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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
 FEDERAL TRADE COMMISSION'S
 PRETRIAL BRIEF

REDACTED VERSION 3 (5 (&))

Date: January 4, 2019
 Time: 9:00 am.
 Courtroom: 7, 4th Floor
 Judge: Hon. Lucy H. Koh

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1 Under the Sherman Act, conduct that "harm[s] the competitive process, and thereby
2 harm[s] consumers" is anticompetitive. *McWane, Inc. v. FTC*, 783 F.3d 814, 835 (11th Cir.
3 2015) (quoting *Microsoft*, 253 F.3d at 58). A government plaintiff need not, however,
4 "reconstruct the hypothetical marketplace absent a defendant's anticompetitive conduct."
5 *Microsoft*, 253 F.3d at 79 (quoting 3 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law*
6 ¶ 651c, at 78 (1996 ed.)). Rather, a government plaintiff must show that the "defendant has
7 engaged in anticompetitive conduct that "reasonably appear[s] capable of making a
8 contribution to . . . maintaining monopoly power"; accord *McWane*, 783 F.3d at 833; *United*
9 *States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005). When a defendant has engaged in
10 multiple acts or practices that may be anticompetitive, a court must consider their interactions
11 and combined effects. *Free Hand Corp. v. Adobe Sys., Inc.*, 852 F. Supp. 2d 1171, 1180
12 (N.D. Cal. 2012).

13 III. QUALCOMM POSSESSES MONOPOLY POWER IN THE MARKETS FOR
14 CDMA AND PREMIUM LTE MODEM CHIPS

15 Qualcomm's anticompetitive conduct has entrenched a market for premium LTE modem chips. (ch)56 (e)

1 economists employ to identify relevant markets. Professor Shapiro will explain that his
2 implementation of the HMT confirms that CDMA modem chips and premium LTE modem chips
3 constitute relevant antitrust markets. Professor Shapiro will further testify that Qualcomm's high
4 shares in these antitrust markets, in combination with other evidence, support the conclusion that
5 Qualcomm possessed monopoly power in the market for CDMA modem chips from 2006
6 through 2010 and in the market for premium LTE modem chips from 2011 through 2016.

7 A. CDMA Modem Chips

8 Evidence at trial will demonstrate that OEMs selecting chips to deploy in their handsets
9 do not consider other modem chips to be reasonable substitutes for CDMA modem chips.
10 Wireless carriers around the world, including Verizon, Sprint, KDDI, and China
11 Telecom, developed communications networks that require the use of handsets that comply with
12 CDMA standards. OEMs need CDMA modem chips to supply handsets that meet these carriers'
13 requirements. While an OEM could in theory abandon the business of supplying CDMA-capable
14 handsets, (b) (5) - (D) [REDACTED]

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Qualcomm and its OEM customers recognize that the size of the “CDMA” reflects the anemic competitive conditions in the market for CDMA modem chips. In 2008, Qualcomm President Cristiano Amon acknowledged that prices for UMTS modem chips were “lower than CDMA not [due] to cost or volume but due to competition” (CX8257). Professor Shapiro will testel (C) (y75 0 Td (A)Tj 07.0 (.)]TJ 0 Tw [(P)6 (52y)TJ 0 Tw.s0 Td (A)Tj 074er)-11 (s)-

1 CDMA modem chips requires developing complementary multimode technology, entry
2 requires considerable time and commitment of R&D resources. While MediaTek licensed Via
3 Telecom's CDMA technology in late 2013, it did not sell modem chips for use in handsets sold
4 in China until 2015 and for use in handsets sold in the United States until October 2016. Finally,
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1 rivals such relationships

2 IV. QUALCOMM ENGAGED IN

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1 reflected its patent position, and instead viewed Qualcomm's royalty as disproportionate to other
2 major licensor's royalties. Yet Samsung ultimately signed the license. (Ex. 6 (m) 2550 (Y)-28 (e)(c)-56 (b) (1) (T) 0t)-22 (

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1 continue to leverage its market power in CDMA modem chips to deter OEMs from challenging
2 Qualcomm's royalties.

3 In Project Phoenix, Qualcomm again decided against separating its chip and licensing
4 businesses. Qualcomm executive David Wise, who played a lead role in Project Phoenix,
5 determined that "[h]igh modem share drives compliance and royalty rate," and "[r]educes
6 dependence on legal and regulatory structures to sustain royalty (CX8299 at 011.) For
7 that reason, he wrote that "IT'S CRITICAL THAT WE MAINTAIN HIGH MODEM SHARE
8 TO SUSTAIN LICENSING." (CX8299.)

9 The FTC's experts will explain how and why Qualcomm's no license-to-chips policy
10 allows it to secure elevated royalties from OEMs that are dependent on Qualcomm modem chips.
11 The FTC's licensing expert, Mr. Richard Donaldson, has decades of experience negotiating
12 patent licenses in the semiconductor industry. Mr. Donaldson can explain that real-world license
13 negotiations typically focus on patent value, with attention toward the legal remedies available for
14 patent infringement (as OEMs confirm). But when outside business interests—such as an OEM's
15 need for Qualcomm chips—are injected into license negotiations, the focus of negotiations shifts
16 from patent value to overall business considerations. Because negotiations are driven by a
17 comparison of the proposed license terms to potential alternatives, Qualcomm's license-to-
18 chips policy provided Qualcomm with substantial leverage, as OEMs dependent on Qualcomm's
19 chips faced the immediate and certain loss of lines of business as the alternative to accepting
20 Qualcomm's proposed license terms

1 Qualcomm's no license~~ee~~ chips policy fundamentally alters the bargaining dynamic.
 2 Qualcomm's monopoly power in premium CDMA and premium LTE modem chips means that
 3 OEMs would find losing the ability to purchase modem chips from Qualcomm extremely costly.
 4 In this setting, basic bargaining theory predicts that Qualcomm's no license~~ee~~ chips policy, by
 5 allowing Qualcomm to bring leverage from its market power in modem chips to bear on license
 6 negotio10 (to10 6 (s)-(to10 6 (m)28)6 (p 0 12 (m) 0 1-30.55 -1.9 Td(o) (i)-72 (to10 6 (yo10 6 (78 (p)

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1 developments—which would have been expected to lower rates—is evidence of its success
2 in using modern chip leverage to elevate its royalties

3 To the extent Qualcomm argues that the relative stability of its royalty rates is evidence
4 that those rates are unaffected by modern chip leverage, this argument ignores both the
5 multifaceted character of Qualcomm's license negotiations and Qualcomm's strong incentives to
6 maintain a consistent headline royalty rate. Qualcomm's negotiations with OEMs are not limited
7 to a single, headline royalty rate; they encompass other license terms and incentive funds, among
8 other things. Moreover, maintaining a consistent headline royalty rate allowed Qualcomm to
9 claim compliance with "most favored royalty rate" clauses in its license agreements and to
10 proffer that rate as a benchmark in future license negotiations. Accordingly, Qualcomm typically
11 has not negotiated its headline royalty rates as Mr. Donaldson will explain based on his analysis
12 of Qualcomm's negotiations. Instead, if necessary, Qualcomm has negotiated over other business
13 terms, such as incentive funds. As a result of these factors, the stability of Qualcomm's royalty
14 rates does not support Qualcomm's argument.

15 6. Qualcomm's royalty surcharge raises rivals' costs and harms competition

16 Qualcomm's imposition of a royalty surcharge raises rivals' costs and harms
17 competition. By bringing leverage from Qualcomm's modern chip monopoly to bear on license
18 negotiations, Qualcomm has been able-22 (e)-56 ((u)56 (al)2.38 a)-6 (s)-2 (n)72e[50 (be)-6 (a)-s

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1 Mediatek) as well, and we refused to enter into anything other than an exhaustive covenant
2 (or covenant to sue last in the case of SS and MT).” (CX8285.)

3 While private standard setting can offer significant, procompetitive benefits, the
4 realization of these benefits depends on the institution and observance of “meaningful
5 safeguards” that prevent subversion of the standard setting process “by members with economic
6 interests in stifling product competition.” *Broadcom Corp. v. Qualcomm, Inc.*, 501 F.3d 297,
7 309-10 (3d Cir. 2007) (quoting *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492,
8 501 (1988)); see *Broadcom*, 501 F.3d at 313 (identifying FRAND commitments as among these
9 safeguards); *Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1031, 1041 (9th Cir. 2015)
10 (same). Conduct that breaches or circumvents these safeguards can form a basis for antitrust
11 liability when such conduct involves an agreement that unreasonably restrains trade, *Allied*
12 *Tube*, 486 U.S. at 501, or contributes to the acquisition or maintenance of monopoly power,

13 *Broadcom*, 501 F.3d at 313-4; see also ECF 134 at 41-

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1 that would have the potential of severely impacting our subscriber licensing program.”
2 (CX8284.) Qualcomm’s views were unchanged in 2015, when it concluded that granting a
3 FRAND license to Intel “would destroy the whole current Qualcomm licensing business.” (CX3758.)

4 Evidence will show that Qualcomm’s refusal to make licenses available to modem chip
5 suppliers also disadvantages its competitors in other ways. Qualcomm’s refusal to make licenses
6 available to its competitors has exposed those competitors to business uncertainty. Qualcomm
7 itself acknowledged the impact of uncertainty on modem chip suppliers’ investment decisions
8 when requesting a modem chip license from Motorola in 2000. Qualcomm’s Steve Altman
9 dismissed as insufficient Motorola’s assurance that it “does not presently intend to assert its
10 essential patents” against chip suppliers. Altman observed that, absent a license, “any 2(4)-5 (e), 6 g

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1 to exclusivity.

2 The evidence will show that Qualcomm's 2011 and 2013 Transition Agreements with
 3 Apple were de facto exclusive deals. The agreements provided for modem chip rebates totaling
 4 billions of dollars, conditioned on Apple using Qualcomm chips exclusively in its new products.
 5 See ECF 134 at 47 (rebates conditioned on a promise of exclusivity or on purchase of a specified
 6 quantity or market share of the seller's goods or services may be understood as de facto
 7 exclusive dealing contracts).

8 The Court will hear testimony from Apple COO Jeff Williams that Apple understood the
 9 2011 Transition Agreement to be exclusive, and Qualcomm's documents confirm that it had an
 10 "objective of exclusivity" through 2015 (CX7968). The same was true of the 2013 First
 11 Amended Transition Agreement. The Court will hear from Apple witnesses that Apple had an
 12 interest in working with multiple suppliers of modem chips, that Apple was intensively engaged
 13 with Intel during 2012 to develop modem chips for possible use in Apple products in 2014
 14 and/or 2015, and that Apple suspended that engagement in early 2013 as a result of its entry into
 15 the First Amended Transition Agreement and the related Business Cooperation and Patent
 16 Agreement.

17 Qualcomm recognized and through these agreements successfully neutralized Apple's
 18 potential to strengthen rivals. Before signing the Transition Agreement, Qualcomm's strategic
 19 plans stated that its principal competitive threat came from "thin" modem chips under
 20 development by competitors. To mitigate that risk, Qualcomm CEO Steve Mollenkopf discussed
 21 the importance of locking up future business at Apple, because Qualcomm believed that any
 22 competitor that won Apple's UMTS business would become stronger and more competitive in
 23 the market. The evidence will show that Apple requires suppliers to meet rigorous technical
 24 requirements, and engagement with Apple helps modem suppliers improve the quality of
 25 their products. Other handset OEMs, recognizing the rigorous standards to which Apple holds its
 26 suppliers, regard a modem chip supplier's engagement with Apple as an indicator of its product
 27 quality. Qualcomm believed a deal with Apple for CDMA and UMTS modem chip sales would
 28 have "significant strategic benefits" because without Apple's business there would not be

1 “enough standalone volume”

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1 Instruments, Nvidia (Icera), Marvell, and STMicroelectronics since 7/2012 -0.8 5 b 0051 u(s)-61 (7-11 40 69.0)

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