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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

IN RE: QUALCOMM ANTITRUST LITIGATION	Case No. 5:17-md-02773-LHK The Honorable Lucy H. Koh **PLAINTIFFS' NOTICE OF MOTION AND MOTION FOR CLASS CERTIFICATION AND MEMORANDUM OF POINTS AND AUTHORITIES** **CLASS ACTION** Date: Thursday, September 27, 2018 Time: 1:30 p.m. Place: Courtroom 8 First Amended Consolidated Class Action Complaint filed June 13, 2018

NOTICE OF MOTION

TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE THAT on September 27, 2018, at 1:30 p.m., or as soon thereafter as counsel may be heard, before the Hon. Lucy H. Koh, United States District Judge, in Courtroom 8 of the United States District Court, located at 280 South First Street, San Jose, California, 95113, Plaintiffs will and hereby do respectfully move this Court for an order granting Plaintiffs' motion for class certification, pursuant to Rule 23(b)(2) and (b)(3) of the Federal Rules of Civil Procedure.

Plaintiffs move for certification of a class (the "Class") consisting of:

> All natural persons and entities in the United States who purchased, paid for, and/or provided reimbursement for some or all of the purchase price for all UMTS, CDMA (including CDMAone and cdma2000) and/or LTE cellular phones ("Relevant Cellular Phones") for their own use and not for resale from February 11, 2011, through the present (the "Class Period") in the United States. This class excludes (a) Defendant, its officers, directors, management, employees, subsidiaries, and affiliates; (b) all federal and state governmental entities; (c) all persons or entities who purchased Relevant Cellular Phones for purposes of resale; and (d) any judges or justices involved in this action and any members of their immediate families or their staff.

First Amended Consolidated Class Action Complaint, Doc. No. 490, ¶ 157.

Plaintiffs also move for appointment of Sarah Key, Terese Russell, Carra Abernathy, Leonidas Miras, and James Clark ("Plaintiffs") as Class Representatives, and for appointment of Kalpana Srinivasan of Susman Godfrey L.L.P. and Joseph W. Cotchett of Cotchett, Pitre & McCarthy, LLP as Class Counsel.[1] The grounds for this motion are that this case meets all the requirements for class treatment as required under Rule 23(b)(2) and (b)(3) of the Federal Rules of Civil Procedure.

This motion is made and based upon the notice of motion, the memorandum of points and authorities filed in support thereof, the Declaration of Kalpana Srinivasan, the exhibits attached

[1] The Court granted Plaintiffs' request to substitute Joseph W. Cotchett of Cotchett, Pitre & McCarthy as a Member of the Plaintiffs' Steering Committee and as Co-Lead Counsel for Steven S. Williams. Doc. No. 251.

thereto, all of the papers, pleadings, and files herein, and all other written or oral argument as may be presented to the Court. A proposed form of order is being lodged concurrently herewith.

Dated: July 5, 2018

By: /s/ *Kalpana Srinivasan*

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MEMORANDUM OF POINTS AND AUTHORITIES

This case meets all of the requirements for class-wide treatment. Qualcomm has used a collection of strategies, including its No-License-No-Chips policy, refusal to license, and exclusive dealing, to stifle competition in the market for baseband processor chips. These strategies have allowed Qualcomm to maintain and further entrench its monopoly position in certain baseband processor chip markets. Qualcomm abused this monopoly position to extract supra-FRAND (and supra-competitive) royalty rates from every cellular device original equipment manufacturer ("OEM") by threatening to cut off OEMs' baseband processor chip supply. These supra-FRAND rates act as an industry-wide "tax" or "surcharge" on OEMs, raising the costs for all of their cellular phones. The evidence of Qualcomm's anticompetitive conduct applies class-wide and is compelling. For example:

- [redacted] Ex.[2] 1 [redacted]
- [redacted] Ex. 2 [redacted]
- [redacted]

[redacted]

[2] Except where noted otherwise, all exhibits are attached to the Declaration of Kalpana Srinivasan ("Srinivasan Decl.").

[redacted]

Ex. 3 ([redacted]

In support of their motion, Plaintiffs submit the expert declarations of Dr. Kenneth Flamm, Prof. Einer Elhauge, Michael Lasinski, and Dr. Robert Akl. Exs. 4-7. These declarations, summarized below, rely exclusively on evidence that is common to the Class:

- **Dr. Kenneth Flamm** (Ex. 4)**:** Dr. Flamm—the Dean Rusk Chair and Professor of Public Affairs at the University of Texas at Austin—uses common evidence to opine on Qualcomm's monopoly power. Dr. Flamm also uses common evidence to create a quality-adjusted price regression to show that the supra-competitive royalties that Qualcomm charged OEMs were passed through to the Class members.
- **Prof. Einer Elhauge** (Ex. 5)**:** Prof. Elhauge—the Petrie Professor of Law at Harvard Law School—opines that Qualcomm's business practices had anticompetitive effects that allowed it to charge supra-competitive royalty rates and higher chipset prices. His declaration explains how Plaintiffs' injury and the impact of Qualcomm's anticompetitive conduct is subject to common proof.
- **Michael J. Lasinski** (Ex. 6)**:** Mr. Lasinski—a leading intellectual property valuation expert—analyzes whether the rates charged by Qualcomm for its SEPs comply with FRAND principles. To do so, he employs two widely accepted methodologies: (1) the "top-down" approach and (2) assessing comparable licensing agreements. Mr. Lasinski concludes that Qualcomm's royalty rates are not fair and reasonable. He calculates a range of potentially reasonable rates for Qualcomm's portfolio, and exemplary overcharges for certain OEMs (the difference between the royalty rate that Qualcomm charged OEMs and an appropriate FRAND rate for its portfolio).
- **Dr. Robert Akl** (Ex. 7): Dr. Akl—a Tenured Associate Professor of Computer Science and Engineering at the University of North Texas and a Senior Member of IEEE, with extensive expertise in wireless communication systems and standards—opines on cellular technology and standard setting. Specifically, he describes the creation of a census of cellular SEPs

declared as essential to various cellular standards.

Like millions of consumers, Plaintiffs are purchasers of cellular phones who were adversely impacted by Qualcomm's anticompetitive conduct and overpaid for their cellular phones. Plaintiffs seek to certify the following Class:

> All natural persons and entities in the United States who purchased, paid for, and/or provided reimbursement for some or all of the purchase price for all UMTS, CDMA (including CDMAone and cdma2000) and/or LTE cellular phones ("Relevant Cellular Phones") for their own use and not for resale from February 11, 2011, through the present (the "Class Period") in the United States. This class excludes (a) Defendant, its officers, directors, management, employees, subsidiaries, and affiliates; (b) all federal and state governmental entities; (c) all persons or entities who purchased Relevant Cellular Phones for purposes of resale; and (d) any judges or justices involved in this action and any members of their immediate families or their staff.

First Amended Consolidated Class Action Complaint, Doc. No. 490, ¶ 157.[3]

On behalf of themselves and their fellow Class members, Plaintiffs seek to recover the damages caused to consumers by Qualcomm's anticompetitive conduct. Had Qualcomm's industry-wide tax on the retail price of cellular phones been lower, consumer purchasers would not have paid as much as they did for the products they bought or would have purchased higher quality products for the same price.

When an entire industry pays higher taxes, then prices for the taxed good are impacted. And consumers end up paying most—if not all—of this bill.[4] All of Plaintiffs' evidence supporting this straight-forward proposition is common evidence capable of establishing class-wide injury at trial. Plaintiffs demonstrate through common proof how much Class members were overcharged. Regardless of whether Class members paid higher prices or received lower quality phones, or a combination of the two, the amount of the overcharge is calculable on a class-wide basis. Absent class treatment, the ultimate victims of Qualcomm's anticompetitive behavior—

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[3] Plaintiffs seek to certify a narrower Class than that proposed in the First Amended Consolidated Class Action Complaint, which referred to all cellular devices. *See McLaughlin v. Wells Fargo Bank, NA*, No. C 15-02904 WHA, 2016 WL 3418337, at *3 (N.D. Cal. June 22, 2016) (certifying a narrower class than the class alleged in the complaint).

[4] The relevant antitrust authorities of China, South Korea, Taiwan, and the European Commission have all penalized Qualcomm for its anticompetitive practices, and the U.S. Federal Trade Commission is seeking injunctive relief for Qualcomm's anticompetitive practices. *FTC v. Qualcomm, Inc.*, No. 17-0220-LHK.

U.S. consumers—will have no redress.

I. LEGAL STANDARD

Class actions are governed by Rule 23 of the Federal Rules of Civil Procedure. Rule 23(a) requires: "(1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a).

In addition to the prerequisites of Rule 23(a), plaintiffs seeking damages must also satisfy Rule 23(b).[5] Plaintiffs move for certification both under Rule 23(b)(2) and Rule 23(b)(3). The Court may certify a Rule 23(b)(2) class if "the party opposing the class has acted or refused to act on grounds that apply generally to the class, so that final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole." *Huynh v. Harasz*, 2015 WL 7015567, at *5 (N.D. Cal. Nov. 12, 2015) (granting motion for class certification of a Rule 23(b)(2) and Rule 23)(b)(3) class). Rule 23(b)(3) requires that "questions of law or fact common to the class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3).[6]

II. PLAINTIFFS MEET EACH PREREQUISITE OF RULE 23(a).

A. The Proposed Class Is Sufficiently Numerous and Ascertainable.

The proposed Class meets the numerosity requirement. Classes are sufficiently numerous when they are comprised of at least 25 members. *See In re Beer Distrib. Antitrust Litig.*, 188 F.R.D. 557, 562 (N.D. Cal. 1999). The proposed Class includes millions of consumers of relevant cellular phones and meets this requirement.

[5] *Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1432 (2013).

[6] Courts in this district consistently recognize that antitrust "[c]lass actions play an important role in the private enforcement of antitrust actions," and "[c]ourts therefore 'resolve doubts in these actions in favor of certifying the class.'" *In re Cathode Ray Tube (CRT) Antitrust Litig.*, 308 F.R.D. 606, 612 (N.D. Cal. 2015) (quoting *In re Rubber Chems. Antitrust Litig.*, 232 F.R.D. 346, 350 (N.D. Cal. 2005)); *see also Amchem Prods. Inc. v. Windsor*, 521 U.S. 591, 625 (1997) (stating the requirement of predominance is "readily met in certain cases alleging . . . violations of the antitrust laws").

The Class is also ascertainable. Ascertainability does not equate to a "freestanding administrative feasibility prerequisite[.]" *Briseno v. ConAgra Foods, Inc.*, 844 F.3d 1121, 1126 (9th Cir. 2017). Rather, a class definition must merely provide "objective criteria" sufficient to "allow class members to determine whether they are included in the proposed class." *In re Lidoderm Antitrust Litig.*, No. 14-md-02521-WHO, 2017 WL 679367, at *25 (N.D. Cal. Feb. 21, 2017) (certifying a class of "[a]ll persons or entities in the United States . . . who purchased [name] brand or generic Lidoderm" during the class period). Courts in this circuit have consistently held that a class definition specifying the purchasers of a given type of consumer product meets the requirements for certification. For example, in *Briseno*, the Ninth Circuit affirmed certification of a class where "the class was defined by an objective criterion: whether class members purchased Wesson oil during the class period." 844 F.3d at 1126.[7] Here, Plaintiffs' Class definition is sufficiently definite because it provides objective criteria—the purchase of particular products in a specified location during a specified time frame—from which potential Class members can determine whether they fall within the Class.

B. <u>Common Issues of Fact and Law Exist.</u>

The proposed Class also satisfies Rule 23(a)(2)'s commonality requirement. To satisfy the commonality requirement, "[e]ven a single [common] question will do," *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541, 2556 (2011) (quotation omitted), and "[a]ntitrust liability alone constitutes a common question that 'will resolve an issue that is central to the validity' of each class member's claim 'in one stroke.'" *In re High-Tech Employee Antitrust Litig.*, 985 F. Supp. 2d 1167, 1180 (N.D. Cal. 2013) (quoting *Dukes*, 131 S. Ct. at 2551). Here, the commonality requirement is satisfied because common questions include whether Qualcomm's business practices are anticompetitive and whether each Class member suffered the same injury—overpayment for cellular phones—as a result of Qualcomm's anticompetitive conduct.[8]

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[7] *See also In re Korean Ramen Antitrust Litig.*, No. 13-cv-04115-WHO, 2017 WL 235052, at *24 (N.D. Cal. Jan. 19, 2017) (certifying an indirect purchaser class of "[a]ll persons and entities that purchased "Korean Ramen Noodles" in certain states during the class period); *In re Lidoderm Antitrust Litig.*, No. 3:14-md-02521, 2017 WL 679367, at *3–4, 31.

[8] Fraudulent concealment is also a common question. "[I]t generally has been recognized that the question of concealment by [an] antitrust defendant is a common question, subject to being uniformly resolved on behalf of all members of the class." *Nitsch v. Dreamworks Animation SKG*

C. Plaintiffs' Claims Are Typical of the Class.

Plaintiffs satisfy Rule 23(a)(3)'s typicality requirement; to do so, Plaintiffs' claims must be "reasonably co-extensive with those of absent class members; [b]ut they need not be substantially identical." *Hanlon v. Chrysler Corp.*, 150 F.3d 1011, 1020 (9th Cir. 1999). As this Court recognized, "[i]n antitrust cases, typicality usually will be established by plaintiffs and all class members alleging the same antitrust violations by defendants." *High-Tech*, 985 F. Supp. 2d at 1181 (quotation omitted). Plaintiffs, proposed as Class Representatives, have purchased an extensive range of relevant cellular phones, including cellular phones manufactured by LG, Huawei, Samsung, Apple, Amazon and Blackberry. Doc. No. 490, ¶¶ 20-24. Plaintiffs allege the same antitrust violation and injury for every Class member—overpayment for relevant cellular phones—making their claims typical of the Class as a whole. *See Davidson v. Apple, Inc.*, 2018 WL 2325426 (May 8, 2018) (holding typicality requirement satisfied where purchasers of iPhone 6 Plus sought to represent class of purchasers of iPhone 6 Plus and iPhone 6).

D. Plaintiffs and Their Counsel Will Adequately Represent the Class.

Plaintiffs and Interim Class Counsel meet Rule 23(a)(4)'s adequacy requirement. The test for adequacy turns on two questions: "(1) whether named plaintiffs and their counsel have 'any conflicts of interest with other class members,' and (2) whether named plaintiffs and their counsel will 'prosecute the action vigorously on behalf of the class.'" *High-Tech*, 985 F. Supp. 2d at 1181 (quoting *Hanlon*, 150 F.3d at 1020). Neither Plaintiffs nor Interim Class Counsel have any conflicts with the Class. Plaintiffs have also demonstrated that they will prosecute this action vigorously; each has produced documents, responded to interrogatories, and sat for deposition.

The Court already concluded in its interim appointment of Kalpana Srinivasan of Susman

(… cont'd)
Inc., 315 F.R.D. 270, 310 (N.D. Cal. 2016) (quoting *In re Linerboard Antitrust Litig.*, 305 F.3d 145, 160 (3d Cir. 2002). Qualcomm fraudulently concealed its anticompetitive conduct, and Plaintiffs could not reasonably have discovered it earlier. *See* Doc. No. 490 at ¶¶ 128-136, Doc. No. 94 at ¶¶ 130-138. Qualcomm did not challenge the sufficiency of these allegations in its Motion to Dismiss. Doc. No. 110. *See also Aryeh v. Canon Bus. Sols., Inc.*, 55 Cal. 4th 1185, 1196, 292 P.3d 871, 878 (2013) (holding that UCL claims may be tolled under discovery rule).

Godfrey L.L.P., Joseph W. Cotchett of Cotchett, Pitre & McCarthy, LLP, and Steve Berman of Hagens Berman Sobol Shapiro LLP as the Plaintiffs' Steering Committee and of Ms. Srinivasan and Mr. Cotchett as Co-Lead Counsel, that these attorneys and their firms satisfy the requirements articulated in Rule 23(g). *See* Doc. No. 31. The firms have vigorously and expeditiously prosecuted this case. They have obtained and reviewed millions of documents; taken or defended 100 depositions; pursued more than 60 non-party subpoenas; briefed substantive motions; moved to compel on key issues; moved for a preliminary injunction; and worked with and supervised a team of highly qualified experts. Despite the history of regulatory action, Class Counsel has engaged in extensive independent analysis and development of case theories. Each of these lawyers has a track record of success in prosecuting complicated class actions and is particularly well-suited to serve as Class Counsel. *See* Doc. Nos. 11, 13, 240.

III. PLAINTIFFS SATISFY RULE 23(b).

In addition to meeting Rule 23(a) prerequisites, Qualcomm's anticompetitive conduct impacts the Class as a whole, such that injunctive relief would be appropriate, satisfying Rule 23(b)(2). As detailed in Sections III.A-B, *infra*, Qualcomm's anticompetitive conduct is based on common policies applied uniformly throughout the market, like Qualcomm's No-License-No-Chips tie and its refusal to exhaustively license to competitors, as well as on its exclusive dealings with Apple that exacerbated the common anticompetitive effects of those common policies. Because these market-wide anticompetitive restraints and effects can be remedied through injunctive relief, the case is suitable for class certification under Rule 23(b)(2). *See In re TFT-LCD (Flat Panel) Antitrust Litig.*, 267 F.R.D. 583, 596 (N.D. Cal. 2010) (certifying class under Rule 23(b)(2) and Rule 23(b)(3) where defendants' conduct was "market-wide and not specific to individual consumers.").[9]

Additionally, Plaintiffs' claims raise common questions that will predominate over any individual issues, thus satisfying Rule 23(b)(3). While the predominance inquiry "must be 'rigorous' and may 'entail some overlap with the merits of the plaintiff's underlying claim,"

[9] *See also Des Roches v. California Physicians' Service*, 320 F.R.D. 486, 507 (N.D. Cal. 2017) (noting that it is possible to satisfy both Rule 23(b)(2) and Rule 23(b)(3).

Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184, 1194 (2013) (quoting *Dukes*, 131 S. Ct. at 2251), courts ought not "engage in free-ranging merits inquiries at the certification stage," *id.* at 1194–95. *See also Backhaut v. Apple Inc.*, 2015 WL 4776427, at *13 (N.D. Cal. Aug. 13, 2015) ("[C]lass certification is not an opportunity for the Court to undertake plenary merits inquiries."). In determining predominance, courts compare the common evidence to the individual evidence for the claim as a whole. There is no requirement that common evidence predominate for each element of the claim. *Amgen*, 133 S. Ct. at 1194 ("Rule 23(b)(3), however, does *not* require a plaintiff seeking class certification to prove that each element of her claim is susceptible to class-wide proof.") (emphasis in original) (quotation and brackets omitted).

Plaintiffs have marshaled extensive documentary evidence, analyzed large amounts of transactional data, and served the expert declarations of Prof. Elhauge, Dr. Flamm, Mr. Lasinski, and Dr. Akl to show that common questions predominate overall *and* on each of the three elements of Plaintiffs' Section 1 claim under the Sherman Act: "(1) a violation of antitrust laws, (2) an injury they suffered as a result of that violation, and (3) an estimated measure of damages." *High-Tech*, 985 F. Supp. 2d at 1183 (quotation omitted). Plaintiffs' Section 2 claim requires similar proof: (1) possession of monopoly power in the relevant market; and (2) the willful acquisition or maintenance of that power through "anti-competitive conduct." *Image Tech. Serv., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1202, 1208 (9th Cir. 1997) (holding that willful acquisition or maintenance of monopoly power involves exclusionary conduct). Plaintiffs' claims under California's Cartwright Act and Unfair Competition Law are based upon the same anticompetitive behavior, seeking monetary damages in addition to injunctive relief.[10]

A. Common Evidence Demonstrates Antitrust Injury.

1. Plaintiffs will be able to prove Qualcomm's monopoly power in the relevant markets through common evidence.

Common evidence establishes that Qualcomm has maintained a monopoly in the global CDMA and premium-LTE baseband processor chip markets. Dr. Flamm measures Qualcomm's

[10] The Court previously denied Qualcomm's motion to dismiss Plaintiffs' Cartwright Act claim, Plaintiffs' UCL claim, and Plaintiffs' nationwide Class allegations. The Court granted with prejudice Qualcomm's motion to dismiss Plaintiffs' Sherman Act claims, but only to the extent the claims sought damages. Doc. No. 175.

monopoly power using market share data, finding (i) that Qualcomm's global market share exceeded [redacted] for CDMA-compatible baseband processors throughout the Class Period, and (ii) that Qualcomm's global market share in premium-LTE baseband processor chips was over [redacted] annually from 2011 to 2016 and was approximately [redacted] in 2017. Flamm Decl. at Part II.E-F. Market share data is considered evidence common to the Class. *See In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, 2006 WL 1530166, at *9 (N.D. Cal. June 5, 2006) (certifying a class where an expert used market share estimates to analyze monopoly power).

Dr. Flamm also relies on common evidence to determine that the relevant baseband processor chip markets are highly concentrated. Dr. Flamm calculates the Herfindahl-Hirschman Index ("HHI"), a measurement of market concentration, finding the HHI for CDMA and premium LTE baseband processors to be "highly concentrated." Flamm Decl. at Part II.E-F. *See Saint Alphonsus Medical Center-Nampa Inc. v. St. Luke's Health System, Ltd.*, 778 F.3d 775, 786 (9th Cir. 2015) (recognizing that HHI is a "commonly used metric for determining market share"); *Giuliano v. Sandisk Corp.*, No. C 10-02787 SBA, 2015 WL 10890654, at *8, 19–20 (N.D. Cal. May 14, 2015) (rejecting challenge to HHI analysis and granting motion for class certification). Additionally, Dr. Flamm calculates that the Lerner Index for the product markets in which Qualcomm is alleged to have monopoly power (CMDA-compatible baseband processors and premium-LTE baseband processors) is significantly greater than the Lerner Index for a market in which Qualcomm is not alleged to have monopoly power (WCDMA). Flamm Decl. at Part II.E-F. *See, e.g., In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, 2006 WL 1530166, at *9 (granting motion for class certification where expert used "competitive yardstick" approach to demonstrate monopoly power).

a. <u>Qualcomm uniformly refused to exhaustively license competing baseband processor chip suppliers.</u>

Qualcomm has a uniform policy of not offering exhaustive licenses for its SEPs to competing baseband processor chip manufacturers.[11] The evidence regarding this policy,

[11] An exhaustive license is a license that exhausts the patent rights through the sale of the chip. *See Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 128 S. Ct. 2109, 2110, 170 L. Ed. 2d

including licenses, licensing negotiations, and internal Qualcomm documents, is all common to the class. Elhauge Decl. at Part IV.A. For example, [redacted] Ex. 8 [redacted] *see also* Ex. 9 [redacted] While the precise contours of this policy have evolved over time in response to legal challenges, the operative premise has remained uniform: consistent refusal to provide exhaustive licenses to rival chipmakers.

Prior to 2008, Qualcomm licensed its cellular SEPs to competing baseband processor chip suppliers through ASIC Patent License Agreements ("APLAs").[12] Under the APLAs, competing chipmakers who obtained licenses to make their own ASICs could only sell their ASICs to "Authorized Purchasers"— handset makers that had entered into a SULA licensing agreement[13] with Qualcomm.[14]

Following the Supreme Court's decision in *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617, 638 (2008), [redacted]

(… cont'd)
996 (2008) ("The longstanding doctrine of patent exhaustion limits the patent rights that survive the initial authorized sale of a patented item.").

[12] An ASIC is an application-specific integrated circuit, a chip customized for particular use.

[13] A SULA is a Subscriber Unit License Agreement. Qualcomm further states that in 2015 it "revised the agreement it typically uses as a starting point for negotiations, and renamed that template agreement the 'Complete Terminal Patent License Agreement' or 'CTPLA' rather than 'SULA.'" [redacted] Ex. 10 [redacted].

Under the ALPAs, "licensed chipmakers [could] not themselves use or pass on to others the right to use the chipmaker's ASICs to make, operate or sell handsets or any other product." Ex. 11 (Brief of Qualcomm Inc. as Amicus Curiae Supporting Respondent, *Quanta Computer, Inc. v. LG Electronics, Inc.*, 2007 WL 4340879, at *8, (U.S.)); Ex. 12 ([redacted]). For example, [redacted] Ex. 8 [redacted]

[redacted] Ex. 8 [redacted] *Id.*

[redacted].[15] [redacted].[16]

[redacted] Ex. 8 ([redacted] Qualcomm has consistently applied each iteration of its policy to all of its chipset rivals; thus, the question of whether Qualcomm's licensing practices are anticompetitive is subject to common proof. *See Meredith Corp. v. SESAC, LLC*, 87 F. Supp. 3d 650, 659 (S.D.N.Y. 2015) (holding that whether licensing practices constituted exclusionary conduct was a common question).

b. <u>Qualcomm further abused its baseband processor chip monopoly via its uniform No-License-No-Chips policy.</u>

Qualcomm has had a uniform practice of not selling baseband processor chips to OEMs unless the OEMs also agree to take out a separate licensing agreement with Qualcomm—on Qualcomm's preferred terms—that covers all the cellular handsets the OEM sells. Qualcomm has

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[15] Ex. 8 [redacted]

Id. [redacted]

implemented this No-License-No-Chips policy throughout the Class Period with respect to *all* cellular device OEMs. Elhauge Decl. at Part III.

The No-License-No-Chips policy is an unlawful tying arrangement that can be demonstrated through common proof. *Id.* Analysis of the antitrust impact of the No-License-No-Chips policy will use common economic proof because the policy functions the same way for all OEMs (and thus all Class members), regardless of how the policy is specifically implemented or communicated to individual OEMs. *Id.*

Prof. Elhauge explains that the tying condition—the No-License-No-Chips policy—was used to obtain licenses that were the same across the market and thus common to the Class. *Id.* [redacted]. Ex. 13 [redacted][17]

[redacted] Ex. 16 [redacted] Ex 17

[17] *See also* Exs. 1 [redacted] 14 [redacted] 15 [redacted]

[redacted]

The tied product—the cellular SEP license—covered virtually all OEMs and it had the same structure across those OEMs. [redacted] Ex. 18 [redacted] Ex. 10 [redacted] *Id.* [redacted]

c. **Qualcomm abused its monopoly power to coerce chip exclusivity and non-FRAND licensing terms from Apple.**

Qualcomm entered into exclusivity agreements with Apple, including the 2011 Transition Agreement ("TA"), and the 2013 First Amendment to the Transition Agreement ("FATA"). Ex. 19 [redacted] Ex. 20 [redacted] Those agreements conditioned large lump-sum payments from Qualcomm to Apple on Apple's not launching any new products that contained baseband processor chips from a rival chipmaker. According to Prof. Elhauge, the incentives from these agreements totaled [redacted]. Elhauge Decl. at V.B; Ex. 21 ([redacted]).

Whether the Apple TA and FATA were *de facto* exclusive dealing arrangements is an issue that is subject to common proof. The key difference between exclusive dealing arrangements and loyalty discounts is whether a customer is offered a discount on the price they would have been charged without the loyalty program, *i.e.*, a positive inducement to accept the loyalty condition, compared with a penalty that threatens a customer with a higher price than it would have paid without the loyalty program. The common evidence here shows that the TA and FATA were penalties.[18] To reach this conclusion, Prof. Elhauge compared Qualcomm's gross margin on chip sales to Apple versus to nonexclusive chip customers and also compared

[18] *See, e.g.*, Ex. 22 ([redacted]

Qualcomm's price to Apple during versus after the exclusivity condition. Elhauge Decl. at Part V.B.1. He determined that if Apple had violated its exclusivity conditions, it would have faced prices far above those paid by nonexclusive customers, and that the prices Apple paid with exclusivity were the same or higher as it and other customers paid without exclusivity, supporting his conclusion that the exclusive dealing provisions are penalties, not loyalty discounts. Elhauge Decl. at Part V.B.1.

[redacted] Ex. 23 [redacted] *Id.* at [redacted]

B. Common Evidence Shows Antitrust Impact.

To show class-wide impact, Plaintiffs must set forth "a reasonable method for determining, on a class-wide basis, the alleged antitrust activity's impact on class members." *CRT*, 308 F.R.D. at 625. Prof. Elhauge uses common evidence to opine how Qualcomm's conduct harmed competition, impaired rivals, and caused consumers to pay supra-FRAND royalties. Mr. Lasinski evaluates the FRAND rate Qualcomm should have charged OEMs on a class-wide basis. Dr. Flamm's declaration demonstrates how the overpayment was passed through every level of the distribution chain: whether a consumer overpaid by paying more for a phone than he would have in the but-for world, paying for a lower quality-phone than he would have in the but-for world, or a combination of the two, the overcharge calculation determines that amount of overpayment on a class-wide basis.

1. Common evidence shows that Qualcomm's refusal to license excluded rivals and harmed competition.

Qualcomm refused to license its cellular SEPs to competing baseband processor chip manufacturers. The impact of Qualcomm's refusal to license to its competitors is that Qualcomm was able to amplify the anticompetitive effects of its No-License-No-Chips tie. Qualcomm's refusal to license exhaustively to competing chipmakers harmed competition by excluding rivals from the market and enabling Qualcomm to impose supra-FRAND royalty rates across the market. These market-wide effects are common to the Class.

First, Qualcomm's failure to provide exhaustive licenses prevented baseband processor chipmakers from being able to offer baseband processor chipset sales that avoid the supra-FRAND tax on SEP license caused by the No-License-No-Chips tie. Elhauge Decl. at Part IV.B. Competing chipmakers confirmed that the failure to obtain an exhaustive license from Qualcomm limited their ability to sell baseband processor chips to device makers. For example, Samsung's [redacted] Ex. 24 [redacted][19] Similarly, [redacted] Ex. 26 [redacted] Ex. 27 [redacted].[20]

Plaintiffs' licensing expert, Michael Lasinski, has opined about how calculation of Qualcomm's supra-FRAND royalties would rely on common evidence. To determine whether Qualcomm's SEP royalty rates were fair and reasonable, Mr. Lasinski would (1) allocate

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[19] [redacted] Ex. 25 (Brief of *Amici Curiae* Samsung Electronics Co. Ltd. and Samsung Semiconductor, Inc. in Opposition to Qualcomm Incorporated's Motion to Dismiss ("Samsung Amici Br.") at 9, *Federal Trade Comm'n v. Qualcomm Inc*., Case No. 17-cv-00220, ECF No. 99 (N.D. Cal. May 15, 2017)).

[20] *See also* Ex. 28 [redacted]

reasonable aggregate royalty rates to the subject portfolio (the "top-down" approach) and (2) assess comparable agreements. Lasinski Decl. at Parts 6.2, 6.3. In both assessments, Lasinski notes that he would consider the portion of deemed-SEPs and the number of approved contributions to 3GPP.[21] *Id.* Using many license agreements and extensive documentary evidence, Mr. Lasinski derived a total overcharge by licensee. *Id.* at Part 6.4. For purposes of his exemplary calculation, Mr. Lasinski considered [redacted], as well as documents and testimony regarding Qualcomm's licensing practices. *Id.* at Part 6.3. Mr. Lasinski calculated the total aggregate overcharge for the five largest U.S. OEMs by applying the percentage overcharge of each licensee to its respective licensed U.S. sales. The overcharge for each OEM ranged from [redacted] of the total cost of the device.[22] *Id.* at Part 6.4.

Second, Qualcomm's refusal to provide exhaustive licenses to rival chipmakers deterred entry of chipmakers into the market. For example, [redacted] *See* Ex. 29 [redacted] Ex. 30 [redacted] Ex. 31 [redacted].[23]

[21] 3GPP, the 3rd General Partnership Project, is a collaboration of telecommunications standard setting organizations.

[22] Mr. Lasinski noted that his analysis was highly conservative for several reasons. For example, it does not consider compensation received by Qualcomm in addition to running royalties. Lasinski Decl. at Part 6.4.

[23] [redacted]

Third, Qualcomm's failure to license to rivals increased Qualcomm's monopoly power and further reduced competing baseband processor chipmakers' ability to compete with Qualcomm for sales on baseband processor chips. Qualcomm's own documents demonstrate [redacted]. For example, [redacted] Exs. 33 ([redacted] 34 [redacted] Similarly, Qualcomm recognized that [redacted] Ex. 35 [redacted] *See*, *e.g.*, Ex. 36 [redacted].[24]

2. Common evidence shows that Qualcomm extracted anticompetitive licensing terms for its SEPs, which in turn caused consumers to pay supra-competitive prices for cellular phones.

Qualcomm's No-License-No-Chips policy allows it to impose supra-FRAND license rates on OEMs and contract manufacturers and restrains competition from Qualcomm's baseband processor chip rivals.

First, the No-License-No-Chips policy inflated Qualcomm's SEP royalty rates to supra-FRAND levels. Qualcomm had monopoly power over the tying baseband processor chips that OEMs needed in order to create phones, and the tie coerced OEMs into accepting higher royalty rates than they would have paid under FRAND. As detailed in Section III.B.1, *supra*, Mr.

(… cont'd)
[redacted] Ex. 32 [redacted]

[24] [redacted]. Ex. 37 [redacted]

Lasinski found for every OEM he analyzed that they were charged supra-FRAND royalties by Qualcomm, which confirms that Qualcomm's anticompetitive tie succeeded in obtaining supra-FRAND licenses.

Second, there is substantial common evidence that Qualcomm used its tying power in the CDMA2000 and premium-LTE chipset markets to obtain tied licenses with supra-FRAND royalty rates. [redacted]

[redacted]

Ex. 38 [redacted].[25]

OEMs also indicated that Qualcomm's tie allowed it to impose supra-FRAND royalties. [redacted] Ex. 40 [redacted][26] Similarly, [redacted]

[25] Ex. 39 [redacted] *See also* Ex. 41 [redacted]

[redacted] Ex. 42 ([redacted]

In his declaration, Prof. Elhauge describes the ample common evidence demonstrating that OEMs were forced to agree to Qualcomm's supra-FRAND rates. *See* Elhauge Decl. at Part III.B. Prof. Elhauge also describes how common evidence shows that the supra-FRAND license royalty is not offset by lower chipset prices and how there are no valid procompetitive justifications for the No-License-No-Chips policy. *Id.*

The evidence of the impact of the No-License-No-Chips policy is common to the Class because the practice not only raised royalties throughout the market, but also created a tax on rival chipmakers that enhanced Qualcomm's monopoly power in chips, which raised chip prices and increased Qualcomm's ability to engage in other types of anticompetitive behavior. *Id.* at Part III.B.2. The creation and maintenance of monopoly power is a market-wide phenomenon and its impact is similarly common to the Class.

3. <u>Common evidence shows that Qualcomm's exclusive dealings with Apple impaired rivals and harmed competition.</u>

Common evidence shows that Qualcomm's exclusivity payments to Apple weakened rival baseband processor chipmakers, delayed Intel's entry into the market, and drove Broadcom and Ericsson out of the market. Qualcomm's weakening of competing chipmakers only further entrenched its monopoly power, which allowed Qualcomm to raise baseband processor chip prices and use its No-License-No-Chips tie to impose supra-FRAND rates throughout the market.

First, whether Qualcomm's foreclosure of Apple weakened, delayed, or eliminated the ability of baseband processor chipset rivals to enter the market is subject to common proof, like the strategic value of Apple to chipset suppliers. Elhauge Decl. at Part V.B.2. Qualcomm recognized the strategic value of its incentive payments to Apple to exclude competition. For example, [redacted] Ex. 43 ([redacted][27]

[27] [redacted]

Second, the issue of whether the impairment of rivals increased Qualcomm's monopoly power is common to the Class. Common evidence demonstrates that Apple would have started using Intel baseband processor chips earlier than it did were it not for the exclusivity payments from Qualcomm. For example, [redacted] Ex. 45 [redacted]).[28] [redacted] Ex. 48 [redacted] Ex. 49 [redacted]

4. **Statistics and econometrics show common impact.**

In addition to the voluminous documentary evidence Plaintiffs have marshaled to show common impact, their expert analyses demonstrate a common method of proving impact and damages on a class-wide basis. As detailed in Section III.B.1, *supra*, Mr. Lasinski opined on the common impact of Qualcomm's supra-FRAND royalties. Specifically, Mr. Lasinski's declaration demonstrates that the overcharge for each OEM is subject to common proof and can be performed on a class-wide basis.

In addition to opining on Qualcomm's market and monopoly power, Dr. Flamm details how Qualcomm's supra-FRAND royalties were passed on to consumers. The Qualcomm royalty functioned as an industry-wide value added tax that was assessed on the initial sales price of

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(… cont'd)
[redacted] Ex. 44 [redacted] Exs. 46 [redacted] Ex. 47 [redacted]

cellular phones sold in the United States. In general, Qualcomm's standard royalty rate of [redacted] was applied to the net sales price that the cellular phone manufacturer received. Lasinski Decl. at Part 6.2.1. At trial, Plaintiffs will be able to use documentary, testimonial, and expert evidence to establish that Class members suffered antitrust injury because the Qualcomm royalty overcharge raised the quality-adjusted prices of phones.[29] This common evidence can be used to show the Qualcomm royalty overcharge on all cellular phones sold in the United States was passed through to all Class members in the form of higher quality-adjusted prices for cellular phones, compared to the but-for world. The concept of "pass-through" of costs as a relationship to quality-adjusted prices is prevalent, commonly understood, and well-accepted in the field of economics.

Plaintiffs have at least three types of common evidence from which they will be able to argue inferences to the jury as to the existence of antitrust impact to Class members. ***First***, it is the consensus of economists, confirmed by both theoretical and empirical research, that industry-wide taxes are passed through to end purchasers in the form of higher prices (than if there were no or lower taxes). Economic theory generally predicts that taxation is passed through to consumers in the form of higher prices. Flamm Decl. Part III.B.1. For many years, economists have repeatedly performed empirical studies of the effects of changes in industry-specific tax rates and have repeatedly found (and confirmed) that changes in tax rates are passed through the distribution chain to the end consumer through changes in the price of the taxed good. *Id.*

Second, Dr. Flamm relies on common evidence, which shows the Qualcomm royalty raised quality-adjusted prices of cellular phones during the Class Period. Flamm Decl. Part III.C.1. For example, [redacted] *Id.* at Part III.D.1; Ex. 50 [redacted]

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[29] The economic term "quality-adjusted prices" captures both the nominal price and total quality of a particular product. For example, a 1 quart carton of milk sold at $2.99 or a 1 gallon carton of milk sold at $3.99 both have lower quality-adjusted prices than a 1 quart carton of milk sold at $3.99.

[redacted]. Ex. 51 [redacted]

Dr. Flamm also relies on common evidence showing Qualcomm executives confirmed that licensees passed on the cost of Qualcomm royalties to OEM phones. Flamm Decl. Part III.C.2. [redacted] Ex. 52 [redacted] Ex. 53 [redacted][30] [redacted]

[30] *See, e.g.*, Ex. 54 [redacted] Ex. 3 (Maddero [redacted]

[redacted].[31]

Documentary evidence corroborates Qualcomm's internal testimony because it shows that OEMs responded to steadily falling costs for other cellular components in the real world through a combination of lowering actual prices and continually improving device quality. For example, the iPhone 4 released in 2010 had an initial retail price of $599. Today, a consumer can purchase an entry-level Moto G6 with a bigger, better screen, a higher megapixel camera, more memory storage, and a bigger battery, for only $249. Flamm Decl. Part III.D.1. This demonstrates that cellular device manufacturers responded to industry-wide component cost decreases by lowering the quality-adjusted prices of cellular phones.

[redacted] Ex. 57 ([redacted] Ex. 58 [redacted][32] In the but-

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[31] Ex. 3 [redacted] Ex. 55 ([redacted] Ex. 56 [redacted] Ex. 59 [redacted] Ex. 57 ([redacted]

for world with a lower Qualcomm royalty component cost, OEMs could use that cost savings to lower the price of their cellular devices and/or to make even great improvements to their features.

Third, Dr. Flamm analyzed extensive transactional data from each step of the cellular device distribution chain to determine the amount by which Qualcomm royalty overcharge raised quality-adjusted prices of cellular phones. Flamm Decl. Part III.I. He used a linear regression analysis, a method common to the Class, to statistically estimate the rate at which a lower royalty component cost for OEMs would have been passed through to consumers in the form of lower quality-adjusted prices for cellular phones. *Id. See High-Tech,* 2014 WL 1351040, at *14 (noting that courts have recognized that "regression analysis is generally a reliable method for determining damages in antitrust cases and is 'a mainstream tool in economic study'").[33]

Dr. Flamm analyzed device sales data from each step of the distribution chain including six different OEMs (including Apple, Samsung, Motorola, LG, and HTC – the five largest OEMs in the U.S. market) – constituting approximately 90% of total U.S. cell phone sales during the relevant period – six retailers (including Best Buy, Amazon, Walmart, and Target) – constituting approximately 84% of the national retailer market – and five wireless operators (including AT&T, Sprint, T-Mobile, Verizon, and US Cellular) – constituting approximately 97% of the market for wireless operators. Part III.I. He examined phones sold in a variety of ways, including at full price or through subsidized two-year contracts with wireless service providers. *Id.*

Dr. Flamm's analysis demonstrates common statistical methods capable of estimating that all or nearly all class members were overcharged. For example, the regression results show that at least 87.4% of the total composite Qualcomm royalty overcharge on cellular phones sold in the United States was passed through the distribution chain to end consumers in the form of higher quality-adjusted prices. Part. IV. These common statistical methods also estimate positive pass-through rates, and thus antitrust impact, for every cell phone manufacturer and reseller that he examined. In particular, Dr. Flamm found the highest pass-through rate at the first stage of the

[33] *See also Giuliano v. Sandisk Corp.*, Case No: C 10-02787 SBA, 2015 WL 10890654, *8 (N.D. Cal. May 14, 2015) (holding that an expert's economic regression model could be used to determine damages on a class-wide basis to "measure the extent to which higher competitors' costs from royalties earned from [disputed patents] resulted in higher prices paid by consumers for [defendant's] products").

distribution chain, and lower rates of pass-through at subsequent stages of the distribution chain by resellers. Part IV. Common class-wide inferences include that to the extent OEMs chose to pass-through component cost changes through quality improvements rather than price reductions, consumers would be directly injured by receiving a lower quality device, regardless of how a reseller chose to price the device. Thus, Dr. Flamm's methods estimate an 87.4% pass-through rate of Qualcomm's overcharge in the form of higher quality-adjusted prices for cellular devices, which represents a conservative lower bound on the total antitrust impact to Class members.

1. <u>Class proceedings are superior in this case.</u>

Given the common proof of antitrust impact, antitrust injury, and damages described above, continuing this case as a class action is superior to other procedural methods. *See LCD*, 267 F.R.D. at 314. Requiring class members to proceed individually "would merely multiply the number of trials with the same issues and evidence." *High-Tech*, 985 F. Supp. 2d at 1228.

C. <u>Damages Can Be Measured Class-wide.</u>

The impact of Qualcomm's anticompetitive conduct – found by regulatory authorities across the world, the subject of injunctive relief sought by the FTC, and confirmed by common class-wide proof in this case – can be quantified in actual damages to consumers. Specifically, the detailed and methodical analysis of two highly experienced experts, Mr. Lasinski and Dr. Flamm, demonstrate that the loss suffered by indirect purchasers of cellular phones can be reliably determined on a class-wide basis. Mr. Lasinski's calculation of supra-FRAND rates, combined with Dr. Flamm's regressions, quantify the amount of the overcharge for each Class member. Whether the overcharge is a higher price, a lower quality phone, or both, the amount that each consumer was harmed by Qualcomm's conduct can be calculated on a class-wide basis.

IV. <u>CONCLUSION</u>

For the foregoing reasons, Plaintiffs respectfully request that this Court: (1) grant Plaintiffs' Motion to Certify the Class; (2) appoint Plaintiffs as Class representatives; and (3) appoint interim co-lead Class Counsel as co-lead Class Counsel.

Dated: July 5, 2018

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