

No. 19-16122

---

IN THE  
**United States Court of Appeals for the Ninth Circuit**

---

FEDERAL TRADE COMMISSION,  
*Plaintiff-Appellee,*

*v.*

QUALCOMM INCORPORATED, A DELAWARE  
CORPORATION,  
*Defendant-Appellant,*  
SAMSUNG ELECTRONICS COMPANY, LTD.; SAMSUNG  
SEMICONDUCTOR INC.; INTEL CORPORATION; ERICSSON,  
INC.; SAMSUNG ELECTRONICS AMERICA, INC.; MEDIATEK  
INC.,

*Intervenors,*  
NOKIA TECHNOLOGIES OY; INTERDIGITAL, INC.,  
*Intervenors.*

---

**BRIEF OF AMICI CURIAE CONTINENTAL  
AUTOMOTIVE SYSTEMS, INC. AND DENSO  
CORPORATION IN SUPPORT OF APPELLEE  
FEDERAL TRADE COMMISSION**

---

John (“Jay”) Jurata, Jr.  
Randall C. Smith  
Thomas King-Sun Fu  
Emily Luken  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
1152 15th Street NW  
Washington, DC 20005

*Counsel for Amici Curiae*

## **CORPORATE DISCLOSURE STATEMENT**

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure, amicus curiae Continental Automotive Systems, Inc. states as follows:

1. Continental Automotive Systems, Inc. is wholly owned by Continental Automotive, Inc. Continental Automotive, Inc. is wholly-owned by Continental Automotive Holding Netherlands B.V., which is wholly-owned by CGH Holding B.V., which is wholly-owned by CAS-One Holdinggesellschaft mbH, which is wholly-owned by Continental Caoutchouc-Export-GmbH, which is owned 51% by Continental Automotive GmbH and 49% by Continental A.G.

2. No publicly held company owns 10% or more of Continental Automotive Systems, Inc., however Continental Automotive Systems, Inc. is an indirect subsidiary of Continental A.G., a German public corporation.

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure, amicus curiae DENSO CORPORATION states as follows:

DENSO CORPORATION is a publicly traded Japanese corporation. DENSO CORPORATION has no parent company. 10% or more of the stock of DENSO Corporation is held by Toyota Motor

Corporation, a Japanese public company. No other publicly held corporation or other public entity has a direct financial interest.

## TABLE OF CONTENTS

	Page
CORPORATE DISCLOSURE STATEMENT.....	i
TABLE OF AUTHORITIES.....	iv
INTEREST OF AMICI CURIAE.....	1
INTRODUCTION.....	2
ARGUMENT .....	5
I.    SEP-Holders’ Refusal To License To Upstream Manufacturers Is Stifling American Automotive Innovation. ....	7
A.    The refusal to license to upstream manufacturers decreases incentives to innovate.....	8
B.    The refusal to license to upstream manufacturers is slowing the deployment of connected vehicles in this country. ....	12
II.   Requiring SEP-Holders To License To Upstream Manufacturers Holds Them To Their FRAND Commitments. ....	17
A.    Requiring SEP-holders to license to upstream manufacturers allows licenses to be negotiated between parties with the best knowledge of the technology and allegedly infringing activity. ....	18
B.    Requiring SEP-holders to license upstream manufacturers helps to avoid exploitation of disproportionate market power. ....	23
CONCLUSION .....	28
CERTIFICATE OF COMPLIANCE	
CERTIFICATE OF SERVICE	

## TABLE OF AUTHORITIES

	Page(s)
<b>Cases</b>	
<i>In re Certain Mobile Electronic Devices</i> , Inv. No. 337-TA-1065 (Oct. 30, 2018), Initial Determination.....	16
<i>Continental Automotive Systems, Inc. v. Avanci, LLC</i> , No. 19-cv-2520-LHK, ECF No. 97 (N.D. Cal. July 23, 2019).....	2, 4
<i>Ericsson, Inc. v. D-Link Sys., Inc.</i> , 773 F.3d 1201 (Fed. Cir. 2014) .....	17
<i>GPNE Corp. v. Apple, Inc.</i> , No. 12-CV- 02885-LHK, 2014 WL 1494247 (N.D. Cal. Apr. 16, 2014).....	19
<i>LaserDynamics, Inc. v. Quanta Computer, Inc.</i> , 694 F.3d 51 (Fed. Cir. 2012) .....	22
<i>Lucent Techs., Inc. v. Gateway, Inc.</i> , 580 F.3d 1301 (Fed. Cir. 2009) .....	26
<i>Microsoft Corp. v. Motorola, Inc.</i> , 696 F.3d 872 (9th Cir. 2012).....	4
<i>United States v. Syufy Enters.</i> , 903 F.2d 659 (9th Cir. 1990).....	27
<b>Other Authorities</b>	
J. Kattan, <i>The Qualcomm Case and U.S. National Security</i> , <a href="https://tinyurl.com/su2wp5s">https://tinyurl.com/su2wp5s</a> .....	16
Karen Tso, <i>Why a Tech War Could Endanger Autonomous and Connected Cars</i> , CNBC (Oct. 1, 2019), <a href="https://tinyurl.com/yy5mnmj9">https://tinyurl.com/yy5mnmj9</a> .....	16

U.S. Dep’t of Transportation, <i>Connected Vehicle Basics</i> , <a href="https://tinyurl.com/yxjj98vr">https://tinyurl.com/yxjj98vr</a> (last visited Oct. 27, 2019) .....	13
Elizabeth Woyke, <i>China Is Racing Ahead in 5G. Here’s What That Means</i> , MIT Tech. Rev. (Dec. 18., 2018), <a href="https://tinyurl.com/y245smbd">https://tinyurl.com/y245smbd</a> .....	15
Yan Zhang, <i>China Is Way Behind the U.S. in Driverless Vehicles. It’s Determined to Catch Up</i> , L.A. Times (May 16, 2019) .....	14

## **INTEREST OF AMICI CURIAE<sup>1</sup>**

Amici Continental Automotive Systems, Inc. and DENSO CORPORATION are upstream automotive component companies known as “Tier One” manufacturers, meaning that they make the highest-level components, short of the automobile itself. Although traditionally thought of as manufacturing companies, automotive manufacturers, including upstream companies like amici, can also be classified today as technology companies. Cars are increasingly connected to cellular networks, and hence to the internet to support a variety of features such as real-time vehicle location tracking.

It is thus crucial that amici, and other upstream manufacturers like them, are able to obtain licenses on fair, reasonable, and nondiscriminatory (FRAND) terms to all standard-essential patents (SEPs) that are relevant to cellular networks. But just as in the smartphone industry, many cellular SEP-holders restrict their licensing in the automotive industry solely to the manufacturers of consumer

---

<sup>1</sup> No counsel for a party authored this brief in whole or in part. No party, counsel for a party, or any person other than amici and their counsel made a monetary contribution to fund the preparation or submission of this brief. All parties have consented to the filing of this brief.

goods (here, the Big Three and other automakers), meaning that upstream manufacturers like amici are left out in the cold. (Other SEP-holders reach the same result through slightly different means: formally offering licenses to non-OEMs, but making them functionally unavailable by demanding royalties that far exceed a FRAND rate.) Accordingly, amici have a strong interest in the outcome of this case, and in particular in ensuring that holders of SEPs for cellular technologies honor their obligation to make licenses available to all comers.<sup>2</sup>

## INTRODUCTION

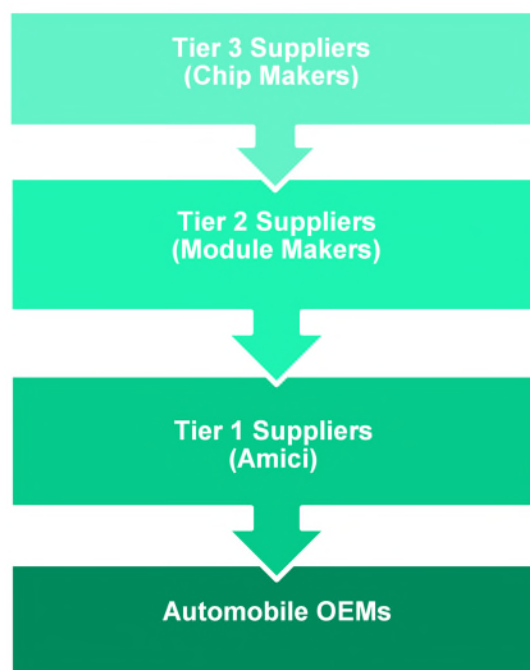
Amici Continental Automotive Systems, Inc. and DENSO CORPORATION have been at the forefront in fueling the development of components of connected cars. Amici are what is known within the automotive industry as “Tier One” component manufacturers, meaning that they make the highest-level automotive components. Within the broader structure of the automotive supply chain, Tier One

---

<sup>2</sup> Amicus Continental is currently involved in litigation implicating this very issue against various SEP-holders. *See* First Amended Complaint, *Continental Automotive Systems, Inc. v. Avanci, LLC*, No. 19-cv-2520-LHK, ECF No. 97 (N.D. Cal. July 23, 2019).



manufacturers like amici source parts from “Tier Two” suppliers, who, in this situation, make “modules” that incorporate cellular chipsets. Those Tier Two suppliers in turn source components from “Tier Three” suppliers, who make the cellular chips. Thus, amici sit at a critical position in the automotive supply chain, as illustrated below:



One component that amici design and manufacture, which (as will be explained in a moment) is of particular relevance here, is called the “telematics control unit.” These units allow cars to connect to cellular networks, facilitating emergency communications, entertainment, vehicle diagnostics, over-the-air software updates, location information, and various other functions. Amici sell these components to automobile

OEMs, which in turn install them in the cars they sell to end-consumers.

Because the telematics control units and other wireless-enabled automotive components connect to cellular networks, amici must practice cellular SEPs. Amici have accordingly sought licenses from SEP-holders. But many of those SEP-holders have engaged in discriminatory licensing practices. Although SEP-holders are obligated “to license [their SEPs] to *all comers* on terms that are ‘reasonable and nondiscriminatory,’” *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 876 (9th Cir. 2012) (emphasis added), Qualcomm refuses to license its patents to competing chip manufacturers that could potentially supply Tier One manufacturers. Other SEP-holders have refused to grant FRAND licenses to anyone other than “original equipment manufacturers” or “OEMs”—the companies at the end of the supply chain (e.g., Ford, BMW, and Chrysler). *See* First Amended Complaint at ¶106, *Continental Automotive Systems, Inc. v. Avanci, LLC*, No. 19-cv-2520-LHK, ECF No. 97 (N.D. Cal. July 23, 2019). And yet other SEP-holders achieve essentially the same result, but through a slightly different tactic: Instead of refusing to make SEP licenses available at

all to non-OEMs, they formally offer such licenses, but at rates that are set relative to the price of the end product as opposed to the allegedly infringing component. The demanded rates are so exorbitant (i.e., so far above FRAND) that no upstream manufacturer could accept them.

The SEP-holders' various refusals to license cellular technologies on FRAND terms to upstream manufacturers—who are responsible for actually producing most automotive components, and in particular those that actually practice the SEPs—carries harmful consequences for consumers, namely higher prices and a slower pace of innovation (particularly with emerging 5G technology). The district court was right to stop Qualcomm from refusing to license competing chip manufacturers, and this Court should affirm.

### **ARGUMENT**

This Court should affirm the district court's ruling that the promise to license on a non-discriminatory basis means what it says—a SEP-holder may not categorically refuse to grant licenses to anyone other than its preferred link in the supply chain. The district court correctly concluded that Qualcomm's systematic practice of limiting to whom within the mobile phone supply chain it will grant licenses

contravenes its obligation to grant licenses for SEPs on a FRAND basis. 1ER125-1ER135. Indeed, that is the only reasonable interpretation of the FRAND promises at issue.

Amici submit this brief to inform the Court about the effects of Qualcomm's and other SEP-holders' similar discriminatory conduct in the automotive industry. Just as Qualcomm refuses to license to certain suppliers in the cellular handset industry, many SEP-holders refuse to license *on FRAND terms* to any automotive component manufacturer upstream of the OEMs. That means that functionally Tier One companies can neither obtain all necessary licenses themselves, nor source fully licensed components from Tier Two or Tier Three manufacturers. This practice of refusing to license the automotive supply chain on FRAND terms has had severe negative consequences for the industry, undermining component manufacturers' incentives to innovate (*see* § I.A.) and threatening the United States' position as a leader in connected-vehicle technology (*see* § I.B.). It also causes severe inefficiencies (§ II.A.) and confirms that the justifications SEP-holders have offered for this practice are pretextual and meant to

conceal an effort to exploit their disproportionate market power to extract the highest licensing fees possible (§ II.B.).

**I. SEP-Holders’ Refusal To License To Upstream Manufacturers Is Stifling American Automotive Innovation.**

The SEP-holders’ defense of their refusal to license to upstream manufacturers on FRAND terms is largely built around their assertion that if they are required to do what they have voluntarily promised—i.e., to offer licenses to their SEPs on a truly fair, reasonable, and nondiscriminatory basis, *see* 1ER126 (noting that Qualcomm committed the Telecommunications Industry Association that its SEPs “will be made available to all applicants”)—they will have insufficient incentive to invest in further innovation. *See* Opening Br. 12-13. This bald assertion cannot withstand scrutiny. Nothing in the district court’s order suggests that Appellant cannot obtain a fair return on investment, commensurate with the value of its patents, or that reasonable royalties (as opposed to higher-than-reasonable royalties) would be insufficient to support ongoing innovation for Appellant’s (or

any) business.<sup>3</sup> Moreover, the SEP-holders get the innovation consequences of their conduct exactly backwards. As amici can attest firsthand, it is the SEP-holders' refusal to license their technologies to upstream manufacturers on FRAND terms that is stifling innovation.

**A. The refusal to license to upstream manufacturers decreases incentives to innovate.**

The SEP-holders' discriminatory approach to licensing creates a crippling uncertainty for upstream manufacturers that suppresses their willingness and ability to innovate. That is because component manufacturers' customers (i.e., the car companies) generally require—and have required for many decades as an established industry practice—upstream manufacturers to indemnify them against patent infringement suits. And so when an upstream manufacturer cannot get a license for a patent that its product may infringe (either because the

---

<sup>3</sup> The SEP-holders' innovation-incentive argument also ignores that they are hugely incentivized to invest in research and development by virtue of the fact that most SEP-holders make and sell products (e.g., chips and network equipment) that practice the standards. Indeed, such product development activities are the real impetus for SEP-holders to invest in research and development—revenues from “out licensing” are often just the “icing on the cake.” Further, SEP-holders' patent portfolios provide defensive value against other patent owners who may claim that the above-described products infringe their patents.

SEP-holder refuses to grant a license at all, or only offers such a license on non-FRAND terms), that manufacturer must either limit its sales to only those customers that happen to be able to get a license, or else be prepared to bear its customers' costs—either those of getting a license (nearly always at a rate that far exceeds the FRAND, *see infra* 21-22) or of defending a patent infringement suit.

Each of the preceding scenarios works to discourage innovation. A component manufacturer is less likely to invest the time and money to introduce a new product if there is a risk that a significant portion of its potential consumer base could vanish for want of the requisite license. Similarly, a manufacturer that is left holding the bag for infringement suits against downstream customers will not only factor those costs into its decision about whether to innovate, but will also likely see significant resources (which otherwise could be used to further innovate) tied up in litigation that easily could have been avoided if only a FRAND license had been available to that manufacturer in the first instance.

Indeed, amici themselves have experienced this innovation-discouraging effect. Because of the long lead time inherent in cutting-

edge research and development, amici have to decide whether to invest in developing a new product incorporating wireless technologies long before they know whether any particular OEM will purchase it. And so if amici wish to develop a new technology, they have to bear a significant risk of not being able to obtain the requisite license—which means that amici face either an artificially smaller customer base or the prospect of steep indemnification costs. And that uncertainty has led amici to forgo significant innovations that would have benefited not just OEMs, but the whole industry and, ultimately, consumers.

For instance, amicus Continental currently has the technical know-how to create a single circuit board with cellular communications and high-end infotainment functions. That kind of product would increase performance, reduce overall costs for consumers, and enable new connected services and safety features. But Continental has decided not to pursue that innovation, due to the intellectual-property uncertainty resulting from its and its suppliers' inability to obtain licenses for the SEPs that would be infringed by that product. Similarly, Continental has forgone working with both MediaTek and Samsung—upstream manufacturers whose chipsets would allow



Continental to upgrade its products to provide consumers with both superior prices and technical capabilities—because their chips come without licenses to SEPs that they practice.

Worse still, SEP-holders have leveraged their refusal to license any upstream component manufacturer to directly stifle innovation. Again, amici's experiences are typical. Consistent with the general structure of the automotive supply chain described above, *supra* 2-4, Continental incorporates parts and materials from other suppliers further up in the supply chain when it manufactures telematics control units.<sup>4</sup> But that was not always the case. In years past, amicus Continental built its own network access devices in-house, effectively consolidating the supply chain by cutting out the middle step of the Tier Two manufacturers and allowing Continental to better customize the components for its products. Around the time cellular networks switched from third-generation (3G) to fourth-generation (4G) technology (circa 2009), however, that practice came to an end: At least

---

<sup>4</sup> In particular, its telematics control units incorporate network access devices sourced from Tier Two manufacturers, which, in turn, incorporate baseband processors sourced from Tier Three manufacturers.

one SEP-holder told Continental that if it continued to use its own network access devices, then it would treat the entire telematics control unit, not just the network access device, as the royalty base for the licensing of its patents—even though it was the network access device that infringed those patents. That forced Continental to switch from making to buying network access devices, and thus to forgo the ability to manufacture more innovative products at lower costs.

**B. The refusal to license to upstream manufacturers is slowing the deployment of connected vehicles in this country.**

As explained above, the refusal of some SEP-holders to license on FRAND terms to any upstream component manufacturer is already causing companies like amici to forgo important and cost-saving innovations in the automotive industry. And although the names of the specific electronics components affected may be generally unfamiliar to consumers—e.g., telematics control units and network access devices—the functionality they provide is not. And delays in the improvement of these technologies at this time in the evolution of the automotive industry could have sweeping and lasting consequences.

As has been well documented, the introduction of 5G technology will bring huge changes for society. Among these will be the widespread deployment of “connected vehicles”—automobiles that use a cellular connection to communicate with both infrastructure (like roads and stoplights) and other vehicles. Such cars, for example, could use cellular connectivity to “communicate with each other so every vehicle on the road would be aware of where other nearby vehicles are.” See U.S. Dep’t of Transportation, *Connected Vehicle Basics*, <https://tinyurl.com/yxjj98vr> (last visited Oct. 27, 2019). That information could be used to, say, warn a driver of “an oncoming car, out of sight beyond a curve, swerving into their lane.” *Id.* All told, the U.S. Department of Transportation estimates that “connected vehicle technologies ha[ve] shown that they have the potential to reduce up to 80 percent of crashes where drivers are not impaired, which would save a significant number of lives and prevent millions of crash-related injuries every year.” *Id.*

What is less clear, however, is which companies—and just as important, which *country’s* companies—will be leading the way. There is little dispute that the United States currently leads the pack with

respect to connected vehicle technology, but China is hot on its tail. As the CEO of one autonomous-vehicle company recently told the *L.A. Times*: “The U.S. is ahead right now. ... But China will soon make significant strides, and I am fully confident that by 2030 it will be a different game.” Yan Zhang, *China Is Way Behind the U.S. in Driverless Vehicles. It’s Determined to Catch Up*, L.A. Times (May 16, 2019).

Qualcomm argues that the district court’s remedy will exacerbate that trend. According to Qualcomm, truly non-discriminatory licensing would “undermin[e] U.S. leadership in forthcoming 5G technology,” presumably because it would make SEP licenses available to all, including Chinese companies. Opening Br. 34. But the notion that SEP-holders’ refusal to license to upstream manufacturers on FRAND terms is somehow the bulwark against China overtaking the United States in 5G infrastructure is simply fanciful. China is already pulling out all the stops to surpass its foreign policy rivals on 5G technology. As the MIT Technology Review recently explained, China has been using its “control[ of] all three of the country’s mobile operators” to push them to move 5G technology forward as quickly as possible. Elizabeth

Woyke, *China Is Racing Ahead in 5G. Here's What That Means*, MIT Tech. Rev. (Dec. 18., 2018), <https://tinyurl.com/y245smbd>.<sup>5</sup> If China does manage to overtake the United States on 5G infrastructure, it will be because of that concerted and government-driven investment, not because SEP owners are required to offer FRAND licenses to upstream suppliers.

Just as important, Qualcomm's argument also misses half of the 5G equation. At least as important as the cellular network itself are the devices that run on it. No matter how advanced a country's cellular infrastructure is, that technology is relatively meaningless if there are not innovative products to utilize it. And so what will truly determine global 5G leadership are the devices—connected cars being a prime example—that will make use of those new cellular networks. As commentators have noted, the “research and development ... for the next generation of [5G-connected] autos needs to happen now, especially

---

<sup>5</sup> Last fall, for instance, the “Fangshan government and China Mobile, the country's largest mobile operator” (again, controlled by the government) launched “the world's biggest rollout of 5G technology,” by “outfit[ing] a 6-mile ... road with 5G cell towers ... to test wireless communications between autonomous vehicles and their surroundings.” *Id.*

for an industry [already] caught off guard by the swift transition to electric vehicles.” Karen Tso, *Why a Tech War Could Endanger Autonomous and Connected Cars*, CNBC (Oct. 1, 2019), <https://tinyurl.com/yy5mnmj9>. Indeed, a recent IBM survey of auto executives found that “most said their company was not yet operating on a digital data platform.” *Id.* But, as explained above, *supra* § I.A, those are the very developments that SEP-holders’ anti-competitive behavior is holding back. Although the cellular connectivity technology at issue in this case is only a small part of connected-vehicle technology, it is a necessary one. And so the inability of Western device companies to access licenses to SEPs on FRAND terms is hamstringing their ability to compete in this critical device-innovation race.

Perhaps unsurprisingly, the International Trade Commission recently found that Qualcomm’s practice of licensing only to mobile phone OEMs creates “a real and palpable likelihood the National Security interests will be jeopardized.” *In re Certain Mobile Electronic Devices*, Inv. No. 337-TA-1065, (Oct. 30, 2018), Initial Determination at 195-96; *see also* J. Kattan, *The Qualcomm Case and U.S. National Security*, at 6-8, at <https://tinyurl.com/su2wp5s>.

This is what is at stake in this case. Not only does the refusal to license SEPs to upstream manufacturers on FRAND terms lead to market inefficiencies, higher prices, and delayed rollout of improved safety and user-experience features to consumers, it also endangers Western countries' position as the leaders in this space. The only supposedly offsetting benefit offered by Qualcomm in the proceedings below—that refusing FRAND licenses to the upstream supply chain allows it to extract higher prices—hardly justifies those costs.

## **II. Requiring SEP-Holders To License To Upstream Manufacturers Holds Them To Their FRAND Commitments.**

As detailed above, SEP-holders' practice of refusing to license any upstream component manufacturer impedes innovation and threatens to delay the deployment of connected cars in this country. And the SEP-holders' conduct also seemingly makes no sense, in light of SEP-holders' underlying FRAND commitments. One of the core aspects of the FRAND obligation is that the rate the licensee pays must be based on the "value of the patented feature, not any value added by the standard's adoption of the patented technology." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014). So why would

most SEP-holders adopt a practice of refusing to license to anyone but the OEMs?

The answer is that the royalties SEP-holders believe they can extract from the OEMs are *not* the same as the royalties they could earn from licensing component manufacturers. When refusing to license to any upstream component manufacturer, SEP-holders are exploiting an informational asymmetry in the system while also trying to capitalize on the highest-priced goods in the supply chain (i.e., the cars themselves). The automotive context dramatically illustrates this asymmetry. And it confirms the district court's determination that Qualcomm's justifications for refusing to license to competing chip manufacturers are pretextual. The real goal in focusing licensing efforts on OEMs is to exploit their disproportionate market power to extract the most lucrative licensing fees possible—precisely the sort of market power abuse the FRAND commitment is meant to prevent.

**A. Requiring SEP-holders to license to upstream manufacturers allows licenses to be negotiated between parties with the best knowledge of the technology and allegedly infringing activity.**

Component-level licensing makes economic sense given the different competencies and levels of knowledge possessed by the

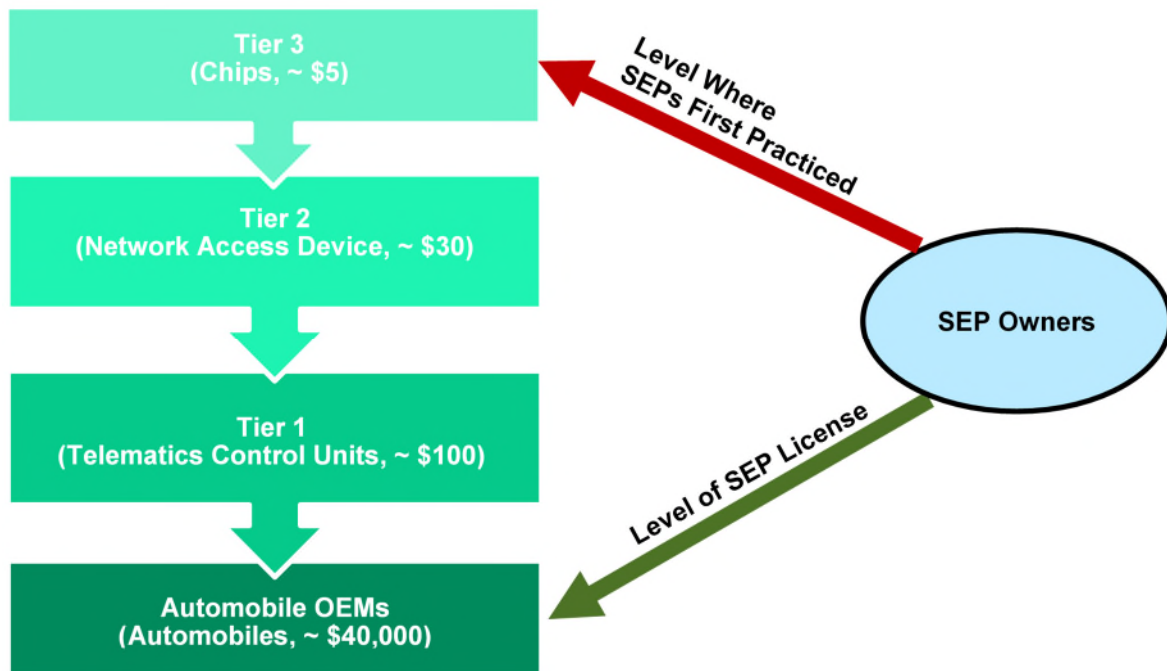


participants in that supply chain. Put simply: It is the component-level manufacturers—companies like amici and their suppliers, and most especially the makers of baseband processor chips—that are most familiar with the standardized technologies used in the products they manufacture. They are accordingly the best situated to evaluate whether those products practice the SEPs, and, if so, to determine whether the terms offered by the SEP-holders are fair and reasonable.

To elaborate: Most, if not all, of the technology protected by SEPs is practiced at the most upstream point in the supply chain—the level of the chips. *See GPNE Corp. v. Apple, Inc.*, No. 12-CV-02885-LHK, 2014 WL 1494247, at \*13 (N.D. Cal. Apr. 16, 2014) (“[A]s a matter of law ... the baseband processor is the proper smallest saleable patent-practicing unit.”). The SEPs, after all, protect basic standards that must be practiced simply so that devices are able to connect with a cellular network and communicate with one another. Nearly any innovation that might occur at later stages in the supply chain—when those chips are assembled into network access devices, which are in turn incorporated into telematics control units—does not alter the technology protected by the SEPs. Because the actual practice of the SEPs occurs

at the level of the individual chips, the licensing should occur there as well.

Here is an image to illustrate the point:



As the diagram demonstrates, many SEP-holders have made a strategic, economic decision that they will earn higher licensing fees by licensing to automotive companies, rather than by licensing to companies like Continental and DENSO CORPORATION that sell telematics control units for approximately \$100, much less with chipmakers that sell chips for approximately \$5 apiece.

The system those SEP-holders have constructed through their refusal to license to any upstream component manufacturer, however,

means that the companies they expect to take a license are the ones that do not actually practice the SEPs at issue, but instead merely purchase components that practice the SEPs from their Tier One suppliers. The practice shifts the obligation to negotiate licensing terms that are fair, reasonable, and non-discriminatory to the party in the supply chain with the least understanding of how the intellectual property is actually practiced.

Said otherwise, when SEP-holders refuse to offer FRAND licenses to upstream manufacturers, they impose an obvious inefficiency, and one that works to the SEP-holders' clear advantage: They know that an OEM will be less familiar with the patented technology than an upstream manufacturer, and so may have less ability to drive down the royalty rate in negotiations with the SEP-holder. They also know that the price of a license makes up a vastly smaller fraction of the OEM's costs than the costs of an upstream manufacturer, so when the SEP-holder negotiates licenses with only the former, it gets a counterparty that is relatively less motivated to fight for every dollar (especially when the OEM also has intellectual property indemnity rights against its suppliers). These inefficiencies help explain why "it is generally

required that royalties be based not on the entire product, but instead on the smallest salable patent-practicing unit.” *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012). The further the licensing gets from the unit that actually practices the patent, the greater the “risk that the patentee will be improperly compensated for non-infringing components of that product.” *Id.*

These asymmetries exist in the cellular phone context, where the SEP-holders are negotiating with manufacturers of handsets even though the SEPs at issue are actually practiced at the chip level. But the asymmetries are several orders of magnitude larger in the automotive context, where many SEP-holders are negotiating licenses not with the Tier Three chip makers, the Tier Two module makers, or the Tier One manufacturers of telematics control units like amici, but instead only with car companies that have a much more limited understanding of the technology at issue.

In short, instead of allowing licenses to be negotiated between the parties with the best understanding of the technology (i.e., the patent-holder and the manufacturer of the component that may infringe it), the opposite is the case. Other SEP owners have adopted Qualcomm’s

practice and negotiate solely against car companies and other “end-product” manufacturers who are less familiar with—and hence less able to accurately value—the cellular technology in the patents. The resulting inefficiency is ultimately borne by consumers in the form of higher prices. As the district court correctly held, while this practice may be “humongously more ... lucrative” for Qualcomm, it contravenes the plain meaning and effect of Qualcomm’s FRAND commitments to license “all applicants,” without restrictions. 1ER126; 1ER131.

**B. Requiring SEP-holders to license upstream manufacturers helps to avoid exploitation of disproportionate market power.**

The SEP-holders’ conduct in the automotive context further confirms the correctness of the district court’s holding, because none of the various justifications the SEP-holders have offered for their practice work in that context. Their conduct, then, bolsters the district court’s determination that these justifications are purely pretextual, and the real motive for their practice of withholding FRAND licenses from upstream manufacturers is to extract the highest licensing fees possible.

In its opening brief, for instance, Qualcomm asserts that, because it “provided un rebutted evidence from its engineers and [Standards Developing Organization] delegates demonstrating that only a complete cellular device (such as a phone or tablet) or cellular infrastructure (such as a base station) can implement or practice [the] standards,” it is justified in refusing to license to anyone but the handset manufacturers. Opening Br. at 133. Amici disagree with that position—the SEPs are practiced at the chip-level, and therefore (as the FTC rightly argues, FTC Br. 70-73) they should be licensed at the chip-level. But if the SEP-holders truly believed that only the complete cellular device practices the SEPs, then they would offer FRAND licenses to Tier One component manufacturers like amici in the automotive context. It is these manufacturers, after all, that provide the telematics control units—essentially mobile phones designed specifically for use in cars. They could make no plausible argument that it is only when the telematics control unit is actually installed into a car that the SEPs are implemented or practiced.

Qualcomm further suggests that if it is required to offer FRAND licenses to any upstream manufacturer (thereby creating the

inefficiency just described), it will be forced into an “inefficien[t] and impractical[] ... ‘multi-level’ licensing scheme”—licensing one part of its portfolio to component manufacturers, instead of the entire thing to OEMs—which will supposedly lead it to cease innovation. Opening Br. 12-13. But Qualcomm’s witnesses tried exactly that argument at trial, and the district court found that testimony (on which Qualcomm continues to rely for this point in its appellate brief, Opening Br. 13 (citing 3ER586:25-3ER587:21)) to be “not credible in multiple respects,” 1ER133-1ER135. Among other things, the district court noted that “concerns about multi-level licensing” appeared to be a “pretextual,” made-for-litigation rationale, which appeared “[n]owhere in [Qualcomm]’s long discussion” before this case as to why it refused to license to anyone but OEMs. 1ER133. To the contrary, “Qualcomm’s own recorded statements”—which Qualcomm’s witness “pretended not to recall”—revealed that Qualcomm’s true motivation was that “it is more lucrative to license only to OEMs.” *Id.*

The district court’s finding of pretext is hardly surprising—even on its own terms, the assertion that a truly non-discriminatory approach will lead to inefficient, multi-level licensing makes little sense.

For one thing, Qualcomm wrongly assumes that only OEMs will license Qualcomm's entire portfolio, meaning that licensing to upstream manufacturers will necessarily involve splitting up that portfolio, which will supposedly cause inefficiencies. *E.g.*, Opening Br. 44. But as the automotive industry illustrates, that is simply untrue. Even if an upstream manufacturer's product does not *implement* a particular patent, it could arguably still *infringe* it. *See, e.g., Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1320-22 (Fed. Cir. 2009) (a party commits infringement not only when it practices every limitation of a claim, but also when it sells a product "constituting a material part of [a patented] invention, knowing the same to be especially made" for that use, or induces infringement by another). And so an upstream manufacturer of a chip involved in cellular connectivity used would have every reason to license the broader cellular portfolio.

In any event, even if Qualcomm were right that there is some point sufficiently far upstream at which component manufacturers would license only part of its portfolio, that would not justify the refusal by certain SEP owners to offer FRAND licenses to *anyone* upstream of OEMs. After all, even if *some* upstream companies are only willing to



license part of an SEP-holders' portfolio, there are still plenty of others willing to license the whole thing. Continental, for instance, is a perfect example. Its telematics control unit features cellular connectivity, and thus arguably implements the entire cellular SEP portfolio. So whatever the merits of Qualcomm's fear of multi-level licensing, that rationale cannot justify the refusal to offer FRAND licenses to any upstream component manufacturer.

Ultimately, however, this Court need not definitively resolve which level of licensing will produce the most efficient outcomes. So long as this Court rules that SEP-holders, like Qualcomm, cannot unilaterally refuse to offer FRAND terms to wide swaths of potential licensees, then the free market can answer that question. After all, little "encourages efficiency" like "the effective operation of the free market." *United States v. Syufy Enters.*, 903 F.2d 659, 668 (9th Cir. 1990). So if licensing to companies other than OEMs turns out to be as inefficient as Qualcomm claims, then market forces will naturally push companies away from engaging in that kind of arrangement. But—and this is what the SEP-holders truly fear—if it turns out that the "OEMs-only" rule of certain SEP owners is what is inefficient, then that is

where the market will go. And that is, in a nutshell, one of the fundamental problems with the SEP-holders' rule: It takes a decision that should be sorted out naturally through market forces, and places it in solely the hands of the very party that stands to benefit most from inefficiency.

### CONCLUSION

For the foregoing reasons, this Court should affirm the decision below.

Respectfully submitted,

/s/ Jay Jurata

John ("Jay") Jurata, Jr.  
Randall C. Smith  
Thomas King-Sun Fu  
Emily Luken  
ORRICK, HERRINGTON &  
SUTCLIFFE LLP  
1152 15th Street NW  
Washington, DC 20005

*Counsel for Amici Curiae*

November 29, 2019

## **CERTIFICATE OF COMPLIANCE**

This brief complies with the length limits permitted by Fed. R. App. P. 29(a)(5). The brief is 4,995 words, excluding the portions exempted by Fed. R. App. P. 32(f), if applicable. The brief's type size and type face comply with Fed. R. App. P. 32(a)(5) and (6).

ORRICK, HERRINGTON & SUTCLIFFE LLP

/s/ Jay Jurata

John ("Jay") Jurata, Jr.

*Counsel for Amici Curiae*

## **CERTIFICATE OF SERVICE**

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on November 29, 2019.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

ORRICK, HERRINGTON & SUTCLIFFE LLP

/s/ Jay Jurata

John ("Jay") Jurata, Jr.

*Counsel for Amici Curiae*