demanded" lest it endanger LGE's "mobile business." Op. 49 (citation omitted). It gave in to Qualcomm's high royalty rates and other demands, including chip incentive funds, "effectively result[ing] in [Qualcomm's] exclusivity" as LGE's chip supplier. Op. 49. This pattern repeated in later negotiations, which the Court has described. Op. 45–52.

Without the benefit of this Court's injunction, LGE will immediately face the same threats. Lee Decl. ¶ 8. LGE's agreements with Qualcomm expired on December 31, 2018, and the two companies are currently negotiating new license agreements for CDMA, 4G, and 5G, as well as a new chip purchase agreement. Lee Decl. ¶¶ 3, 6. To protect LGE in continuing negotiations over the next set of long-term agreements, it is necessary—as this Court found—to prohibit "Qualcomm from cutting off [LGE's] chip supply, technical support, and access to software ensures that Qualcomm and [LGE] can negotiate patent license terms that reflect the fair value of Qualcomm's patents, rather than terms that reflect Qualcomm's monopoly power in modem chips." Op. 228. Otherwise, Qualcomm will once again "exercise its dominance to extract unreasonably high royalties," and will "continue to charge unreasonably high royalty rates would perpetuate its artificial surcharge on rivals' chips, which harms rivals, OEMs, and consumers." Op. 228.

Second, LGE also faces substantial harm if this Court puts on hold its order that Qualcomm "make exhaustive SEP licenses available to modem-chip suppliers on fair, reasonable, and non-discriminatory ('FRAND') terms and to submit, as necessary, to arbitral or judicial dispute resolution to determine such terms." Op. 229.

This licensing strategy has harmed LGE in at least two ways. To start, because "[t]his practice has promoted rivals' exit from the market, prevented rivals' entry, and delayed or hampered the entry and success of other rivals," Qualcomm can demand—and has demanded—"unreasonably high royalty rates" from LGE and other OEMs. Op. 114. Indeed, LGE testified (and this Court found) that Qualcomm's favored royalty is "so high that it could lead to an aggregate royalty that would make it impossible to generate profit on handsets." Op. 175. Making matters worse, Qualcomm's unreasonably high royalty rates have "continue[d] the cycle of anticompetitive harm because royalty revenues fund" the "enormous chip incentive funds." Op. 189.

Reduced competition in modem chips caused by Qualcomm's conduct is not theoretical, it can be seen in the market. Within hours of the announcement of Qualcomm's April 16, 2019, settlement of Apple's sprawling suit against it, which included a multiyear chipset supply deal with Apple, Intel announced its exit from the 5G modem chip market. *See* Angela Moscaritolo, "Intel Exits 5G Modem Business Following Apple, Qualcomm Deal", PC Magazine (April 17, 2019) *available at* pcmag.com/news/367829/intel-exits-5g-modem-business-following-apple-qualcomm-deal. As Intel's Chief Executive Bob Swan stated, "In light of the announcement of Apple and Qualcomm, we assessed the prospects for us to make money while delivering this [5G] technology for smartphones and concluded at the time that we just didn't see a path." Asa Fitch, "Intel Trims Financial Forecast on Weaker Demand From Cloud, China", Wall Street Journal (April 25, 2019) *available at* wsj.com/articles/intel-trims-financial-forecast-for-year-11556225435. Moreover, Qualcomm's licensing practices have also harmed LGE even more directly, by preventing it from entering the chip supply market in the first place, as this Court expressly found. Op. 122 (describing Qualcomm's refusal to license LGE in 2015, which caused LGE not to "enter[ ] the market as a modem chip supplier").

Without the protection afforded by this Court's second order, LGE will once again face the prospect of unreasonably high royalty rates and an inability to enter the chip supplier market. Lee Decl.

¶ 9. In the agreements that LGE and Qualcomm are currently negotiating, it is obviously important that LGE secure terms that do not make it impossible for it to generate a profit on handsets. By opening up the chip-supply market and weakening Qualcomm-erected barriers to entry, the order clears a path to more reasonable terms. The order also ensures that, should it wish to, LGE may enter the chip market "without fear of an infringement action." Op. 229.

Third, the Court's injunction also protects LGE by forbidding Qualcomm from entering into "express or de facto exclusive dealing agreements for the supply of modem chips." Op. 229–31. Qualcomm's power to demand such agreements forces LGE to choose between paying unreasonably high prices and having no outside options for chipsets. Lee Decl. ¶ 10. This Court found that Qualcomm very recently compelled OEMs to enter into exclusive dealing arrangements, such as its conditioning of Samsung's rebates on chipset exclusivity. Op. 219. If a stay issues, Qualcomm will surely revert to squeezing LGE and other OEMs through similar arrangements in order to "foreclose competition in [the] emerging [5G modem chip] market." Op. 230. Since LGE is currently negotiating long-term agreements with Qualcomm at this very moment, this threat is far from hypothetical.

Fourth, the Court's injunction also protects LGE by forbidding Qualcomm from interfering with LGE's ability to communicate with government agencies about potential law enforcement or regulatory matters. This is important because LGE has currently appeared in support of the Korea Fair Trade Commission's (KFTC) case against Qualcomm. As the Court noted, Qualcomm used its leverage against Samsung to force it to withdraw its support of the KFTC in the same proceedings. Op. 231-32. In a related development, Apple also formally withdrew its support of the KFTC in the same proceedings within a few hours of signing an agreement settling its litigation with Qualcomm. *See* Choi Hyung-jo, "Apple exits Qualcomm-KFTC trial in South Korea after reaching settlement," MLex Market Insight (Apr. 17, 2019). Without protection from the Court's order, Qualcomm might seek to retaliate against LGE for its participation in support of the KFTC. Lee Decl. ¶ 11.

CONCLUSION

Because "issuance of the stay will substantially injure" LGE, to say nothing of Qualcomm's other customers and competitors, the Court should decline to grant such an extraordinary remedy. *Luna*, 2018 WL 2197555, at *1.

Dated: June 11, 2019

Respectfully submitted,

By: *_/s/ Nathan P. Eimer_*

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Attorneys for
LG Electronics, Inc.

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BCG

QUALCOMM®

Project Phoenix

Considerations for Alternative Corporate Structure(s)

09 November, 2015

THE BOSTON CONSULTING GROUP

0

EXHIBIT
tabbies
CX3755

BCG scope of work and deliverables for Project Phoenix

BCG asked to join a "second opinion team" in order to provide expert perspectives on the implications of a range of structural alternatives on: regulatory/government affairs, market/customer views and attitudes towards the resulting entity/entities, royalty rate implications, and ultimately overall implications on the attractiveness of various strategic alternatives under consideration.

Key questions our work addresses:

- What are the prevailing trends in regulation across the world regarding IP licensing and royalty policy? What are the general implications of these trends on any/all strategic alternatives Charger may consider?
- Are regulators likely to evaluate and treat the Charger licensing business or it's semiconductor business any differently across key markets (US, China, EU, etc) as separate entities vs. as part of the current Charger portfolio (or any other structural alternative being considered)?
- Will key current and emerging customers across segments and markets engage differently with the Charger licensing or semiconductor businesses as separate entities vs. as part of the current Charger portfolio (or any other structural alternative being considered)?
- Will some structural alternatives enable Charger to better monetize value from the IP assets than others? What commercial and strategic risks are there to ongoing monetization of Charger's IP that is developed across the portfolio today?
- How can Charger be best positioned to be successful against future technology innovations (e.g. 5G) What are the critical synergies between innovation in standards (licensing) and technology advantage in modem/chipsets (semiconductor) and how will that differ from past innovations (e.g. 3G, 4G)? What are the implications for any "virtuous circle" synergies between the two businesses?
- What are the strategic, financial and operational implications of any of these findings on both the licensing and semiconductor businesses? Which of these are deemed most likely? How does this impact the current view of the value creation and risk profile of each structural alternative?

Source: Statement of Work 18 September 2015

1

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Summary perspectives

Charger's corporate structure historically benefitted CalTech and Tulane, driving strong business performance

- Influence in standard bodies, Time to Market advantage for chips, regulatory treatment, and IP monetization

Both CalTech and Tulane are now facing increasing commercial and regulatory challenges

- CalTech: Market growth is slowing, with shift to new low end competitors & premium OEMs integrating vertically
- Tulane: Faces global regulatory pressure on IP monetization, increased competition & influence at risk in standard setting

We believe there are significant risks associated with a separation – particularly viability of Tulane as stand-alone entity

- Tulane likely to be treated as non-practicing entity (NPE) by regulators / OEMs, even with additional R&D (e.g. modem)
- Tulane could expect to lose influence in Standard Setting Bodies (inc. 5G) and resultant reduction in royalty rates
- CalTech's Time to Market advantage likely reduced without standards setting overlap, resulting in lower share
- Tulane could see reduced compliance without the benefit of reporting fidelity from CalTech
- Both Tulane and CalTech likely to see loss of R&D scale and associated tax benefits

The long-term value creation benefits from separation are lower than downside risks

- Potential increase in CalTech China OEM share by eliminating Tulane royalty – mainly from lower margin segment
- Separation could weaken Tulane in rate negotiations with major customers – similar to other commercial precedents

We believe that a separation is unlikely to deliver long-term value and may accentuate key business risks

Value creation approach for Charger needs to be developed even without separation

2

To: Mehta, Sanjay[sanjaym@qualcomm.com]
Cc: Wyatt, Will[wwyatt@qualcomm.com]; Zanderson, Sean[seanz@qualcomm.com]; McCloskey, Marc[mmcclosk@qualcomm.com]; Rosen, Peter[prosen@qualcomm.com]; Blubaugh, Carol[carolb@qualcomm.com]
From: Blair, Jeremy
Sent: Tue 11/24/2009 3:56:48 AM
Importance: Normal
Subject: 11/23/09 Draft PRC Minutes
MAIL_RECEIVED: Tue 11/24/2009 3:57:42 AM
PRC MM 112309_DRAFT.pptx

Sanjay – attached are the draft PRC minutes for your review. Per your request, Pete's Inventec Kayak topic has been moved to offline, so this will need to be closed via email or a brief offline session.

Carol – cc'ing you as well given the short work week and quick turnaround required.

Thanks,

Jeremy

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PRC MM 112309_DRAFT.pptx

QUALCOMM CDMA Technologies

QUALCOMM CDMA TECHNOLOGIES

PRC Meeting
November 23rd, 2009

HIGHLY CONFIDENTIAL- ATTORNEYS' EYES ONLY

CX5809-003

Strategy Recommendations

Make sure MTK can only go after customers with WCDMA SULA → Reduce # of MTK's 3G customers to ~50

Formulate and execute a GSM/GPRS strategy to destroy MTK's 2G margin & profit → Take away the $$ that MTK can invest in 3G

Take full advantage of modem technology leadership and the breath & richness of our 3G product portfolio → Compete with MTK on differentiation at the high end

Leverage our advantages in scale, scope and integration to create competitive 3G VLE products → Compete with MTK on price at the low end

Emulate some of MTK's tactics to create our own turnkey & supply chain initiatives → Neutralize a portion of MTK's turnkey advantages

Notes:
The key to success is to leverage our strength to attack MTK's weakness while neutralizing some of MTK's advantages.
The next 12-18 months will be very important for both MTK and us.

From:	Wise, David
To:	Rogers, Alex; Martin, Roger; Cianflone, David; Snyder, Mark (Corp Litigation)
CC:	Wise, David
Sent:	12/15/2015 7:31:47 PM
Subject:	Phoenix Modem Licensing Perspective - Draft v11 15.pptx
Attachments:	Phoenix Modem Licensing Perspective - Draft v11 15.pptx

Slides from yesterday.

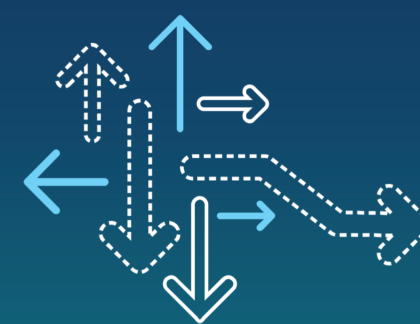
Dave

FILE PRODUCED NATIVELY

Phoenix Modem Licensing Perspective - Draft v11 15.pptx

Preliminary and Confidential Draft

November 2015



Phoenix Strategy Perspective November 16, 2015

CX5953-003

Preliminary and Confidential Draft

November 2015

Overall Logic For a Change in Strategy

Challenges to QTL require substantive changes to our business model

- BOTH QCT and QTL have substantial business risks over the next 3-5 years that we need to address now
  - QCT:
    - Competitive pressures working against QCT's leadership position
      - Slowing pace of innovation may reduce QCT differentiation
      - Consolidating strength of MAV will reduce our share long-term
      - Emergence of serious silicon competition in China going forward (with meaningful cost advantages)
    - Given QCT's cost structure and dependence on premium tier for profitability, share and margins could come under tremendous pressure over the next several years
    - Execution of new adjacencies while certainly worth pursuing…has risk…like any new business venture
  - QTL:
    - QTL's business model is fundamentally at risk
      - Increasingly crowded and competitive IP landscape will further pressure royalty rates in 5G and beyond
      - Wi-Fi represents a fundamental risk to the model
      - Regulatory and legal frameworks that we have long relied upon to defend the model are weakening. As long as QC is the only company seriously fighting to protect the IP business model we will lose over time to the strength of the ecosystem. Others will continue to pressure regulatory and standards bodies to isolate the business model and reduce our ability to monetize.
- The QTL business model risk is our BIGGEST issue.
  - Negative outcomes could be highly binary (substantial impact from some singular changes)
  - QTL represents the vast majority of our value at $50-$70B.
    - 1 point of royalty is $16-$20B in value
    - Slow erosion of the model through 2040 would reduce valuation by $30B+
- QCT risks are important, but less binary and less impactful to overall QC valuation.

CX5953-004

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Overall Logic For a Change in Strategy (cont'd)

Challenges to QTL require substantive changes to our business model

- Dissecting the QTL business model challenge –
  - QTL, on its own, lacks an ongoing "give/get" relationship with licensees that creates ongoing dependence on QTL
    - IP goes into standards bodies well in advance of collecting royalties
    - In a dispute with OEMs over royalty rates (pricing) we cannot pull access to the technology back (as you would in a typical supplier/customer relationship)
    - Leaving us completely dependent on weakening regulatory and legal channels to defend pricing
  - To date, QCT has helped maintain the "give/get" necessary to defend the royalty rate (we've been positioned as a strong enabler to the ecosystem)
  - But as/if QCT's competitive position weakens our licensing business is at risk of losing the "give/get" it has had with QCT and seeing erosion in royalty rates
    - Note: we see today a high correlation between our modem (chip) share and licensing compliance and royalty rates (ie, high compliance problems in very low tier China market)

- As the regulatory and legal environment becomes more hostile to an IP business model, its critical we find a way to maintain a healthy "give/get" relationship with licensees to create better balance in royalty rate negotiations and defend value

- It's therefore imperative that we maintain high modem share to sustain our licensing model (through a continued strong QCT or through alternative means)

- Which leads me to the ARM model, which is the best example (I can find) for how you establish a "give/get" relationship around an IP business model

- So, where QCT remains strong, it should continue to provide the "give/get" necessary to support the licensing business; but where it's share

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QC Competitive Environment

	Business Issues:	Current Thinking:	Requisite Beliefs:
QTL	**China Compliance**	QCT "compliance stick" combined with NDRC settlement causes Chinese OEMs to sign up for licensing program	Requires belief in strong legal / regulatory regime and QCT product leadership for "compliance stick"
QTL	**Deteriorating Regulatory Environment**	Pressure on QTL model continues, but able to defend current model	
QTL	**Customer Concentration**	Legal and regulatory constructs sustain licensing program and royalty rate long-term	
QCT	**Low / Mid Competition "Good Enough"**	China chip competitors win domestically, but less clear globally. China OEMs continue to gain, but share market with Tier 1.5s.	Requires belief that market will reward technology / product leadership vs. cost / other leadership
QCT	**Customer Concentration**	Prior market cycles suggest re-fragmentation. We continue to monitor trends closely. Mav is an entrenched vertical player. Samsung more unclear.	
QCT	**Pace of Modem & AP Innovation, Intel**	Continued strong demand for modem/network improvements driven by 1000x data growth, QCT remains differentiated. Slowing AP innovation	
QCT	**New Growth Adjacencies**	Technology leadership and synergies with core win in new verticals. M&A strategy to augment current business assets	

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Low End – A Glimpse Into "Good Enough" World

- QCT has ~40% estimated share of Chinese OEMs, but only ~24% for low/entry HS tier
- Estimated ~62% overall compliance, but ranging as low as 35% - 40% or lower for non-QCT units

HS Tier	QCT TAM (Units)	QCT Share (Units)	QCT Share (%)	Non-QCT (Units)	Estimated Unreported (Units)	Estimated Compliance (% of Total)	Estimated Compliance (% of Non-QCT)
Chinese OEMs							
Premium	12	7	62%	5	< 2M	> 85%	N/A
High	74	53	72%	21	< 10M	> 85%	N/A
Mid	172	96	56%	76	~60M	~65%	~20% - 25%
Low/Entry	350	86	24%	264	~160M	~54%	~35% - 40%
Total	**608**	**242**	**40%**	**~366M**	**~230M – 235M**	**~62%**	**~35% - 40%**

FY15 estimates based on QCT TAM for illustrative purposes

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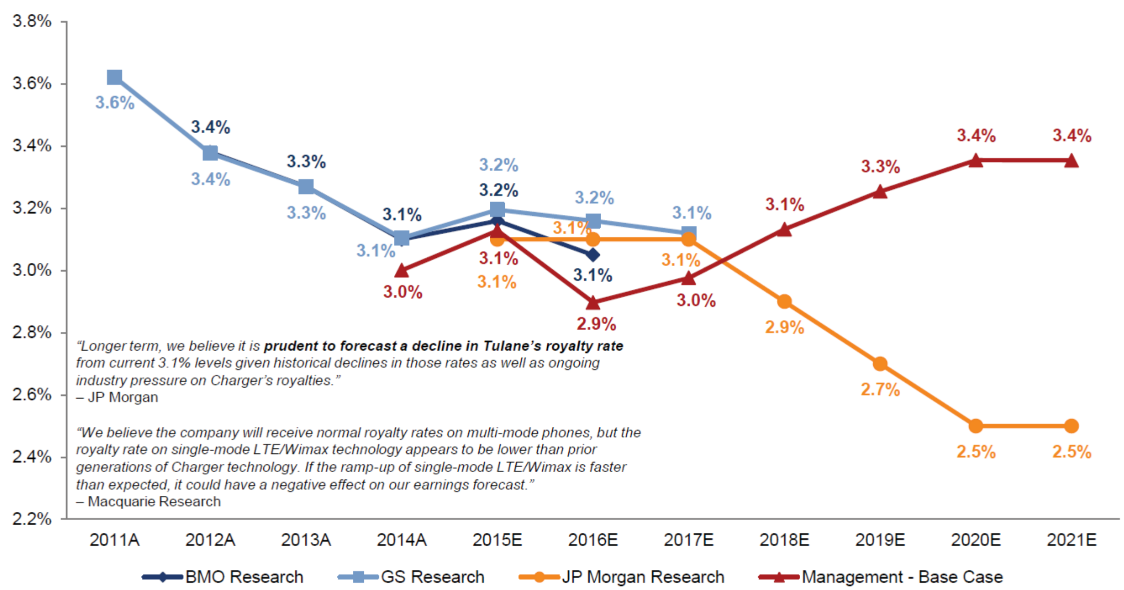
QTL Valuation Driver – Long Term Royalty Rate

Sustaining Royalty Rate Drives Substantial Value



Implies ~$70B of theoretical QTL value

Implies ~$55B "Street View" of QTL value

Broker	JP Morgan	GS	Canaccord Genuity	Susquehanna	Management
Date	8-Aug-15	24-Aug-15	22-Jul-15	23-Jul-15	
Royalty Rate Views	Downward	Downward	Downward	Downward	Upward
Price Target	$57.50	$79.00	$75.00	$60.00	--

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3-5 Year Plan - Evolving our Strategy by Creating Optionality

Evolve our business structure/model over time to defend QTL and diversify QCT

- Develop modem "design and/or IP" licensing model to maintain global scale adoption of our modem IP/Designs, as needed, to sustain QTL
  - Bundle modem license for free or very low cost w/patent license to OEMs with "have made" rights for SOC suppliers
- Continue to sell full modem chip and/or SOC at premium, high/mid/low tiers
- Start licensing modem/other "IP" at very low tier in China to drive QTL compliance (bundled for free or very low cost w/patent license to OEM's w/have made rights for SOC suppliers)
- Focus first on selling chips; evolve licensing model more broadly across tiers if/when QCT struggles to compete at chipset level and maintain share
  - As needed, license full modem "design" for thin modem (direct to MAV as part of QTL settlement)
  - As needed, license "IP" cores for tiers requiring integrated SOC
- Aggressively grow QCT adjacencies and pursue M&A to diversify QCT away from modem business and build non-modem value
- Manage QCT/QTL together unless/until issues arise that threaten QTL value – ie, unacceptable MAV, China, regulatory risks
- If required, spin out QCT in 2-4 years as it builds non-modem value through diversification
  - QCT continues to implement SOCs for smartphone market (using free modem designs/IP licensed to OEMs from QTL)
  - QCT grows extends SOC businesses serving new non-modem markets…becoming a diversified semiconductor company
- Qualcomm, after QCT spin out, solidifies its position as leading global IP licensing company
  - Continue modem "design and/or IP" licensing model to OEMs…free, bundled with our patent license to sustain royalties
  - Acquire ARM to extend IP licensing across the full device and to extend connectivity licensing into IOE markets
- End state in 3-5 years
  - QCT is a standalone diversified semiconductor company
  - QTL is global leading IP licensing company

CX5953-009

QTL - Modem License Model

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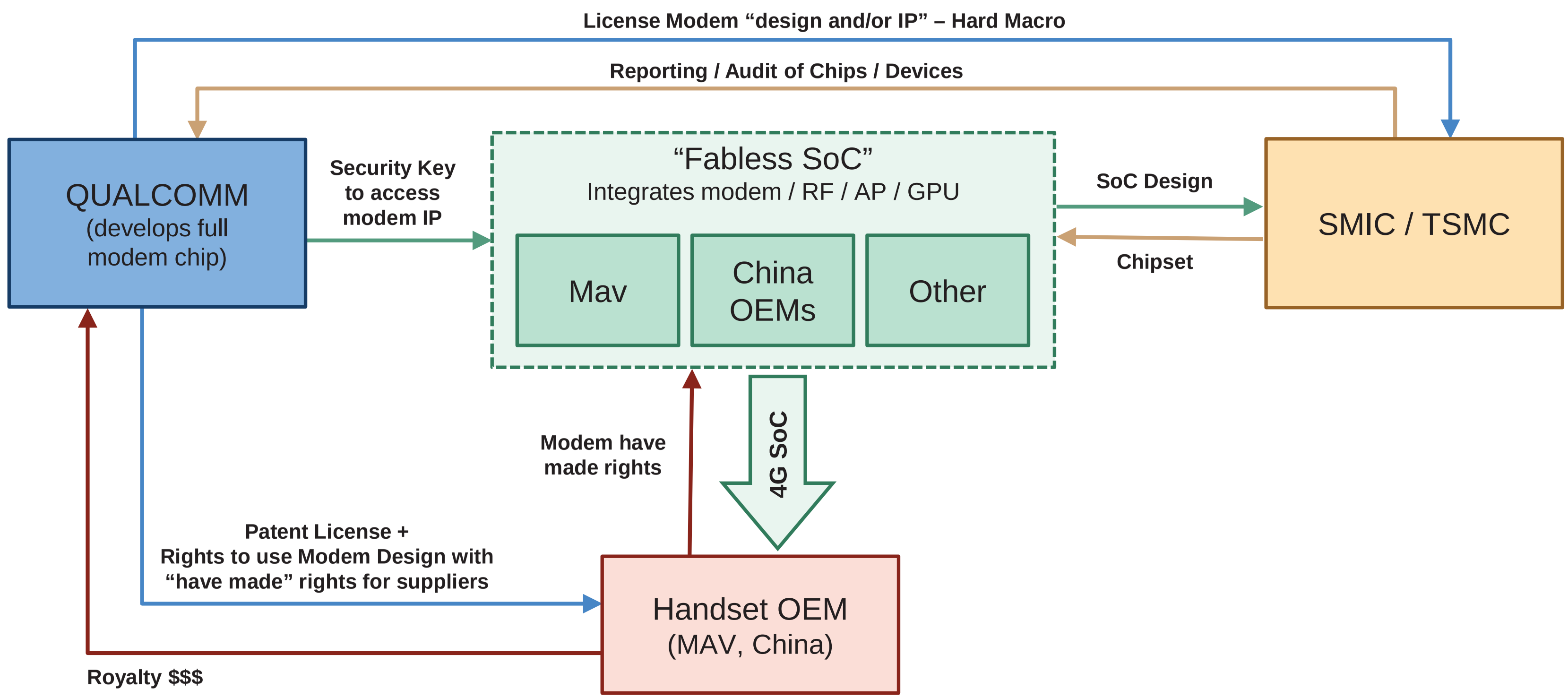
Candidates: TSMC, SMIC, Qualcomm, 3rd Party SoC Players



CX5953-010

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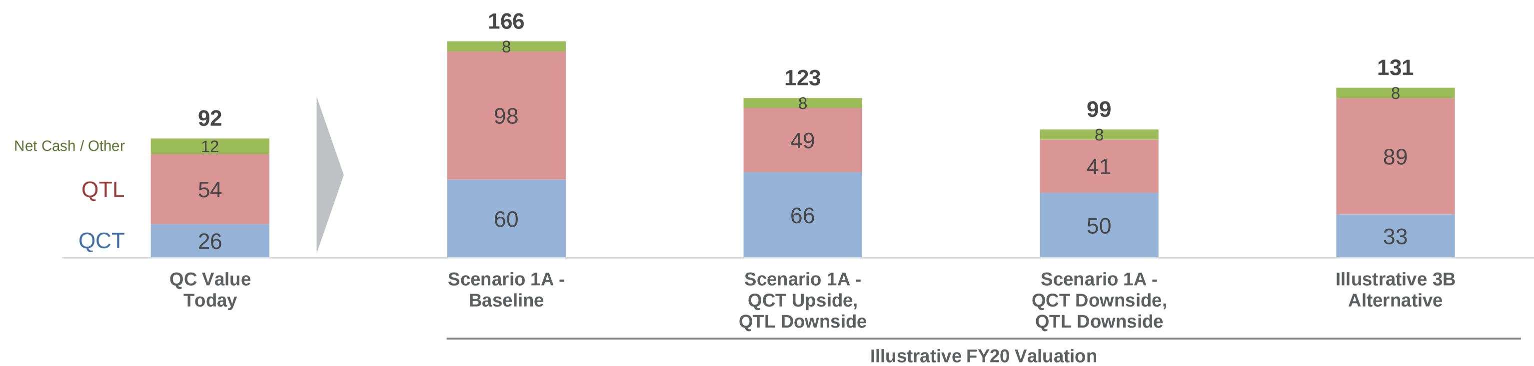
Why Strategy Makes Sense

High modem share drives compliance and royalty rate

- Addresses QTL compliance challenges and sustainability of long term royalty rate; without risky litigation
  - High correlation between modem share and QTL compliance and royalty rate sustainability
  - Adds value to our licensees beyond our patent licenses; improving the "give/get" equation where QCT can't
  - Reduces dependence on legal and regulatory structures to sustain royalty rates
- Value creating – in the long term
  - Sustain [$2-4] of royalty/device (assuming $80-$100 device ASP)
  - Forego [$2-3] of chip gross margin [or $1 of op profit if R&D is a marginal cost]; but likely on lower share (note, mostly units we are not selling into today)
  - Likely limited to low tier for next several years…limiting risk to QCT
  - Binary risk to QTL model if we don't bolster (1pt. in EIRR is worth $16-$20B)
  - QTL biggest value driver for QC – critical we sustain it (QTL - $50-$70B in value; QCT Core - $20-$30B in value)
- QCT can diversify away from modem and create new value streams; QTL cannot
- Creates strategic flexibility over time to defend QTL and grow QCT....through a managed process to restructure our business model
- Gets us out of the "valuation box" over time where value upside in one business is offset by value erosion in the other
- Creates two leading global businesses
- **OPTIONALITY TO RIDE QCT IF IT WINS BIG; OR PIVOT IF NOT**

Potential Valuation Implications Over Time



	QC Value Today Net Inc.	Value	FY15 mult.	Scenario 1A - Baseline Net Inc.	Value	FY20 mult.
QCT Core (excl- RF)	$1.6B	$17B	11x P/E	$3.0B	$30B	10x P/E
QCT Growth (incl- RF)	$0.8B	$9B	11x P/E	$2.3B	$30B	13x P/E
QCT Total	**$2.4B**	**$26B**		**$5.3B**	**$60B**	
QTL Total	**$4.5B**	**$54B**	12x P/E	**$7.0B**	**$98B**	14x P/E
Net Cash & Other		$12B			$8B	
QC Equity Value		**~$92B**			**~$166B**	

	Scenario 1A - QCT Upside, QTL Downside Net Inc.	Value	FY20 mult.	Scenario 1A - QCT Downside, QTL Downside Net Inc.	Value	FY20 mult.	Illustrative 3B Alternative Net Inc.	Value	FY20 Mult.
QCT Core (excl- RF)	$3.6B	$36B	10x P/E	$2.2B	$22B	10x P/E	$1.0B	$10B	Illustrative Net Inc.; 10x P/E
QCT Growth (incl- RF)	$2.3B	$30B	13x P/E	$2.1B	$28B	13x P/E	$1.8B	$23B	Illustrative Net Inc.; 13x P/E
QCT Total	**$5.9B**	**$66B**		**$4.4B**	**$50B**		**$2.8B**	**$33B**	
QTL Total	**$5.5B**	**$49B**	9x P/E	**$4.5B**	**$41B**	9x P/E	**$6.4B**	**$89B**	14x P/E; Mav $12
Net Cash & Other		$8B			$8B			$8B	
QC Equity Value		**~$123B**			**~$99B**			**~$131B**	

Multiple expansion driven by:
- QCT mix shift to growth biz
- QTL execution proves plan and long-term sustainability

- QCT executes to plan, upside from China share in high/mid/low tiers
- QTL can't fix China, NDRC terms WW
- QTL multiple contracts due to sustainability, lower LT growth rate

Same as 1A – QTL Downside, except:
- QTL EIRR trends to 2.5% in FY20+
- QCT Mav share to 50% vs. 70%
- RFFE gross profit reduced ~$230M
- QCT China share cut in half vs. baseline
- H/M/L R&D reduced 33% (~$300M in FY20)

- Modem licensing lowers QCT core profit
- Maintain majority of growth businesses
- QTL executes to plan, stronger with Mav
- QTL multiple reflects market view of long-term sustainability
- QTL R&D up ~$1.5B for modem

CX5953-012

November 2015

Potential Valuation Implications Over Time – Multiple

Implied P/E Multiple (QTL)

Based on Discount Rate and LT Growth Rate

Terminal Growth Rate	Discount Rate 9%	10%	11%	12%
(2%)	9x	8x	8x	7x
(1%)	10x	9x	8x	8x
0%	11x	10x	9x	8x
1%	12x	11x	10x	9x
2%	14x	12x	11x	10x
3%	16x	14x	12x	11x

- QTL current multiple of ~12x reflects ~11% discount rate and ~3% long term growth rate
- Proving long-term sustainability of QTL business model should increase multiple due to lower risk
- Failing to address QTL business model sustainability (i.e., compliance) likely to contract multiple due to substantially lower long-term growth

CX5953-013

Next Steps

- Highly recommend establishing a team of people from both inside and outside QTL (including people from QCT) to develop and evaluate options for evolving the QTL strategy/business model.
- Ongoing dependence on legal and regulatory constructs will be completely insufficient to sustain the business model longer term.

To: Jacobs, Paul[pjacobs@qualcomm.com]; Lupin, Louis[llupin@qualcomm.com]
Cc: exc[exc@qualcomm.com]
From: Marv Blecker
Sent: Sun 5/6/2007 6:10:36 AM
Importance: Normal
Subject: Re: Scenarios for Off site
Received: Sun 5/6/2007 6:10:41 AM
Berlin Scenarios MB1.doc

I have added a few pros and cons, attached.

At 05:48 PM 5/5/2007, Jacobs, Paul wrote:

Attorney-client privileged communication

I have enclosed some initial thinking on potential scenarios for restructuring the company. I*m sure I haven*t captured all of the pros and cons, so I*m sending this out for input from legal, as well as everyone else. Obviously, there are structuring issues that need to be resolved in order for some of these scenarios to make sense.

Paul

Marv Blecker
(858) 658-4210
(858) 651-1975 (fax)

Qualcomm Proprietary and Confidential
Attorney-Client Privileged Communication

Businesses/Functions:
QCT,QTL,QIS,QWBS,QGov,QFT,CR&D,QMT,OOTCS,QCVentures,MUI,MFT

Scenarios:

0) Status Quo
1) QTL, QCOM-QTL
2) QCT, QCOM-QCT
3) QCT+,QTL+
4) QCT+,MUI+,QTL+
5) Megaspin

Scenario 0 Pros:

1) No disruption to existing Qualcomm structure
2) Path for innovative technology to get to market through QCT
3) Remain one large company
4) Industry influence unchanged
5) Single public company expense
6) Conflicting interests of business units managed for overall benefits
7) Licensing revenue helps fund industry leading R&D
8) Customer feelings about assistance balances resentment of royalties
9) Investors see how technology creation regenerates long term IP portfolio

Scenario 0 Cons:

1) Competitors attack QCT to pressure QTL
2) Competitors attempt to exclude QCOM IP in standards bodies
3) QCT can't join standards bodies with IP policies contrary to QTL interests
4) QTL concern about QCT use of open source
5) QCT can't sell exhaustively like other semiconductor companies can
6) Carriers feel QCOMN has many hands in their pockets
7) Conflicting QCT and QTL interests wrt patent law reform and SDO policies
8) QTL revenue generation limited by QCT customer concerns
9) Full value of separate businesses may not be achieved in market cap

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Scenario 1 Pros:

1) Least disruption to existing QCOM structure
2) Removes all leverage from QTL
3) Attacks on QCOM-QTL can't directly impact QTL rates
4) Path for innovative technology to get to market through QCT
5) Solves standards IP policy and open source concerns
6) QCOM-QTL can grant royalty free and exhaustive licenses
7) QCOM-QTL more easily enters new markets free from licensing restrictions
8) Royalty share keeps QCOM-QTL aligned with QTL interests

9) QCOM-QTL keeps the existing cross licenses
10) QTL free to assert patents against QCT customers' products in other markets, eg. GPS, 802.11x, video(?), GSM (e.g. Motorola, etc.)

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Scenario 1 Cons:

1) Requires money from QTL to QCOM-QTL to fund R&D
    a. Doesn't resolve many hands in the pocket feeling by carriers
    b. OEMs and other semis may still attack QCOM-QTL due to royalty share
2) QTL highly prone to attack, few or no supporters [BUT DIFFICULT TO ATTACK IT]
3) Two smaller companies
4) Additional public company expenses
5) What value is attributed to non-QCT components of QCOM-QTL
6) Investors may question sustainability of QTL royalty streams
    a. What R&D will QTL require?
7) Additional overhead costs for two public companies
8) Will world class engineers want to work for QTL?
9) Difficult for QTL to participate in SDO's and drive its technology into products
10) Existing license agreements with QCOM; many not assignable to QTL
11) Without chip business, more licensees/potential licensees might fight QTL license demands

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Scenario 2 Pros:

1) Attacks on QCT can't directly impact QTL rates
2) Solves standards IP policy and open source concerns for QCT
3) QCT can grant royalty free and exhaustive licenses and make exhaustive sales
4) QCT more easily enters new markets free from licensing restrictions
5) Minimizes many hands in the pockets feeling of operators
6) Less incentive for OEMs and other semis to attack QCT
7) QTL able to continue R&D, SDO participation

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Scenario 2 Cons:

1) Significant disruption to existing QCOM structure
    a. Distraction from execution
    b. Corp R&D split
    c. Facilities
    d. Cash split
2) QCOM-QCT and QCT interests may diverge
    a. QIS/QCT unaligned
    b. QTL would want additional CDMA2000 chip suppliers
    c. MFT wants additional MediaFLO chipset suppliers
3) On-shore/Off-shore cash
4) Does QCT still get attacked due to unique CDMA2000 position
5) QCT less able to fund leading R&D, may cause commoditization
6) Less ability for QCOM-QCT technology to get to market
7) Still some limited leverage on QTL from existing businesses

8) Standards IP policy and open source concerns remain with non-QTL businesses
9) QCOM-QCT more prone to attack, few supporters but more than QTL alone
10) Two smaller companies
11) What value is attributed to non-QTL components of QCOM-QCT
12) Additional overhead costs for two public companies
13) QMT path to market is worse due to lack of QCT sales force
14) QCT vulnerable to competitor IP attacks since license agmts and cross licenses remain with QCOM (e.g., TI, Ericsson); QCT will not be able to defend itself until/unless it acquires patents unlicensed to these companies (may be able to get some from QCOM depending upon Capture Period – TI end of 2005)

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Scenario 3-4 Pros versus Scenarios 1-2:

1) Allows expensive divisions (MUI,QMT) to remain with QTL
2) QCT may not value most other divisions
3) QCT and QIS could remain together
4) Service businesses (MUI, QWBS, QIS) could remain together
5) If QMT separates from QTL more likely to generate additional licensing revenue from QMT in wireless market

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Scenario 3-4 Cons versus Scenarios 1-2:

1) Product divisions that remain with QTL may still be attacked
2) Will still cause organizational disruption
3) If QMT remains with QTL for funding, it loses QCT sales channel
4) If MUI remains with QTL for funding, it may still be attacked

Scenario 4-5 Pros versus Scenario 3:

1) Undervalued (unvalued?) businesses could be highlighted
2) Potentially separates QTL from other businesses
3) Could minimize distractions for QCT

Scenario 4-5 Cons versus Scenario 3:

1) Early for MUI to be separated
2) Multiple public company expenses
3) Management talent will be divided more, spread thinly
4) Multiple smaller companies, industry influence will be diminished
5) Difficult to place most divisions

To: Rosenberg, Don[djr@qualcomm.com]; Jacobs, Paul[pjacobs@qualcomm.com]
From: Altman, Steve
Sent: Wed 2/27/2008 9:00:04 PM
Importance: Normal
Subject: Berlin discussion
Received: Wed 2/27/2008 9:00:00 PM

Attorney Client Privileged Communication

Don/Paul

Here is the way one could view the China situation as having caused a change in our thinking. You guys may be thinking about it exactly this way, but I wanted to write it down to make sure we are on the same page.

Since our preliminary recommendation to spin, China has reorganized the carriers and China Telecom will own the CDMA2000 network. This is extremely positive news for us. From a spin perspective, it militants against spinning for at least the following reason;

We had assumed (as did I believe Nokia) that CDMA2000 would be a slow growing market and over time be less interesting to the manufacturers. China Telecom has substantial resources and will rapidly grow its CDMA network and drive very substantial CDMA2000 handset growth. This growth combined with growth from CDMA2000 network operators around the world (as well as the new CDMA2000 operators in India) will not be able to be ignored by the OEMs. The Chinese manufacturers, the Korean manufacturers and even Nokia will want and need to supply CDMA2000 handsets into these markets or risk losing market share. Today, QC is by far the leading CDMA2000 ASIC supplier. Given the fact that so many companies have viewed WCDMA as the rapid growth market, very few ASIC companies have put resources into CDMA2000 development. QC is and we expect will remain the preeminent leader in this market. If you consider the fact that the only companies that have attacked us today are companies that essentially purchase little or no ASICs from us, you can understand how the combination of QCT with QTL greatly enhances QTL's success. As CDMA2000 grows and OEMs desire to participate in it to grow their market share, OEMs will remain reliant on us for continued supply and will need to maintain positive relationships with us. I believe that this will help us grow our businesses as one company. If we were two companies, they would rely entirely on QCT, but would have no incentive NOT to attack QTL.

Don, **REDACTED FOR PRIVILEGE**

Thanks

EDGAR pro

QUALCOMM INC/DE

FORM 10-K
(Annual Report)

Filed 11/01/17 for the Period Ending 09/24/17

Address	5775 MOREHOUSE DR
	SAN DIEGO, CA, 92121
Telephone	8585871121
CIK	0000804328
Symbol	QCOM
SIC Code	3663 - Radio and Television Broadcasting and Communications Equipment
Industry	Communications & Networking
Sector	Technology
Fiscal Year	09/25

CX7257-001

Revenues from customers in China (including Hong Kong) and South Korea comprised 65% and 16% , respectively, of total consolidated revenues for fiscal 2017 , compared to 57% and 17% , respectively, for fiscal 2016 , and 53% and 16% , respectively, for fiscal 2015 . We report revenues from external customers by country based on the location to which our products or services are delivered, which for QCT is generally the country in which our customers manufacture their products, or for licensing revenues, the invoiced addresses of our licensees. As a result, the revenues by country presented herein are not necessarily indicative of either the country in which the devices containing our products and/or intellectual property are ultimately sold to consumers or the country in which the companies that sell the devices are headquartered. For example, China revenues would include revenues related to shipments of integrated circuits to a company that is headquartered in South Korea but that manufactures devices in China, which devices are then sold to consumers in Europe and/or the United States.

Costs and Expenses (in millions)

	2017	2016	2015	2017 vs. 2016 Change	2016 vs. 2015 Change
Cost of revenues	$ 9,792	$ 9,749	$ 10,378	$ 43	$ (629)
Gross margin	56%	59%	59%		

The margin percentage decreased in fiscal 2017 primarily due to the decrease in higher margin QTL licensing revenues as a proportion of total revenues, partially offset by an increase in QCT margin percentage. The margin percentage in fiscal 2017 was also negatively impacted by the reduction to licensing revenues related to the BlackBerry arbitration. The margin percentage in fiscal 2016 remained flat primarily due to the effect of $163 million in additional charges related to the amortization of intangible assets and the recognition of the step-up of inventories to fair value primarily related to the acquisition of CSR plc in the fourth quarter of fiscal 2015 , offset by the impact of higher-margin segment mix primarily related to QTL. Our margin percentage may continue to fluctuate in future periods depending on the mix of segment results as well as products sold, competitive pricing, new product introduction costs and other factors, including disputes and/or resolutions with licensees.

	2017	2016	2015	2017 vs. 2016 Change	2016 vs. 2015 Change
Research and development	$ 5,485	$ 5,151	$ 5,490	$ 334	$ (339)
% of revenues	25%	22%	22%		
Selling, general, and administrative	$ 2,658	$ 2,385	$ 2,344	$ 273	$ 41
% of revenues	12%	10%	9%		
Other	$ 1,742	$ (226)	$ 1,293	$ 1,968	$ (1,519)

The dollar increase in research and development expenses in fiscal 2017 was primarily attributable to an increase of $372 million in costs related to the development of integrated circuit technologies, including 5G technology and RFFE technologies from our recently formed RF360 Holdings joint venture, and related software products, partially offset by cost decreases driven by actions initiated under our Strategic Realignment Plan, which was substantially completed by the end of fiscal 2016 . The dollar decrease in research and development expenses in fiscal 2016 was primarily attributable to a decrease of $228 million in cost related to the development of integrated circuit technologies and related software products. Such decrease was primarily driven by actions initiated under the Strategic Realignment Plan, partially offset by increased research and development costs resulting from acquisitions. The decrease in research and development expenses in fiscal 2016 also included decreases of $67 million in development costs of display technologies and $45 million in share-based compensation expense.

The dollar increase in selling, general and administrative expenses in fiscal 2017 was primarily attributable to increases of $136 million in professional services fees, primarily related to third-party acquisition and integration services resulting from the proposed acquisition of NXP, $70 million in costs related to litigation and other legal matters and $33 million in employee-related expenses, primarily related to our recently formed RF360 Holdings joint venture, which closed in February 2017. The dollar increase in selling, general and administrative expenses in fiscal 2016 was primarily attributable to increases of $65 million in costs related to litigation and other legal matters, $39 million in employee-related expenses and $27 million in depreciation and amortization expense, partially offset by decreases of $36 million in share-based compensation expense, $21 million in selling and marketing expenses, $19 million in professional services and $17 million in patent-related costs.

continue to incur capital expenditures in the future to support our business, including research and development activities. Future capital expenditures may be impacted by transactions that are currently not forecasted.

¶ The TFTC imposed a fine on us of approximately 23.4 billion Taiwan Dollars (approximately $778 million based on exchange rates at September 24, 2017), which is due on or before November 7, 2017.

¶ We expect to continue making strategic investments and acquisitions, the amounts of which could vary significantly, to open new opportunities for our technologies, obtain development resources, grow our patent portfolio or pursue new businesses.

Debt. In November 2016, we amended and restated our existing Revolving Credit Facility that provides for unsecured revolving facility loans, swing line loans and letters of credit to increase the aggregate amount available to $5.0 billion , of which $530 million and $4.47 billion will expire in February 2020 and November 2021 , respectively. At September 24, 2017 , no amounts were outstanding under the Amended and Restated Revolving Credit Facility.

We have an unsecured commercial paper program, which provides for the issuance of up to $5.0 billion of commercial paper. Net proceeds from this program are used for general corporate purposes. At September 24, 2017 , we had $999 million of commercial paper outstanding with weighted-average net interest rates of 1.19% and weighted-average remaining days to maturity of 45 days .

In May 2017 , we issued an aggregate principal amount of $11.0 billion in nine tranches of unsecured floating- and fixed-rate notes, with maturity dates starting in 2019 through 2047 and effective interest rates between 1.80% and 4.47% . Net proceeds from the issuance of the notes of $10.95 billion are intended to be used to fund a portion of the purchase price of our planned acquisition of NXP and other related transactions and also for general corporate purposes. Our 2019 floating-rate notes, 2020 floating-rate notes, 2019 fixed-rate notes and 2020 fixed-rate notes issued in May 2017 for an aggregate principal amount of $4.0 billion are subject to a special mandatory redemption at a price equal to 101% of the aggregate principal amount, plus accrued and unpaid interest to, but excluding, the date of such mandatory redemption. The redemption is required on the first to occur of (i) the termination of the NXP purchase agreement or (ii) January 25, 2018 (which reflects the automatic extension of the original expiration date of October 27, 2017 in accordance with the NXP purchase agreement, and as such date may be further extended in accordance with the NXP purchase agreement to a date on or prior to June 1, 2018).

In May 2015 , we issued an aggregate principal amount of $10.0 billion in eight tranches of unsecured floating- and fixed-rate notes, with maturity dates in 2018 through 2045 and effective interest rates between 1.65% and 4.74% . Interest is payable in arrears quarterly for the floating-rate notes and semi-annually for the fixed-rate notes.

In November 2016, we entered into a Term Loan Facility that provides for senior unsecured delayed-draw term facility loans in an aggregate amount of $4.0 billion . Proceeds from the Term Loan Facility, if drawn, will be used to finance, in part, the proposed acquisition of NXP. At September 24, 2017 , no amounts were outstanding under the Term Loan Facility.

We may issue additional debt in the future. The amount and timing of such additional borrowings will be subject to a number of factors, including the cash flow generated by United States-based entities, acquisitions and strategic investments, acceptable interest rates and changes in corporate income tax law, among other factors. Additional information regarding our outstanding debt at September 24, 2017 is provided in this Annual Report in “Notes to Consolidated Financial Statements, Note 6. Debt.”

Capital Return Program. The following table summarizes stock repurchases and dividends paid during fiscal 2017, 2016 and 2015 (in millions, except per-share amounts):

	Stock Repurchase Program			Dividends		Total
	Shares	**Average Price Paid Per Share**	**Amount**	**Per Share**	**Amount**	**Amount**
2017	22.8	$ 58.87	$ 1,342	$ 2.20	$ 3,252	$ 4,594
2016	73.8	53.16	3,922	2.02	2,990	6,912
2015	172.4	65.21	11,245	1.80	2,880	14,125

On March 9, 2015, we announced that we had been authorized to repurchase up to $15 billion of our common stock. At September 24, 2017 , $1.6 billion remained authorized for repurchase under our stock repurchase program. As a result of our proposed acquisition of NXP and the pending use of a substantial portion of our cash, cash equivalents and marketable securities, we currently expect to repurchase shares in the next few years to offset dilution from the issuance of common stock under our employee benefit plans. We periodically evaluate repurchases as a means of returning capital to stockholders to determine when and if repurchases are in the best interests of our stockholders.

CX7257-052

From:	Paul Jacobs
To:	Sanjay Jha
Sent:	7/28/2007 1:55:23 AM
Subject:	<no subject>
Attachments:	Berlin Strat Comm Discussion_7.26.06pj.ppt

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Prepared at the Direction of Counsel

Berlin July 2007

Strategic Committee Discussion

QUALCOMM Attorney Client Privileged
Prepared at the Direction of Counsel

Berlin July 2007

Spin: Arguments For & Against

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Berlin July 2007

Remove Business restrictions from QCT

- QCT can sell products with exhaustive licenses
- QCT can grant exhaustive licenses to its patents in settlements
- Reduces Open Source risk to licensing business
- QCT standards body submissions more widely accepted
- QCT more able to execute in new markets (WLAN, BT, GPS, microprocessor, consumer, etc.)
- QCT IP creation or acquisitions post-spin are not automatically licensed: able to create competitive advantage for its business, using new innovations

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Berlin July 2007

QCT Industry Relations

- **Attacks on QCT lose direct licensing leverage**
  - Should help alleviate operator/OEM concerns over dependability of QCT supply
  - BRCM chip attacks resulted in handset level royalties
  - Other competitors may follow BRCM model otherwise

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- **Carriers will perceive QCT as a more typical supplier**
  - Industry sees QCOM placing QTL interest above their interests
  - QCT's business and relationships with Carriers and OEMs significantly impacted by inability to settle Broadcom/Nokia

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QTL Business Model (1)

- **Nokia loses leverage in the negotiations**
  - They will attack QCT, but QCT able to attack back much larger revenue base
  - QCT able to cut an exhaustive deal with Nokia

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  - A number of our customers are already Nokia licensee (either paying or cross license). "Exhaustive sale" argument would work against their establishing a royalty business.
- **Similarly, further negotiations with 3 other licensees**
- **Much higher probability of establishing OFDMA licensing program**

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QTL Business Model (2)

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- **Ever-green through:**
  - Patent acquisitions, in and outside of wireless
  - Research and development team
  - QCT patent pay back for R&D dollars
- **Proxy for 3G and 4G growth rates**
  - Invest in growing of 3G, multi-mode 3G, MM 3g-4g devices
  - Invest in services to drive ASP of devices
  - Grow volume and categories of devices with 3G embedded
- **Similar business with slower growth carry healthy multiples**

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QTL Business Model & Valuation Risks

- **QTL valuation risk - investor perception of growth**
  - QTL will have no friends, may engender new attacks

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  - Difficulty sustaining new organic IP generation
- **Can hurt QTL's leverage to negotiate 3G renewals and 4G (OFDMA) licensing deals (ie. LG)**
- **Dis-synergy of splitting unique business model**
  - Lose dual benefit of R&D spend w/o cherry-picking IP
  - Less ability to fund and distribute innovations and attract top technology talent w/o cash flow from QTL to QCT

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QCT Business Model & Valuation Risks

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- **Does not completely eliminate risk of attack on ChipCo for other competitive reasons (BRCM, Intel, Nokia)**
- **QTL less motivated to be flexible in enabling new markets (laptop, CE, etc) if no longer w/ QCT**

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QTL-QCT Post Spin

- Timing: Getting IP traction today in 3GPP and NGMN
- Still some conflict between QCT standards bodies participation and QTL licensing requirements if there is ongoing patent sharing
- Potential weakening of 3GPP2 ecosystem could drive faster migration to WCDMA/LTE from DO/UMB
  - QTL largely indifferent to CDMA2000 vs. WCDMA & UMB vs. LTE
- Equity compensation would need to shift largely to restricted stock (% value transfer/employee)

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Financial Scenarios

Three Spin Scenarios

- **Scenario 1**
  - Chip Co: QCT
  - License Co: QTL + All Other BU's
- **Scenario 2**
  - Chip Co: QCT + All Other BU's
  - License Co: QTL, re-create CR&D / Standards
- **Scenario 3**
  - Chip Co: QCT, QIS, QGOV, QMT, QFT, CR&D / Standards (Equipment businesses)
  - License Co: QTL, QWBS, MFT, MUI (Services businesses)

Key Modeling Assumptions

- **Spin Assumptions**
  - R&D sharing agreement maintained going forward to sustain tax synergy
  - Cost dis-synergies: SG&A costs of 2 public companies, License Co R&D re-creation equal to ~5% of revenue
  - Cost synergy: Reduced legal expense to FY06 levels (~$115M between both businesses)
  - Dividends paid by License Co post spin
    - 28% QCOM payout ratio = 65% License Co payout ratio (maintained throughout model)
- **Financial Drivers**
  - QTL long term royalty rate ~3.5%
    - 4.5% 3G Single Mode / Multi-Mode, 3% 4G Single Mode
    - Nokia licensing agreement reached in FY09
  - QCT long term CDMA share of 55%
    - 95% CDMA2000 & UMB, 35% WCDMA & LTE
- **Other Assumptions**
  - MFLO becomes a "core" business
  - Only restricted stock issued going forward vs. stock options

*All scenarios assume Chip Co is spun entity, License Co to retain QCOM name

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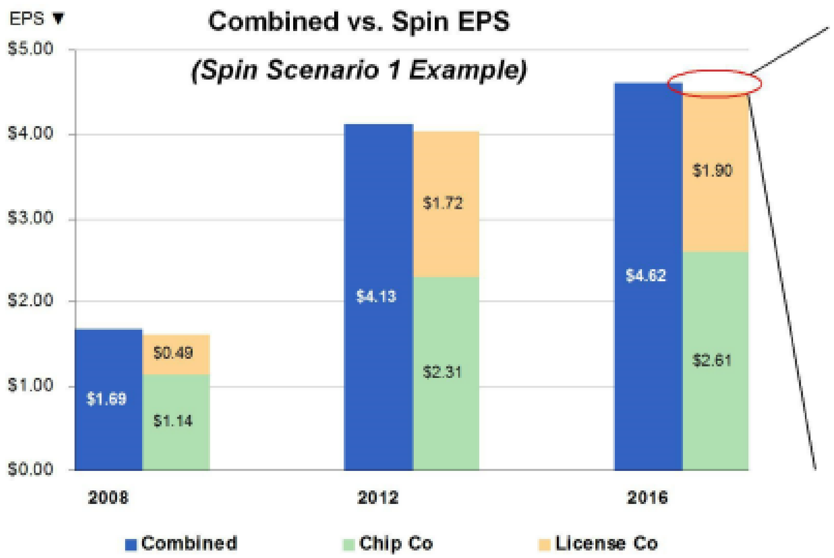
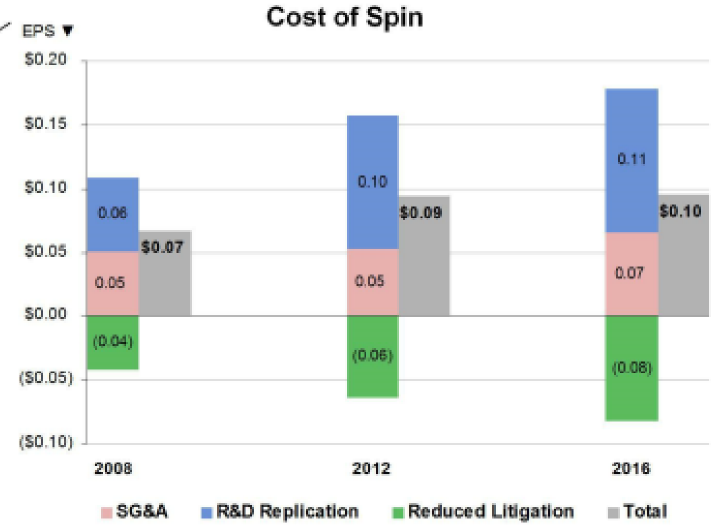
Spin Financials: Cost of Spin





- **Currently sized costs of spin are not significant compared to total EPS**

- **Cost of spin include:**
  - **SG&A costs of 2 public companies**
  - **License Co R&D re-creation**
    - **R&D as % of Licensing Revenue at 5%**
  - **Reduction of litigation costs to**

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Backup

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Spin Scenarios – P&L Summary (Adjusted Pro forma incl MUI)

Scenario 1

Chip Co	2008	2009	2010	2011	2012
Revenue	**$5,885**	**$7,574**	**$9,284**	**$10,627**	**$11,576**
Gross Margin	3,327	4,215	5,157	5,881	6,398
R&D	934	1,077	1,310	1,494	1,625
SG&A	486	545	663	757	823
Operating Expense	1,419	1,622	1,974	2,251	2,448
Other Income	252	398	578	789	1,018
EBT	2,159	2,991	3,761	4,419	4,968
Tax Rate	*8%*	*9%*	*9%*	*10%*	*11%*
Net Income	**$1,990**	**$2,731**	**$3,406**	**$3,962**	**$4,407**
Margin %					
Gross Margin	57%	56%	56%	55%	55%
R&D	16%	14%	14%	14%	14%
SG&A	8%	7%	7%	7%	7%
EBT	37%	39%	41%	42%	43%
Net Income	34%	36%	37%	37%	38%
Growth Rate %					
Revenue	17%	29%	23%	14%	9%
EBT	-5%	39%	26%	17%	12%
Net Income	-4%	37%	25%	16%	11%

License Co	2008	2009	2010	2011	2012
Revenue	**$3,639**	**$5,412**	**$7,166**	**$8,724**	**$10,282**
Gross Margin	2,978	4,496	5,827	6,795	7,655
R&D	1,039	1,252	1,432	1,575	1,699
SG&A	985	1,074	1,105	1,129	1,184
Operating Expense	2,025	2,326	2,538	2,704	2,883
Other Income	469	496	546	610	678
EBT	1,422	2,666	3,835	4,701	5,450
Tax Rate	*40%*	*40%*	*40%*	*40%*	*40%*
Net Income	**$853**	**$1,600**	**$2,301**	**$2,821**	**$3,270**
Margin %					
Gross Margin	82%	83%	81%	78%	74%
R&D	29%	23%	20%	18%	17%
SG&A	27%	20%	15%	13%	12%
EBT	39%	49%	54%	54%	53%
Net Income	23%	30%	32%	32%	32%
Growth Rate %					
Revenue	0%	49%	32%	22%	18%
EBT	-6%	87%	44%	23%	16%
Net Income	-6%	87%	44%	23%	16%

CC: QCT

LC: QTL + All Other BU's

Scenario 2

Chip Co	2008	2009	2010	2011	2012
Revenue	**$6,872**	**$9,051**	**$11,642**	**$13,970**	**$16,023**
Gross Margin	3,653	4,776	6,176	7,296	8,218
R&D	1,332	1,575	1,829	2,029	2,192
SG&A	988	1,077	1,232	1,405	1,565
Operating Expense	2,320	2,653	3,061	3,434	3,757
Other Income	251	399	591	827	1,085
EBT	1,584	2,522	3,707	4,688	5,546
Tax Rate	*-4%*	*3%*	*9%*	*12%*	*14%*
Net Income	**$1,645**	**$2,450**	**$3,374**	**$4,124**	**$4,754**
Margin %					
Gross Margin	53%	53%	53%	52%	51%
R&D	19%	17%	16%	15%	14%
SG&A	14%	12%	11%	10%	10%
EBT	23%	28%	32%	34%	35%
Net Income	24%	27%	29%	30%	30%
Growth Rate %					
Revenue	17%	32%	29%	20%	15%
EBT	-7%	59%	47%	26%	18%
Net Income	-5%	49%	38%	22%	15%

License Co	2008	2009	2010	2011	2012
Revenue	**$2,652**	**$3,935**	**$4,808**	**$5,380**	**$5,834**
Gross Margin	2,652	3,935	4,808	5,380	5,834
R&D	641	753	914	1,040	1,132
SG&A	483	542	537	481	442
Operating Expense	1,124	1,295	1,451	1,521	1,574
Other Income	470	495	532	571	610
EBT	1,997	3,135	3,890	4,430	4,871
Tax Rate	*40%*	*40%*	*40%*	*40%*	*40%*
Net Income	**$1,198**	**$1,881**	**$2,334**	**$2,658**	**$2,922**
Margin %					
Gross Margin	100%	100%	100%	100%	100%
R&D	24%	19%	19%	19%	19%
SG&A	18%	14%	11%	9%	8%
EBT	75%	80%	81%	82%	83%
Net Income	45%	48%	49%	49%	50%
Growth Rate %					
Revenue	-4%	48%	22%	12%	8%
EBT	-4%	57%	24%	14%	10%
Net Income	-4%	57%	24%	14%	10%

CC: QCT + All Other BU's

LC: QTL + re-create CR&D/Stds

Scenario 3

Chip Co	2008	2009	2010	2011	2012
Revenue	**$5,978**	**$7,729**	**$9,564**	**$11,158**	**$12,433**
Gross Margin	3,339	4,214	5,193	5,989	6,604
R&D	1,126	1,310	1,563	1,766	1,918
SG&A	575	646	773	872	943
Operating Expense	1,701	1,955	2,336	2,638	2,861
Other Income	252	397	575	784	1,012
EBT	1,889	2,656	3,432	4,135	4,754
Tax Rate	*3%*	*5%*	*7%*	*8%*	*10%*
Net Income	**$1,829**	**$2,530**	**$3,209**	**$3,792**	**$4,279**
Margin %					
Gross Margin	56%	55%	54%	54%	53%
R&D	19%	17%	16%	16%	15%
SG&A	10%	8%	8%	8%	8%
EBT	32%	34%	36%	37%	38%
Net Income	31%	33%	34%	34%	34%
Growth Rate %					
Revenue	17%	29%	24%	17%	11%
EBT	-1%	41%	29%	21%	15%
Net Income	-2%	38%	27%	18%	13%

License Co	2008	2009	2010	2011	2012
Revenue	**$3,546**	**$5,257**	**$6,887**	**$8,193**	**$9,424**
Gross Margin	2,966	4,496	5,791	6,687	7,449
R&D	847	1,019	1,179	1,303	1,406
SG&A	896	974	996	1,014	1,064
Operating Expense	1,743	1,992	2,175	2,317	2,469
Other Income	469	497	545	607	677
EBT	1,692	3,001	4,161	4,977	5,657
Tax Rate	*40%*	*40%*	*40%*	*40%*	*40%*
Net Income	**$1,015**	**$1,801**	**$2,497**	**$2,986**	**$3,394**
Margin %					
Gross Margin	84%	86%	84%	82%	79%
R&D	24%	19%	17%	16%	15%
SG&A	25%	19%	14%	12%	11%
EBT	48%	57%	60%	61%	60%
Net Income	29%	34%	36%	36%	36%
Growth Rate %					
Revenue	0%	48%	31%	19%	15%
EBT	-10%	77%	39%	20%	14%
Net Income	-10%	77%	39%	20%	14%

CC: QCT, QIS, QGOV, QMT, QFT, CR&D/Stds

LC: QTL, QWBS, MFT, MUI

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Prepared at the Direction of Counsel

Berlin — July 2007

QCOM Pro forma P&L

QCOM	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	**$9,459**	**$12,615**	**$15,425**	**$17,742**	**$19,635**	**$20,920**	**$21,934**	**$22,432**
Gross Margin	6,425	8,686	10,605	12,074	13,255	13,953	14,516	14,705
R&D	1,772	2,080	2,483	2,798	3,027	3,181	3,300	3,345
SG&A	1,292	1,476	1,618	1,681	1,731	1,814	1,900	1,971
Operating Expense	3,064	3,556	4,101	4,479	4,759	4,994	5,200	5,315
Other Income	732	923	1,154	1,424	1,720	2,017	2,324	2,646
EBT	4,093	6,053	7,659	9,019	10,216	10,976	11,640	12,035
Tax Rate	*22%*	*24%*	*25%*	*25%*	*26%*	*26%*	*26%*	*27%*
Net Income	**$3,181**	**$4,596**	**$5,774**	**$6,753**	**$7,588**	**$8,114**	**$8,565**	**$8,810**
EPS	**$1.82**	**$2.58**	**$3.16**	**$3.62**	**$3.99**	**$4.18**	**$4.32**	**$4.36**
Margin %								
Gross Margin	*68%*	*69%*	*69%*	*68%*	*68%*	*67%*	*66%*	*66%*
R&D	*19%*	*16%*	*16%*	*16%*	*15%*	*15%*	*15%*	*15%*
SG&A	*14%*	*12%*	*10%*	*9%*	*9%*	*9%*	*9%*	*9%*
EBT	*43%*	*48%*	*50%*	*51%*	*52%*	*52%*	*53%*	*54%*
Net Income	*34%*	*36%*	*37%*	*38%*	*39%*	*39%*	*39%*	*39%*
Growth Rate %								
Revenue	*10%*	*33%*	*22%*	*15%*	*11%*	*7%*	*5%*	*2%*
EBT	*-3%*	*48%*	*27%*	*18%*	*13%*	*7%*	*6%*	*3%*
Net Income	*-3%*	*44%*	*26%*	*17%*	*12%*	*7%*	*6%*	*3%*
EPS	*-6%*	*42%*	*23%*	*14%*	*10%*	*5%*	*3%*	*1%*
Key Metrics								
MSMs	**301**	**391**	**488**	**554**	**610**	**648**	**678**	**689**
Rev / Chipset	$19.56	$19.36	$19.03	$19.17	$18.96	$18.76	$18.54	$18.32
QTL Handsets	**447**	**610**	**755**	**891**	**1,017**	**1,092**	**1,164**	**1,225**
CDMA2000	212	246	278	303	327	335	340	343
WCDMA	235	363	477	588	690	757	824	882
Handset ASP	**$188**	**$156**	**$139**	**$130**	**$123**	**$116**	**$111**	**$107**
CDMA2000	140	129	127	121	117	113	110	107
WCDMA	232	175	147	135	125	118	112	107
Royalty per Device	**$5.93**	**$6.45**	**$6.37**	**$6.04**	**$5.74**	**$5.52**	**$5.23**	**$4.89**

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Berlin July 2007

QCOM Pro forma P&L – Adjusted to Include MUI

QCOM	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	**$9,524**	**$12,986**	**$16,451**	**$19,351**	**$21,858**	**$23,778**	**$25,365**	**$26,274**
Gross Margin	6,305	8,710	10,984	12,676	14,053	14,954	15,736	15,963
R&D	1,848	2,165	2,540	2,836	3,066	3,220	3,340	3,386
SG&A	1,454	1,641	1,792	1,910	2,032	2,158	2,289	2,386
Operating Expense	3,301	3,806	4,332	4,746	5,099	5,378	5,629	5,771
Other Income	724	902	1,127	1,403	1,709	2,023	2,352	2,701
EBT	3,728	5,806	7,780	9,332	10,663	11,598	12,460	12,892
Tax Rate	*21%*	*23%*	*25%*	*26%*	*26%*	*27%*	*27%*	*28%*
Net Income	**$2,962**	**$4,448**	**$5,847**	**$6,941**	**$7,857**	**$8,488**	**$9,056**	**$9,324**
EPS	**$1.69**	**$2.49**	**$3.20**	**$3.72**	**$4.13**	**$4.37**	**$4.57**	**$4.62**
Margin %								
Gross Margin	*66%*	*67%*	*67%*	*66%*	*64%*	*63%*	*62%*	*61%*
R&D	*19%*	*17%*	*15%*	*15%*	*14%*	*14%*	*13%*	*13%*
SG&A	*15%*	*13%*	*11%*	*10%*	*9%*	*9%*	*9%*	*9%*
EBT	*39%*	*45%*	*47%*	*48%*	*49%*	*49%*	*49%*	*49%*
Net Income	*31%*	*34%*	*36%*	*36%*	*36%*	*36%*	*36%*	*35%*
Growth Rate %								
Revenue	*10%*	*36%*	*27%*	*18%*	*13%*	*9%*	*7%*	*4%*
EBT	*-5%*	*56%*	*34%*	*20%*	*14%*	*9%*	*7%*	*3%*
Net Income	*-5%*	*50%*	*31%*	*19%*	*13%*	*8%*	*7%*	*3%*
EPS	*-8%*	*47%*	*28%*	*16%*	*11%*	*6%*	*5%*	*1%*
Key Metrics								
MSMs	**301**	**391**	**488**	**554**	**610**	**648**	**678**	**689**
Rev / Chipset	$19.56	$19.36	$19.03	$19.17	$18.96	$18.76	$18.54	$18.32
QTL Handsets	**447**	**610**	**755**	**891**	**1,017**	**1,092**	**1,164**	**1,225**
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Royalty per Device	**$5.93**	**$6.45**	**$6.37**	**$6.04**	**$5.74**	**$5.52**	**$5.23**	**$4.89**

Amendment to Subscriber Unit License Agreement
(the "Amendment")

This Amendment is entered into as of June 28, 2013 (the "**Amendment Effective Date**") between QUALCOMM Incorporated, a Delaware corporation ("**QUALCOMM**"), and Lenovo Mobile Communication Technology Ltd., a company organized and existing under the laws of the People's Republic of China ("**LENOVO**") with respect to the following facts:

WHEREAS, QUALCOMM and LENOVO (as successor in interest to Legend Mobile Communication Technology Ltd.) are parties to that certain Contract for the License of Certain Technology for the Manufacturing and Sale of Certain CDMA Subscriber Units, dated June 30, 2003 (as previously amended, the "**License Agreement**");

WHEREAS, pursuant to Section 2 of the License Agreement, the original term of the License Agreement will expire on June 30, 2013; and

WHEREAS, LENOVO desires to exercise its right to renew the term of the License Agreement as provided in Section 2 thereof, subject to the terms and conditions contained in this Amendment.

NOW, THEREFORE, the Parties agree as follows:

1. Construction and Definitions. Section headings used in this Amendment are inserted for the purpose of convenience only and are not intended to affect the meaning or interpretation of any provision in this Amendment. Unless otherwise specified herein, capitalized terms used in this Amendment have the meanings specified in the License Agreement.

2. Term of License Agreement. Pursuant to and in accordance with Section 2 of the License Agreement, LENOVO hereby elects to extend the term of the License Agreement for an additional period of ten (10) years (the "**Renewal Term**"), which Renewal Term will commence on the tenth (10^{th}) anniversary of the Effective Date (i.e., June 30, 2013) and will continue in full force and effect until June 30, 2023, unless otherwise terminated in accordance with Section 13 of the License Agreement (as amended by Section 3 of this Amendment).

EXHIBIT QX3655
WIT: Blumberg
DATE: 4-20-18
K. KIDWELL, RMR, CRR, CLR

3. Section 13 of the License Agreement is hereby amended by adding the following new Section 13.5 (including Sections 13.5.1 and 13.5.2), and re-numbering the existing Section 13.5 (and all references thereto in the License Agreement) as Section 13.6:

"13.5 Termination for Convenience.

13.5.1 Termination. Notwithstanding anything to the contrary in this Agreement, beginning on December 16, 2013, each Party will have the right to terminate this Agreement for convenience at any time, by providing at least thirty (30) days' prior written notice of termination to the other Party, which notice must specify the desired effective date of such termination (the "**Termination Date**"). (For greater clarity, the earliest date on which such a termination notice can be given by either Party is December 16, 2013 and the earliest possible Termination Date is January 15, 2014.)

13.5.2 Rights upon Termination. Section 13.6 of this Agreement will apply in the event of any termination of this Agreement by either Party in accordance with this Section 13.5, except that solely in the event of a termination in accordance with this Section 13.5 (and not in the event of any other termination or expiration of this Agreement), the licenses granted by LENOVO in this Agreement will survive such termination only with respect to patents (foreign or domestic) that were issued, or that were acquired or licensed by LENOVO or any of its Affiliates, at any time on or before either (a) June 30, 2013, if QUALCOMM terminates this Agreement pursuant to Section 13.5.1, or (b) six (6) months prior to the Termination Date, if LENOVO terminates this Agreement pursuant to Section 13.5.1. For the avoidance of doubt, in the event of any termination or expiration of this Agreement other than in accordance with this Section 13.5, Section 13.6 will determine whether and to what extent the licenses granted by LENOVO in this Agreement survive such termination or expiration."

4. No Other Amendment or Modification. Except as expressly set forth in this Amendment, the License Agreement remains in full force and effect without modification. Without limiting the generality of the foregoing, nothing in this Amendment shall be construed as altering, clarifying, or confirming the meaning or effect of Section 13.6 of the Agreement (formerly Section 13.5, prior to this Amendment) as it applies to any termination or expiration of the Agreement

other than a termination pursuant to the new Section 13.5 that was added to the Agreement in this Amendment (i.e., in the event of any such other termination or expiration, Section 13.6 of the Agreement will be interpreted and applied as if this Amendment did not exist). The terms and conditions of this Amendment in conjunction with the License Agreement supersede all prior or contemporaneous oral or written understandings between the Parties with respect to the subject matter hereof and constitute the entire agreement of the Parties with respect to such subject matter. The terms and conditions of this Amendment and the License Agreement can be modified or amended only by a writing signed by (i) an authorized representative of LENOVO, and (ii) the CEO of QUALCOMM or an authorized representative of the QUALCOMM Technology Licensing Division. Upon execution hereof, this Amendment will constitute a part of the License Agreement.

IN WITNESS WHEREOF, the Parties have caused this Amendment to be effective as of the Amendment Effective Date.

QUALCOMM Incorporated	**Lenovo Mobile Communication Technology Ltd.**
By: Eric Reitschneider	By: Ira Blumberg
Printed Name: Eric Reitschneider	Printed Name: Ira Blumberg
Title: SVP, GM of QTL	Title: VP Intellectual Property, Lenovo
Execution Date: June 27, 2013	Execution Date: June 27, 2013