

Nos. 18-1363, 18-1380, 18-1382, 18-1732

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**UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

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TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED, TCT  
MOBILE LIMITED, TCT MOBILE (US) INC.,

*Plaintiffs-Appellees,*

v.

TELEFONAKTIEBOLAGET LM ERICSSON, ERICSSON INC.,

*Defendants-Appellants.*

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On Appeal from the United States District Court for the Central District of  
California in No. 8:14-cv-00341-JVS-DFM

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ERICSSON, INC., TELEFONAKTIEBOLAGET LM ERICSSON,

*Plaintiffs-Appellants,*

v.

TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED, TCT  
MOBILE LIMITED, TCT MOBILE (US) INC.,

*Defendants-Appellees.*

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On Appeal from the United States District Court for the Central District of  
California in No. 2:15-cv-02370-JVS-DFM

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**BRIEF OF AMICUS CURIAE UBER TECHNOLOGIES INC. IN SUPPORT  
OF NO PARTY**

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FORM 9. Certificate of Interest

Form 9  
Rev. 10/17

**UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT**

TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED, TCT MOBILE LIMITED, TCT MOBILE (US) INC. v. TELEFONAKTIEBOLAGET LM ERICSSON, ERICSSON INC.

Case No. 2018-1363

**CERTIFICATE OF INTEREST**

Counsel for the:

(petitioner)  (appellant)  (respondent)  (appellee)  (amicus)  (name of party)

certifies the following (use "None" if applicable; use extra sheets if necessary):

1. Full Name of Party Represented by me	2. Name of Real Party in interest (Please only include any real party in interest NOT identified in Question 3) represented by me is:	3. Parent corporations and publicly held companies that own 10% or more of stock in the party
Uber Technologies Inc.	None	SB Cayman 2 Ltd., a private company, owns more than ten percent of Uber Technologies Inc.'s outstanding stock. SB Cayman 2 Ltd. is a subsidiary of Softbank Group Corp., a publicly traded corporation.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court **(and who have not or will not enter an appearance in this case)** are:

**Perkins Coie LLP  
T. Andrew Culbert  
Kevin A. Zeck**

FORM 9. Certificate of Interest

Form 9  
Rev. 10/17

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. *See* Fed. Cir. R. 47. 4(a)(5) and 47.5(b). (The parties should attach continuation pages as necessary).

*HTC Corporation & HTC America, Inc. v. Telefonaktiebolaget LM Ericsson & Ericsson Inc.*, Case No. 6:18-cv-00243-JRG (E.D. Texas) (Mr. Culbert and Mr. Zeck are counsel of record for HTC)

*Ericsson Inc. & Telefonaktiebolaget LM Ericsson v. LG Electronics, Inc. & LG Electronics Mobilecomm U.S.A., Inc.*, Case No. 4:18-cv-186-ALM (E.D. Texas)

June 18, 2018

Date



Signature of counsel

Please Note: All questions must be answered

T. Andrew Culbert

cc: \_\_\_\_\_

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## STATEMENT OF *AMICUS*' IDENTITY AND INTEREST

*Amicus* Uber Technologies, Inc. develops, markets, and operates a mobile ridesharing application and service that connects riders with a crowd-sourced network of drivers to get them wherever they want to go. Since its founding in 2009, the company has expanded its technology offerings beyond its ride hailing application—creating applications that facilitate food ordering and delivery, healthcare patient transportation, freight-booking, and bike-sharing. And Uber continues to invest in the future of transportation, with major efforts underway in self-driving technology and urban air transportation.

Mobility solutions that operate in the Uber environment, including autonomous vehicles, make use of the cellular communication network and so must be compliant with the same 2G, 3G and 4G standards that are at issue in this appeal. Accordingly, *amicus* has a strong interest in the standard essential patent licensing paradigm that governs access to this network, including the proper interpretation and application of the obligation to license on fair, reasonable and non-discriminatory terms.<sup>1</sup>

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<sup>1</sup> Defendants-Appellants and Plaintiffs-Appellees have consented to the filing of this brief. Pursuant to Federal Rule of Appellate Procedure 29(c), Uber Technologies Inc. certifies that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person or entity, other than *amicus* or its counsel, made a monetary contribution to the preparation or submission of this brief.

## I. SUMMARY OF THE ARGUMENT

This appeal raises fundamental issues concerning access to the world's cellular communication network. An estimated 34 billion devices will connect to this network by the year 2020.<sup>2</sup> Each device will connect using standards promulgated by the European Telecommunications Standards Institute ("ETSI"). Appellant Ericsson owns patents essential to these ETSI standards, sells networking infrastructure products that embody its patents covering ETSI standards, and seeks compensation from device makers, including appellee TCL. By defining general rules governing the appropriate compensation owed to the owner of a standard essential patent ("SEP"), this case will have a profound and far-ranging impact.

Today's connected devices come in many shapes and sizes, and can include kitchen appliances, bicycles, drones, phones and automobiles. Indeed, the list of possible products implicated by this appeal is limited only by the reach of human imagination. Yet each device shares a basic commonality: the ETSI standards dictate how the device will communicate. Each device will include a processor that implements the ETSI standards, and each device maker will need a license to all patents essential to the ETSI standards.

Most ETSI members commit to make their SEPs available to anyone on terms

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<sup>2</sup> See *BI Intelligence projects 34 billion devices will be connected by 2020*, (Nov. 6, 2015), <http://www.businessinsider.com/bi-intelligence-34-billion-connected-devices-2020-2015-11>.

that are Fair, Reasonable and Non-Discriminatory (“FRAND”). This poses two questions: what is a *reasonable* royalty, and what type of licensing model is *fair* and *non-discriminatory*?

*Amicus* respectfully requests that this court adopt an approach to FRAND licensing that recognizes the following fundamental principles: First, there should be no *horizontal* royalty discrimination based on device characteristics. To be reasonable, the royalty paid for a SEP must be the same across all devices. Second, the SEP holder should not discriminate *vertically* with a licensing model intended to avoid the patent exhaustion doctrine. Vertical discrimination based on the product channel conflicts with ETSI’s FRAND royalty mandate.

Varying SEP royalties based on device characteristics untethered to the ETSI standard constitutes horizontal royalty discrimination and violates the apportionment doctrine set forth by the Supreme Court in *Garretson v. Clark*, 111 U.S. 120 (1884). The essence of apportionment is that the patentee can only be compensated based on *its* invention; compensation cannot be predicated on something the patentee did not invent. Here, reasonable compensation should stem from the SEP’s individual contribution to the ETSI standard isolated from the contributions of all other participants. Moreover, SEP royalties cannot fluctuate based on device features unrelated to the invention, such as the volume of device units shipped or the device’s primary use as a car, phone, or drone. The ETSI

standards do not address any of these differences. Instead, the SEPs cover *interoperability* and are directed to the same network connection utility in each device. The invention is the same no matter whether it is implemented in a car, phone, bicycle, or refrigerator. There is no legal justification for varying the patentee's compensation based on the device characteristics.

Whether a patentee's licensing model is *fair* and *non-discriminatory* is further informed by the Supreme Court's patent exhaustion doctrine. Once a patentee has designed and manufactured products that incorporate its patented inventions, and then receives compensation for those inventions by placing those same products into commerce, the patentee may not reach beyond its initial sales and receive additional compensation from downstream users. This constraint on the downstream exploitation of patented inventions provides a framework for this court's interpretation of *fair* and *non-discriminatory*. A SEP holder should not be allowed to license its patents in a manner that frustrates the policies underlying the exhaustion doctrine.

## II. BACKGROUND

Hundreds of different companies have collaborated over the years to create today's cellular communication network.<sup>3</sup> These companies are both competitors

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<sup>3</sup> See generally, *Welcome to the World of ETSI: An overview of the European Telecommunication Standards Institute*, EUROPEAN TELECOMMUNICATION STANDARDS INSTITUTE (“ETSI”) (2016),

and collaborators, and include chip manufacturers, such as Qualcomm and Intel, network infrastructure manufacturers, such as Ericsson and Huawei, network service providers, like Verizon and AT&T, as well as governments, universities and research bodies.<sup>4</sup> Scores of technical committees within standard setting organizations (“SSOs”) meet several times a year to develop and publish the comprehensive specifications that define the communication network.<sup>5</sup> While collaborating to develop these specifications, many SSO participants also file applications for patents that read on the standard. The resulting patents are “essential” if they are necessarily infringed by a network capable device.

The cellular standards—commonly referred to as the 2G, 3G, 4G, and forthcoming 5G standards—provide interoperability across diverse products and services. With interoperability, an Apple iPhone, using a Qualcomm baseband processor, can connect over a Verizon network, to communicate with a Samsung smartwatch that uses a Samsung Exynos system-on-a-chip. But this seamless interoperability comes at a cost: alternative technologies are abandoned during the

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<http://www.etsi.org/images/files/ETSIGenericPresentation.pdf> (ETSI touts its 866 members from 66 countries and five continents).

<sup>4</sup> *Id.*

<sup>5</sup> Brief of *Amicus Curiae* The Institute of Electrical and Electronics Engineers, Incorporated In Support of No Party at 2-12, *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201 (Fed. Cir. 2014) (Nos. 2013-1625, -1631, -1632, -1633).

standardization process, and the ETSI participants obtain the potential for enormous economic leverage. *See generally, Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 500–01 (1988). As the Ninth Circuit has recognized:

The development of standards . . . creates an opportunity for companies to engage in anti-competitive behavior. Most notably, once a standard becomes widely adopted, SEP holders obtain substantial leverage over new product developers, who have little choice but to incorporate SEP technologies into their products.

*Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1030–31 (9th Cir. 2015).

ETSI’s Intellectual Property Rights (“IPR”) policies mitigate these competition concerns by embracing the FRAND licensing paradigm. The goal and purpose of FRAND is to guarantee that all companies have access to the cellular network. The European Commission, the creator of ETSI, sets forth the general principle as follows: “standard-making bodies should ensure that: . . . standards are available for use on *fair, reasonable and non-discriminatory terms*, regardless of whether the users participated in the work of the standard-making body.” *Communication from the Commission, Intellectual Property Rights and Standardization*, at 32, COM (92) 445 final (Oct. 27, 1992) (emphasis added), <http://aei.pitt.edu/1222/1/1222.pdf>. Further, the Commission states that intellectual property owners should “offer fair, reasonable, and non-discriminatory monetary or non-monetary terms for the license to use any IPR.” *Id.* at 32–33; *see also* FTC’s Complaint for Equitable Relief ¶ 107, *FTC v. Qualcomm Inc.*, No. 5:17-cv-00220-LHK (N.D. Cal. Feb. 1, 2017), ECF No.

38 (emphasizing that ETSI’s IPR policy does “not restrict who is eligible to receive a FRAND license from a holder of a FRAND-encumbered patent”).

Because each SEP necessarily presents a barrier to anyone desiring access to the communications network, *all* applicable SEPs must be considered when fashioning a reasonable royalty. *See In re Innovatio IP Ventures, LLC Patent Litig.*, No. 11 C 9308, 2013 WL 5593609, at \*10 (N.D. Ill. Oct. 3, 2013); *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 WL 2111217, at \*12 (W.D. Wash. Apr. 25, 2013). This concept—consideration of all applicable SEPs—is referred to as the “total aggregate royalty” approach and is an approach that both Ericsson and TCL have endorsed as a first step in deriving a FRAND royalty.<sup>6</sup>

Only a small minority of participants in standardization exploit SEPs through licensing. In fact, many successful standards have used royalty free licensing models.<sup>7</sup> However, all standard body participants benefit tremendously from

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<sup>6</sup> *See, e.g.*, Ericsson, Motorola, and Nokia, *Proposal for IPR Policy Reform*, ETSI GA/IPPR01(06)08, 2006 (FRAND must “tak[e] into account the *overall* licensing situation including the cost of obtaining all necessary licenses from the other relevant patent holders for all relevant technologies”) (emphasis in original); Memorandum of Findings of Fact and Conclusions of Law at 14-16, *TCL Commc’n Tech. Holdings, Ltd. et al. v. Telefonaktiebolaget LM Ericsson Inc. et al.*, No. 8:14-cv-00341-JVS-DFM (C.D. Cal. Dec. 21, 2017), ECF No. 1802 (explaining TCL’s advocated approach).

<sup>7</sup> One of the most successful standards is the Bluetooth standard for short range communication, a technology that Ericsson largely invented. Bluetooth is made available with *royalty free* licensing. *See Bluetooth Patent/Copyright License Agreement* § 5, Bluetooth, (last revised April 25, 2017)

standardization because the creation of a single interoperable network provides each company with a vibrant opportunity to make and sell standard-compliant products. The creation of the network opens the door to a robust market for the equipment needed to run the network.<sup>8</sup> Manufacturers of chips and infrastructure equipment reap substantial economic rewards precisely because the standard they create is optimized for the products they sell.

A network service provider like AT&T obviously needs more than a patent license to operate its network: it must purchase and assemble infrastructure equipment, base stations, cell towers and switching mechanisms. Similarly, a mere license does not create an iPhone—Apple must purchase the baseband processors that provide the essential gateway into the cellular network. The well-documented

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<https://www.bluetooth.com/about-us/governing-documents>. Many other important standards also use a royalty free model. *See, e.g., W3C Patent Policy* § 5, World Wide Web Consortium, (updated Aug. 1, 2017), <https://www.w3.org/Consortium/Patent-Policy-20170801/#sec-Requirements>; *USB 3.0 Adopters Agreement* ¶ 2.1(a), USB, (updated June 22, 2015), [http://www.usb.org/developers/docs/USB\\_3\\_0\\_Adopters\\_Agreement\\_Mail\\_Stop\\_Update\\_20150622.pdf](http://www.usb.org/developers/docs/USB_3_0_Adopters_Agreement_Mail_Stop_Update_20150622.pdf); *Specification Drafting Process*, CableLabs, <https://www.cablelabs.com/suppliers/specification-drafting-process/> (last visited June 15, 2018).

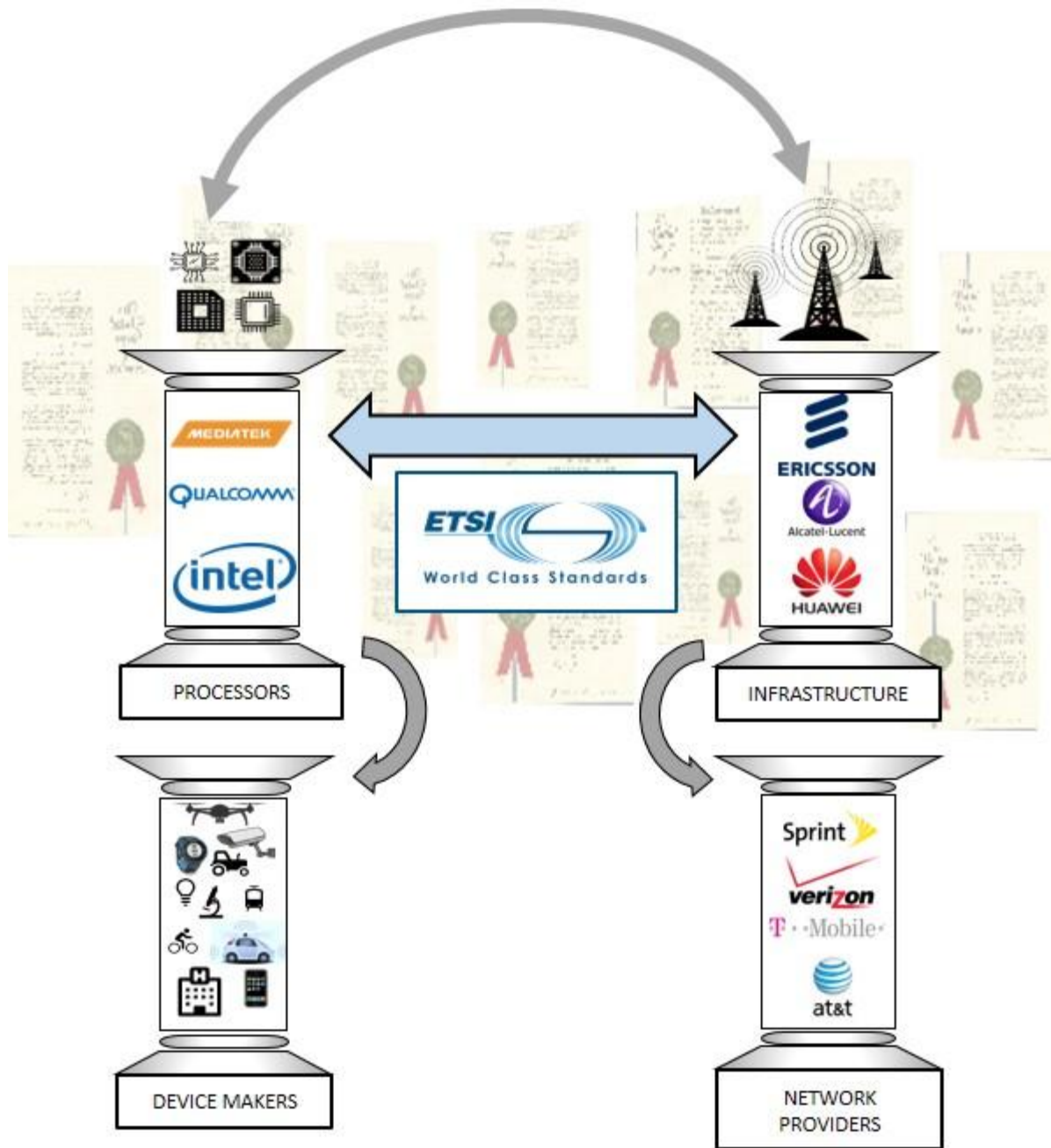
<sup>8</sup> It has been reported that “[t]he 5G value chain will **invest an average of \$200 billion** annually to continually expand and strengthen the 5G technology base within network and business application infrastructure.” Karen Campbell et al., *The 5G economy: How 5G technology will contribute to the global economy*, HIS Economics & HIS Technology 4, 18 (Jan. 2017) (emphasis in original), <https://cdn.ihs.com/www/pdf/IHS-Technology-5G-Economic-Impact-Study.pdf>.



phenomenon of “network effects,” which drove the remarkable expansion of the computer industry, is even more evident in the increasing growth of the cellular communications industry. The constantly improving functionality increases consumer demand, which increases the utilization of the network, which increases demand for more and more infrastructure equipment.

Today’s vast cellular communication network reflects a multi-billion-dollar industry. Yet this complex network can be distilled down to four key pillars as shown in the following diagram:

# CELLULAR NETWORK



The baseband processor companies, such as Qualcomm, Intel, Mediatek and Samsung, work with the infrastructure companies, such as Ericsson, Huawei, and

Alcatel-Lucent, to design the standards. All of these companies obtain SEPs that are ultimately embodied in the processors and infrastructure equipment they manufacture and sell.<sup>9</sup>

The processor companies sell their standard compliant processors to device manufacturers, who in turn sell their devices to consumers. The infrastructure companies sell their standard compliant equipment to the network carriers. The carriers assemble and operate the networks and make them available to consumers. All components of this ecosystem combine to make a fully functioning network.

Although Ericsson's primary business is the design, manufacture and sale of cellular network infrastructure equipment, it also licenses its portfolio of SEPs. *See Ericsson Annual Report 2017*, ERICSSON, 19 (2017), <https://www.ericsson.com/assets/local/investors/documents/2017/ericsson-annual-report-2017-en.pdf>. Ericsson thus wears two hats: one hat as equipment seller, one

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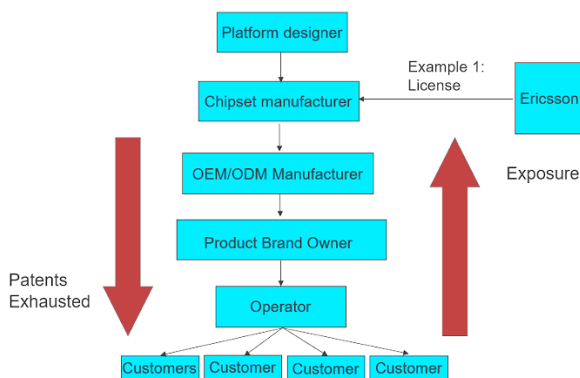
<sup>9</sup> It should come as no surprise that Ericsson owns SEPs that are directed to the technology incorporated in the equipment it designs. *See, e.g.*, U.S. Patent No. 8761770 (filed Jun. 24, 2014); *see also* Non-Confidential Brief for Appellants Ericsson Inc. and Telefonaktiebolaget LM Ericsson at 4-6, *TCL Commc'n Tech. Holdings, Ltd. et al. v. Telefonaktiebolaget LM Ericsson Inc. et al.*, Nos. 18-1363, 18-1380, 18-1382, 18-1732 (Fed. Cir. June 11, 2018), ECF No. 40 (detailing the functionality of Ericsson's 2G, 3G and 4G SEPs, including "data transmission between cellular phones and towers," "increas[ing] data speeds by combining multiple radio channels," and "coordinating transmissions to prevent interference, delays, and dropped calls when multiple phones simultaneously attempt to access the same cell tower").

hat as patent licensor. As a patent licensor, Ericsson has adopted a licensing model typical of SEP owners.

This SEP licensing program focuses on the “product brand owners” of devices that access infrastructure equipment in the network. Although the devices all connect with the common denominator of the baseband processor, the patentees avoid licensing the manufacturers of those baseband processors. This licensing avoidance stems from the SEP owners’ concerns about the ramifications of the patent exhaustion doctrine, which prevents recovery of royalties from entities downstream of the licensee. For example, if an *upstream* processor manufacturer were licensed to Ericsson’s SEPs, the SEPs would be exhausted with respect to all *downstream* device manufacturers such as TCL.

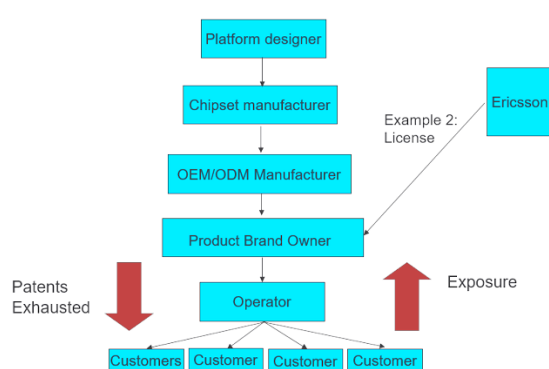
Indeed, the record in this appeal amply demonstrates the scope of exhaustion: when Ericsson provided Qualcomm with a license to 3G patents, it admittedly exhausted Ericsson’s claims against devices using those Qualcomm chips. *See* Memorandum of Findings of Fact and Conclusions of Law at 88, *TCL Commc’n Tech. Holdings, Ltd. et al v. Telefonaktiebolaget LM Ericsson Inc. et al*, No. 8:14-cv-00341-JVS-DFM (C.D. Cal. Dec. 21, 2017), ECF No. 1802-2. This exhaustion-avoidance licensing model is reflected in the following Ericsson presentation:

## WHERE TO LICENSE IN THE VALUE CHAIN?



2010-03-12

## WHERE TO LICENSE IN THE VALUE CHAIN?



2010-03-12

Brief of Amici Curiae Intel Corporation, Aruba Networks Inc., Dell Inc., Hewlett-Packard Company, Newegg Inc., SAS Institute Inc., Sierra Wireless, Inc., Vizio, Inc., and Zilinx, Inc. in Support of Appellee and Affirmance at 10, *Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024 (9th Cir. 2015) (No. 14-35393).

Thus, in the first image, if the SEP owner licenses the chip manufacturer, its patent rights are exhausted as to every downstream entity. Similarly, a license to an Original Equipment Manufacturer (“OEM”) would exhaust claims against any brand owner who contracts with the OEM. As revealed by the second image, this leaves the “product brand owner” sitting in the sweet spot for the most profitable approach to patent licensing.<sup>10</sup>

<sup>10</sup> By structuring the licensing model to focus on the “product brand owner,” SEP owners have taken advantage of rulings such as *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992) and *Jazz Photo Corp. v. International Trade Commission*, 264 F.3d 1094 (Fed. Cir. 2001). These cases generally permitted

The prospect of pursuing licenses from the makers of 34 *billion* devices has created a cottage industry seeking to take advantage of this expanding use of cellular connectivity. *See Richard Lloyd, Avanci announces pricing for auto sector - range from \$3 to \$15 per car, IAM* (Dec. 4, 2017), <http://www.iam-media.com/Blog/Detail.aspx?g=1405413d-2b9a-46c5-b3c6-0bdd245dbe05>. As reported, one company has announced plans to “focus . . . on licensing wireless technology into different verticals in the Internet of Things (IoT).” *Id.* The SEPs are the same; the contributions to the standards are the same; but the advertised royalties of \$3–\$15 *per unit* would compensate the SEP owners at rates pegged to the value of a car instead of a phone or other device, thereby compensating the SEP owners for things they did not invent.

### III. ARGUMENT

#### A. Varying SEP royalties based on device characteristics is unreasonable and discriminatory

##### 1. A reasonable royalty is based on the value attributed to the patented technology—not the entire product

The owner of a SEP, like the owner of any other patent, bears the burden of apportioning its value. *See Garretson*, 111 U.S. at 121. In the context of FRAND,

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contractual and geographic limitations on the scope of exhaustion. Those cases have since been overruled by the Supreme Court in *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523 (2017). Among other things, based on *Impression Products*, a device manufacturer can sell products worldwide so long as it has a license to patents applicable in the country of manufacture.

apportionment requires assessing the contribution of a participant's SEPs *relative to* the entirety of the subject matter of the standards at issue. In this case, implicating ETSI's 2G, 3G, and 4G standards, the subject matter is the entirety of the cellular communication network. The 866 members of ETSI have worked together to jointly design that network, and each essential patent constitutes a potential barrier to that network. Consequently, the value of each participant's contribution must be judged relative to the network technology itself—not the market value created by network effects from standardization and not the unique characteristics of connected devices. *See Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1233 (Fed. Cir. 2014); *Innovatio*, 2013 WL 5593609, at \*9-10; *Microsoft*, 2013 WL 2111217, at \*12.

This analytical starting point flows naturally from both *Garretson* and the policy goals dictated by ETSI. For many years, this court has implemented the Supreme Court's apportionment doctrine in cases such as *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012) and *VirnetX, Inc. v. Cisco Systems, Inc.*, 767 F.3d 1308 (Fed. Cir. 2014). Those cases embrace the notion of the smallest saleable patent practicing unit ("SSPPU") as a tool to derive the actual value of the patentee's contribution relative to a multi-faceted product or service. In *LaserDynamics* the court stated:

Where small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components

of that product. Thus, it is generally required that royalties be based not on the entire product, but instead on the “smallest salable patent-practicing unit.”

694 F.3d at 67. In *VirnetX* the court went further, explaining that SSPPU alone was not enough: “[t]he patentee must do more to estimate what portion of the value of [that] product is attributable to the patented technology.” 767 F.3d at 1327. In *Innovatio*, Judge Holderman specifically applied this precedent and the SSPPU principle to the determination of a FRAND royalty.

**2. SEP royalties cannot be based on device characteristics the SEP holder did not invent**

Although application of the SSPPU approach can be effective in many cases, the SSPPU is not a magic talisman that somehow determines the value of the patented contribution. Instead, the power of the SSPPU lies in what it teaches about *inappropriate* valuation methods. The cases make clear that the patentee cannot measure its contribution based on something that the patentee did not invent.

Applying these principles, it is not possible to adopt a valuation approach that uses *in any way* the mobile device that implements the standard to assess the patentee’s contribution to the standard. Ericsson makes infrastructure equipment. It owns patents directed to those products. An Ericsson-built base station, operated by Verizon, does not know or care whether the communications circulating through its systems stemmed from a drone, a refrigerator, an autonomous vehicle, a watch, or a phone.



All cellular connected devices may incorporate the same or similar baseband processors, and all such devices may be “plugged into” the infrastructure that Ericsson designed and sold. But Ericsson’s contribution through its SEPs is a small portion of the uniform functionality used by the baseband processor in each connected device. A patent on one aspect of interoperability is not synonymous with a patent on an entire device. The maxim that a patentee’s compensation cannot be predicated on things the patentee did not invent cannot be reconciled with any valuation of SEPs that considers the device manufacturer’s line of business, or the volume of that business, when assessing a reasonable royalty.

What this means, in the context of this case, is that the entire discussion concerning whether Apple and Samsung were “similarly situated” to TCL has no bearing on the question of the compensation due Ericsson. There are lots of things that make Apple different from Samsung, or different from TCL, or different from the “local kings,” or different from home security systems, or autonomous vehicles. Other than the fact that all device makers must use a baseband processor that is standard compliant, all device makers will be different. But the things that make the device makers different cannot inform this Court as to the appropriate compensation for Ericsson’s infrastructure patents because the differences among devices do not stem from anything related to Ericsson. Drawing any distinction that results in different pricing for different device makers would embrace *discriminatory* pricing

that is unreasonable under established apportionment jurisprudence, and thereby contravene core tenets of FRAND.

**B. It is unfair and discriminatory to avoid exhaustion by targeting “downstream” licensing**

Just as principles of apportionment prohibit SEP owners from engaging in horizontal discrimination between different device makers (regardless of how “similarly situated” the device makers are), exhaustion principles prohibit SEP owners from discriminating vertically along the supply chain. Licensing strategies that avoid the impact of patent exhaustion are necessarily unfair and discriminatory.

Of course, the owner of a patent not encumbered by a FRAND obligation may be free to pick and choose its licensees. The patent statute does not obligate a patentee to license, much less proscribe any particular type of permissible licensing. But a FRAND encumbered patent is different. The patentee must offer a license intended to achieve the principal goal of the SSO: to make the technology available. The license must be non-discriminatory and must be made available to anyone. With a FRAND obligation, picking and choosing is no longer an option. Extracting value from a downstream channel may be desirable, but that licensing model is undeniably discriminatory.

Both this Court and the Supreme Court have grappled with business models in which patentees sought to extract value “downstream.” In a typical scenario a patentee makes and sells a product that is covered by some patents; a downstream

user transforms the product, and the transformed implementation infringes other patents of the original patentee. The question posed is the extent to which the patentee can invoke patent law to prohibit the new downstream use. *See, e.g., Mallinckrodt*, 976 F.2d at 708–09. The Supreme Court has provided clear guidance on the policies that govern this downstream licensing: any form of downstream licensing intended to avoid exhaustion cannot credibly pose as a “fair” licensing model.

The seminal case is *United States v. Univis Lens Co.*, 316 U.S. 241 (1942), a case involving the sale of fabricated lens blanks. When the lens blanks were later modified and polished into finished lenses, Univis sued for patent infringement, claiming that the original sale did not include the sale of the later modified products. *Id.* at 244–47. Univis was correct on the facts: it did not sell polished lenses and it owned patents infringed by polished lenses. The Supreme Court, however, took a different view about the way in which patentees can invoke their patents. By selling the lens blanks, Univis had relinquished its right to control downstream use, including a unique downstream implementation that otherwise would have infringed. *Id.* at 251–52.

The Supreme Court has cautioned against downstream “double dipping” that impedes commerce. A SEP licensing model that intentionally avoids upstream licensing and selectively targets brand owners collides with that Court’s policy

directives. To make licenses available in a fair and non-discriminatory way, the SEP owner must license across the spectrum. The SEP owner may not want to license the *upstream* processor company, but that choice is no longer the patentee's to make. A FRAND obligation does not allow for a free pass to the upstream market or for the profit maximizing collection of downstream royalties.

#### IV. CONCLUSION

*Amicus* respectfully requests that this court adopt an approach to the FRAND licensing of SEPs that embraces the doctrine of apportionment, that recognizes that device characteristics do not bear on the value of the contribution of the SEP owner, and that prohibits unfair and discriminatory licensing models that target downstream implementers of standard compliant products.

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**CERTIFICATE OF COMPLIANCE**

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Dated: June 18, 2018

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**CERTIFICATE OF SERVICE**

In accordance with Federal Rule of Appellate Procedure 25 and Federal Circuit Rule 25, I certify that I caused this brief to be served via the Federal Circuit's CM/ECF system on counsel of record for all parties.

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

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