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

IN THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED,
TCT MOBILE LIMITED, TCT MOBILE (US) INC.,
Plaintiffs-Appellees,
V.

TELEFONAKTIEBOLAGET LM ERICSSON, ERICSSON INC.,
Defendants-Appellants.

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

ERICSSON, INC., TELEFONAKTIEBOLAGET LM ERICSSON,
Plaintiffs-Appellants,
V.

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

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

SECOND CORRECTED BRIEF OF *AMICI CURIAE* INTELLECTUAL PROPERTY DAMAGES EXPERTS IN SUPPORT OF APPELLANTS AND REVERSAL

(Counsel Listed on Inside Cover)

Peter J. Ayers
Counsel of Record
Law Office of Peter J. Ayers, PLLC
2200 Bowman Avenue
Austin, Texas 78703
(512) 771-3070 (telephone)
peter@ayersiplaw.com

Counsel for Amici Curiae Intellectual Property Damages Experts

CERTIFICATE OF INTEREST

Counsel for amici curiae Intellectual Property Damages Experts certifies the following:

1. The full name(s) of every party represented by me are:

   John Jarosz, J.D.
   Analysis Group

   Jeffrey H. Kinrich, CPA
   Analysis Group

   Michael Chapman, J.D., Ph.D.
   Ankura Consulting Group

   Michael Wagner, J.D.,
   LitiNomics

   Edward A. Gold, Ph.D.
   Stout Risius Ross

   John Bone, CPA
   Stout Risius Ross

   David Haas
   Stout Risius Ross

   Scott Weingust
   Stout Risius Ross

2. The name(s) of the real parties in interest represented by me are:

   Not applicable.

3. All parent corporations and any publicly held companies that own 10 percent or more stock of the parties represented by me are:

   None

4. The names of all law firms and the partners or associates that appeared for amici in the trial court or are expected to appear in this court are:

Peter J. Ayers
Law Office of Peter J. Ayers, PLLC
2200 Bowman Avenue
Austin, Texas 70703
(512) 771-3070 (telephone)
(512) 771-3070 (facsimile)
peter@ayersiplaw.com

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).

None.

Dated: August 4, 2018

Respectfully submitted,

By: *<u>/s/ Peter J. Ayers</u>*
Peter J. Ayers

Counsel for Amici Curiae Intellectual Property Damages Experts

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INTEREST OF AMICI

Amici are experienced professionals serving either as expert witnesses or consultants to corporations, law firms, universities, and investment firms on issues primarily related to the economics of intellectual property protection, including the licensing of standard-essential patents (SEPs). We have no personal interest in the outcome of this case, but a professional interest in seeing that patent law with respect to SEPs develops in a way to incentivize innovators to contribute their technologies to technical standards, while still allowing would-be implementers to license these technologies on terms that are fair, reasonable and non-discriminatory (FRAND).[1] No one other than the undersigned wrote any portion of this brief. The undersigned have received no compensation in exchange for our work or participation in this brief. Institutional affiliations are given for identification purposes only.[2] This brief is being filed pursuant to an Order of the Court filed July 27, 2018 granting amici leave to file. *See* Order, Doc. 106, p. 2 (July 27, 2018).

[1] The Amici refer to fair, reasonable and non-discriminatory (FRAND) and reasonable and non-discriminatory (RAND) terms as FRAND throughout, unless associated with a specific quote by a court.

[2] Pursuant to Fed. R. App. P. 29(c)(5), amici certify that no party's counsel authored this brief in whole or part, that no counsel or party contributed money intended to fund this brief, and that no one other than amicus, its members, and its counsel made such a contribution.

SUMMARY OF ARGUMENT

In general, patent licenses are negotiated by sophisticated licensing professionals where the licensor and licensee act in their best interests to negotiate for terms (including royalty compensation) that is largely determined by the technical, legal and economic strengths and weaknesses of a patent or patent portfolio. Within the FRAND context, the terms of the license must be fair, reasonable and non-discriminatory, however the parties may still structure the royalty in a variety of ways, including but not limited to lump-sum, running royalty (per-unit or percentage of revenue), aggregate or minimum royalty caps, and/or a running royalty percentage (as modified by per-unit floors and caps).

The District Court in this case appears to base its decision on two propositions that concern us. The first is that "there is no support in the record that a package of SEPs has a fixed, determinable value which would justify a fixed dollar-per-unit rate or a percentage rate as modified by floors or caps."[3] The Amici believe this proposition, if interpreted as a generalized conclusion and not a specific conclusion solely connected to this case due to a lack of evidence, is in conflict with the fact that fixed dollar-per-unit rates (or a percentage rate as modified by floors and caps) often result from real-world licensing negotiations, including Ericsson's own

[3] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.69 (C.D. Cal. March 9, 2018) (Appx00095).

licensing history, related to SEPs. Additionally, the use of per-unit rates is a practice largely adopted by patent pools, which license SEPs across a variety of technical standards, including a patent pool for the 4G standard at issue in this matter.

Second, the District Court concluded that "Ericsson's use of floors in its rates is itself discriminatory."[4] It wrote that "there is no basis for essentially discriminating on the basis of average selling price where a floor would result in a higher effective rate for lower priced phones."[5] This conclusion is inconsistent with previous cases where district courts have determined or affirmed FRAND royalty rates expressed on a per-unit basis.[6,7,8] Further, in an environment with largely different price points such as the handset market, uniform percentage-based royalties can result in vastly different payments on a per-unit basis, despite the products incorporating the same or similar technology. As will be discussed in more detail below, the conclusion by the District Court suggests that employing royalty structures on a percentage of revenue basis is the only non-discriminatory option despite the fact that some

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[4] *Id.* at 113 (Appx000139).

[5] *Id.* at 69 (Appx00095).

[6] *See In re Innovatio IP Ventures, LLC Patent Litigation*, MDL Doc. No. 2303, Memorandum Opinion, Findings, Conclusions, and Order, p.88, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Oct. 3, 2013).

[7] *Microsoft Corp. v. Motorola, Inc.,* No. 2:10-CV-01823, Findings of Fact and Conclusions of Law, p.207, 2013 U.S. Dist. LEXIS 60233 (W.D. WA. April 25, 2013).

[8] *See In the Matter of Certain Wireless Devices With 3G Capabilities and Components Thereof*, No. 337-TA-800, Initial Determination, p. 432, 2013 ITC LEXIS 1203 (Int'l Trade Comm'n June 28, 2013).

competitors may pay a greater amount on a per-unit basis as a result of implementing more or higher-priced features, even if those features are completely unrelated to the asserted patents. The Amici provide an example in this brief illustrating that there are common settings in which royalty structures with per-unit floors and caps are less likely to discriminate than a percentage-based royalty or a per-unit royalty. If properly apportioned to the value of the technology, the use of per-unit floors can, in many settings, ensure that licensors derive an adequate economic return from the use of its licensed technology while the use of per-unit caps can, in many settings, ensure that licensees do not overpay for the rights to implement the licensed technology.

ARGUMENT

A. The District Court's Decision is Inconsistent with Real World Licensing Practices

The District Court in this case appears to base its decision on the proposition that "there is no support in the record that a package of SEPs has a fixed, determinable value which would justify a fixed dollar-per-unit rate or a percentage rate as modified by floors or caps."[9] From an evidentiary perspective, the Amici note that there is at least *some* support in the record concerning Ericsson's licensing

[9] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.69 (C.D. Cal. March 9, 2018) (Appx00095).

practices including the use of fixed dollar-per-unit rates or a percentage rate as modified by floors or caps. The District Court acknowledged this, writing that "[w]hile Ericsson has in the past entered into some licenses [with] dollar-per-unit rates or licenses with caps and floors, the Court declines to adopt a dollar-per-unit approach in determining FRAND rates here."[10] Ericsson's licensing history for the patents at issue does not indicate a *single* royalty structure - a fact noted by the District Court, which wrote "[s]ome Ericsson licenses expressly state a clear one-way per-unit royalty rate that the licensee must pay Ericsson for its SEPs. However, the licenses with Apple, Samsung, HTC, LG, and ZTE all involve either lump sum payments, or meaningful cross-licenses."[11] As such, the licensing negotiations between SEP holders and implementers *can, and do,* result in a variety of licensing structures, which is a practice explicitly acknowledged by the European Telecommunications Standards Institute ("ETSI").[12] In other words, there is no *single* structure that is FRAND.

Notwithstanding the evidentiary issues, the Amici are concerned that the District Court's opinion can be interpreted more broadly as a legal principle against the use of per-unit rates or a percentage rate as modified by floors or caps. Interpreted as such, the Amici believe this position conflicts with the fixed dollar-per-unit rates

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[10] *Id*. at 68 (Appx00094).
[11] *Id*. at 62 (Appx000088).
[12] *See* http://www.etsi.org/about/how-we-work/intellectual-property-rights-iprs.

(or a percentage rate as modified by floors and caps) that often result from real-world licensing negotiations covering SEPs, including Ericsson's own licenses, and their use by patent pools.

Typically, SEP owners and potential licensees engage in good-faith, bilateral negotiations that result in real-world FRAND license agreements with consideration given to similarly-situated parties. ETSI acknowledged this practice, writing that "[s]pecific licensing terms and negotiations are commercial issues between the companies."[13] In general, these license agreements are negotiated by sophisticated licensing professionals where the parties assess the technical and legal strengths and weaknesses of the licensor's patent portfolio as well as make assessments regarding the economic contribution of the patents included within the portfolio. Based on these assessments, the licensor and licensee negotiate the structure of the license, including, but not limited to, the duration of the license; the types of products licensed; the form of the royalty (*e.g.,* lump-sum, running percentage royalty, minimum or aggregate royalty caps, a running percentage royalty modified by per-unit floors and caps, etc.); and whether or not the license will be a one-way or cross-license.

The ultimate structure of the license is a product of these bilateral negotiations, where each party is likely to make certain concessions to achieve a

[13] *See id*.

mutually-agreeable license. Even in the FRAND context, both a licensor and licensee would generally be aware of the unique facts and circumstances specific to the other party. For instance, both a licensor and licensee would understand the licensee's business strategy (*e.g.*, product mix, markets, pricing, competitors), which may cause each party to contemplate and negotiate for different licensing terms that may have not been relevant in prior licensing negotiations with other licensees.

Ericsson has entered into several FRAND license agreements with cellular device manufacturers such as Apple, Samsung, LG, HTC, Huawei, ZTE, Coolpad and Karbonn.[14] These licenses offer real-world evidence of how sophisticated parties have structured a FRAND license for certain technologies at issue in this matter some of which included "a fixed dollar-per-unit rate or a percentage rate as modified by floors or caps."[15] For instance, it appears that at least Samsung agreed to per-unit royalties for 2G, 3G and 4G device sales[16] and Coolpad agreed to royalties with a floor and a cap for 4G device sales.[17]

[14] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.54 (C.D. Cal. March 9, 2018) (Appx00080).

[15] *Id*. at 69 (Appx00095).

[16] *Id*. at 79 (Appx00105).

[17] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 8:14-CV-00341, Ericsson's Post-Trial [Proposed] Findings of Fact and Conclusions of Law, Doc. 1936, p.29 (C.D. Cal. Mar. 9, 2018).

Additionally, the use of per-unit rates is a practice largely adopted by patent pools, which license SEPs across a variety of technical standards, including a patent pool for the 4G standard at issue in this matter. Patent pools, which are independent from standard setting organizations (SSOs), collect SEPs from prospective licensors for a particular technical standard and act as a licensor (for all SEPs contributed) to third-party licensees.[18] Patent pools may be deemed successful if they are able to achieve widespread adoption by setting a rate high enough to induce patent holders to contribute their SEPs to the patent pool and low enough that implementers utilize the standard in lieu of available alternatives. Thus, a successful patent pool aligns with the goal of SSOs, which is to create valuable standards and ensure widespread adoption.[19]

In *Microsoft v. Motorola,* for example, the court concluded that the rates set forth by the MPEG-LA H.264 (related to video coding SEPs) and the Via Licensing 802.11 (related to Wi-Fi SEPs) patent pools "can serve as indicators of a royalty rate that falls within the range of royalties consistent with the RAND commitment."[20] Notably, the rates set forth by the MPEG-LA H.264 patent pool - which the court

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[18] *Microsoft Corp. v. Motorola, Inc.,* No. 2:10-CV-01823, Findings of Fact and Conclusions of Law, p.149, 2013 U.S. Dist. LEXIS 60233, *217 (W.D. WA. April 25, 2013).
[19] *Id*. at 164, 2013 U.S. Dist. LEXIS 60233, *240.
[20] *Id*., 2013 U.S. Dist. LEXIS 60233, *239.

found to be a successful patent pool[21] - included per-unit royalties as summarized below:[22]

- The first 100,000 units are royalty-free;
- For unit volumes between 100,000 and 5 million, the royalty is $0.20 per-unit;
- For unit volumes above 5 million, the royalty rate is $0.10 per-unit

Moreover, the licenses included the following original annual caps:

- Sales in 2005 and 2006: $3.5 million
- Sales in 2007 and 2008: $4.25 million
- Sales in 2009 and 2010: $5.0 million

The court concluded that the MPEG-LA H.264 patent pool royalty rates were set such that they were consistent with the purpose of the RAND commitment.[23]

Similarly, the Via Licensing 802.11 patent pool adopted and offered per-unit royalty rates (depending on volume), as summarized in Table 1 below:[24]

Table 1
Royalty Rates - Via Licensing 802.11 patent pool

Units/Year	License Fee Per-Unit
1 to 500,000	$0.55
500,001 to 1,000,000	$0.50
1,000,001 to 5,000,000	$0.45
5,000,001 to 10,000,000	$0.30
10,000,001 to 20,000,000	$0.20

[21] The court cited the widespread adoption of the MPEG LA H.264 patent pool, which included 1,1100 licensees, and over 2,400 worldwide SEPs from over 26 licensors including leading technology firms such as Apple, Cisco, Ericsson, Fujitsu, LG, Microsoft, and Sony. *Id.* at 165, 2013 U.S. Dist. LEXIS 60233, *239.
[22] *Id.* at 158, 2013 U.S. Dist. LEXIS 60233, *229-230.
[23] *Id.* at 165, 2013 U.S. Dist. LEXIS 60233, *242.
[24] *Id.* at 180, 2013 U.S. Dist. LEXIS 60233, *265.

20,000,001 to 40,000,000	$0.10
40,000,001 or more	$0.05

While the court noted that the Via Licensing 802.11 patent pool has not been as successful as the MPEG-LA H.264 patent pool, it nonetheless concluded "the royalty rates set by the pool provide a benchmark as to what certain businesses in the industry believed to be a RAND royalty rate."[25]

Via Licensing also administers a licensing pool for the 4G LTE standard, which is one of the cellular standards at issue in this matter. The Via Licensing patent pool includes large licensors such as AT&T Intellectual Property, LLC; Google LLC; HP Inc.; and Verizon Wireless.[26] Similar to Via's 802.11 patent pool, the Via Licensing 4G LTE patent pool has adopted and offered per-unit royalty rates of between $0.00 and $2.10 per-unit, as summarized in Table 2 below:[27]

Table 2
Royalty Rates - Via Licensing 4G LTE patent pool

Units/Year	License Fee Per-Unit
1 to 100,000	No fee
100,001 to 1,000,000	$1.00
1,000,001 to 2,500,000	$1.50
2,500,001 or more	$2.10

[25] *Id.* at 183, 2013 U.S. Dist. LEXIS 60233, *268.
[26] *See* http://www.via-corp.com/us/en/licensing/lte/licensors.html.
[27] *See* http://www.via-corp.com/us/en/licensing/lte/licensefees.html.

The Amici are aware of several other patent licensing pools that utilize per-unit royalty rates and/or running royalties as modified by floors and caps including MPEG-2[28] (video coding), One-Blue[29] (Blu-Ray) and DVD-Video / ROM Disc[30] (DVD). These patent pools have routinely set rates for SEPs within their respective pools on a per-unit basis that are applicable for *all* implementers taking a license. In fact, the United States (U.S.) Department of Justice reviewed and approved royalty rates including the use of per-unit floors offered by DVD-Video / ROM patent pools, which included licensors such as Phillips, Sony, Pioneer, Hitachi, Mitsubishi, Time Warner, Toshiba and JVC.[31]

Additionally, certain patent pools make use of per-unit royalty rates across a variety of devices and price points. For instance, licensees to the MPEG-LA patent pool that consists of licensees manufacturing devices such as camcorders, DVD

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[28] *See* http://www.mpegla.com/main/programs/M2/Documents/m2web.pdf.
[29] *See* http://www.one-blue.com/royalty-rates/royalty_rates.html.
[30] *See* http://www.ip.philips.com/licensing/program/29/dvd-video-rom-disc-joint.
[31] "The licenses from Sony and Pioneer also establish the Portfolio Licenses' royalty rates. The Player License per-unit royalty is to be 3.5% of the net selling price for each player sold, subject to a minimum fee of $7 per unit, which drops to $5 as of January 1, 2000." https://www.justice.gov/atr/response-koninklijke-philips-electronics-nvs-sony-corporation-japans-and-pioneer-electronic.
"The Authorization Agreement requires Toshiba to charge royalties of $.075 per DVD Disc and 4% of the net sales price of DVD players and DVD decoders, with a minimum royalty of $4.00 per player or decoder." https://www.justice.gov/atr/response-hitachi-ltds-matsushita-electric-industrial-co-ltds-mitsubishi-electric-corporations.

players, and computers pay the same per-device royalty, regardless of the sales price of the end-product.[32]

As such, the District Court's conclusion here that there is no support "that a package of SEPs has a fixed, determinable value which would justify a fixed dollar-per-unit rate or a percentage rate as modified by floors or caps"[33] conflicts with many patent pool's standard and successful practice with many well-known licensors and licensees.

B. Use of Per-Unit Floors and Caps is not Inherently Discriminatory

The District Court also concluded that "Ericsson's use of floors in its rates is itself discriminatory."[34] However, this conclusion is inconsistent with prior cases and general economic theory. The use of a per-unit floor effectively establishes a per-unit rate for products that do not meet the revenue threshold to trigger a running royalty as a percentage of revenue. Prior cases support the use of per-unit FRAND rates. For instance, in *In re Innovatio IP Ventures*, the court determined that "the RAND rate to be paid to Innovatio for licensing Innovatio's portfolio of nineteen 802.11 standard-essential patents is 9.56 cents for each Wi-Fi chip used or sold by

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[32] *See* http://www.mpegla.com/main/programs/M2/Pages/Agreement.aspx.
[33] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.69 (C.D. Cal. March 9, 2018) (Appx00095).
[34] *Id*. at 113 (Appx000139).

the Manufacturers in the United States..."[35] Similarly in *Microsoft vs. Motorola*, the court determined that the "RAND royalty rate for Motorola's H.264 SEP portfolio is 0.555 cents per unit" and the "RAND royalty rate for Motorola's 802.11 SEP portfolio is 3.471 cents per unit."[36] Further, a U.S. International Trade Commission (ITC) decision supports the notion that licensing terms across implementers need not be identical to be considered non-discriminatory. In that case, Judge David P. Shaw considered the non-discrimination component of FRAND holding that "[t]he FRAND nondiscrimination requirement prohibits 'unfair discrimination,' but it does not require uniform treatment across licensees, nor does it require the same terms for every manufacturer or competitor…A non-discrimination analysis, however, requires an examination of the whole of each license agreement, and not just the effective royalty rate."[37]

The District Court's conclusion that "there is no basis for essentially discriminating on the basis of average selling price where a floor would result in a

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[35] *In re Innovatio IP Ventures, LLC Patent Litigation*, MDL Doc. No. 2303, Memorandum Opinion, Findings, Conclusions, and Order, p.88, 2013 U.S. Dist. LEXIS 144061, *43-44 (N.D. Ill. Oct. 3, 2013).

[36] *Microsoft Corp. v. Motorola, Inc.*, No. 2:10-CV-01823, Findings of Fact and Conclusions of Law, p.207, 2013 U.S. Dist. LEXIS 60233, *20 (W.D. WA. April 25, 2013).

[37] *See In the Matter of Certain Wireless Devices With 3G Capabilities and Components Thereof*, No. 337-TA-800, Initial Determination, p. 432, 2013 ITC LEXIS 1203, *570 (Int'l Trade Comm'n June 28, 2013).

higher effective rate for lower priced phones"[38] is inconsistent with apportionment principles. In *Ericsson v. D-Link*, for example, this Court wrote that "the RAND royalty rate must be based on the value of the invention, not any value added by the standardization of that invention."[39] If a per-unit floor is based on a properly apportioned calculation based strictly on the value of the invention, the usage of a per-unit floor is not inherently discriminatory. In fact, it might merely represent the low end of a properly apportioned FRAND range.[40]

The following example illustrates the point. Consider a market with four manufacturers of 4G cellular handsets that offer products in three price tiers (low-end, mid-tier, and high-end) as reflected in Table 3 below.

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[38] *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.69 (C.D. Cal. March 9, 2018) (Appx00095).

[39] *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1235 (Fed Cir. 2014).

[40] The District Court concluded that "there is no single rate that is necessarily FRAND, and different rates offered to different licensees may well be FRAND given the economics of the specific license." *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-02370, Amended Memorandum of Findings and Conclusions of Law, p.109 (C.D. Cal. March 9, 2018) (Appx00135).

Table 3
Summary of Licensees Average ASP

Company	Type of Phone	Price
Company 1	Low-end	$ 100
Company 2	Mid-tier	$ 400
Company 3	Mid-tier	$ 500
Company 4	High-end	$ 800

Each manufacturer requires a license to 4G SEPs from a particular SEP holder. Assume that three possible royalty structures are considered as reflected in Table 4 below: 1) a dollar per-unit royalty; 2) running royalty as a percentage of revenue; and 3) a running royalty as a percentage of revenue (subject to floors and caps).

Table 4
Summary of Alternative Royalty Structures

	Structure 1	Structure 2	Structure 3
Structure:	Royalty per Unit	% Royalty	% Royalty with cap and floor
Royalty Rate:	$2.00 per Unit	0.5% of Revenue	0.5% of Revenue
Floor/Cap:	N/A	N/A	$1.00 floor/$3.00 cap

Applying the rate structure of Table 4 to the prices reflected in Table 3 results in the following royalties:

Figure 1
Effective Royalties across Various Royalty Structures

		Structure 1	Structure 2	Structure 3
	Structure:	Royalty per Unit	% Royalty	% Royalty with cap and floor
	Royalty Rate:	$2.00 per Unit	0.5% of Revenue	0.5% of Revenue
	Floor/Cap:	N/A	N/A	$1.00 floor/$3.00 cap

Effective Royalty Rate ($)

Company	Price	Structure 1	Structure 2	Structure 3
Company 1	$ 100	$ 2.00	$ 0.50	$ 1.00
Company 2	$ 400	$ 2.00	$ 2.00	$ 2.00
Company 3	$ 500	$ 2.00	$ 2.50	$ 2.50
Company 4	$ 800	$ 2.00	$ 4.00	$ 3.00

Effective Royalty Rate (%)

Company	Price	Structure 1	Structure 2	Structure 3
Company 1	$ 100	2.00%	0.50%	1.00%
Company 2	$ 400	0.50%	0.50%	0.50%
Company 3	$ 500	0.40%	0.50%	0.50%
Company 4	$ 800	0.25%	0.50%	0.38%

As demonstrated by the figure above, a percentage-based royalty can result in manufacturers of high-end phones paying eight times more ($4.00 per-unit versus $0.50 per-unit) than the manufacturer of the low-end phone on a dollar basis for the same rights; whereas, a royalty per-unit can result in the manufacturer of the low-end phone paying eight times more (2.00% versus 0.25%) than the manufacturer of the high-end phone on a percentage basis for the same rights.

As also reflected in Figure 1, the use of per-unit floors and caps can mitigate the disparity at the extreme low and high-end price points, ensuring a minimum level of return for the SEP holder and limiting the total royalty payments to those manufacturers that are able to price their products higher as a result of brand strength or additional features. Therefore, royalty structures with per-unit floors and caps, in certain settings, can be less likely to discriminate than a pure percentage-based royalty or a per-unit royalty.

The District Court's decision is also inconsistent with certain concepts relevant to the FRAND determination. In *In re Innovatio IP Ventures*, the court stated that "a RAND rate must be set high enough to ensure that innovators in the future have an appropriate incentive to invest in future development and to contribute their inventions to the standard-setting process."[41] In instances where a potential licensee prices its products below its competitors, it is reasonable for a licensor to contemplate the usage of a per-unit floor to ensure that the licensee does not pay a lower-than-market rate (in actual dollar terms) compared to its other licensees that are implementing the same or similar technologies. In fact, the District Court's proposed license structure combined with TCL's low-priced business strategy, arguably provides an advantage to TCL relative to other Ericsson licensees that pay more for the same technology. Such an advantage is arguably discriminatory versus these other Ericsson licensees.

Further, if a licensee makes the business decision to capture market share by undercutting on price, this decision can have the effect of diminishing the aggregate return a licensor receives for the use of its SEPs. For example, assuming that TCL's

[41] *In re Innovatio IP Ventures, LLC Patent Litigation*, MDL Doc. No. 2303, Memorandum Opinion, Findings, Conclusions, and Order, p.19, 2013 U.S. Dist. LEXIS 144061, *70 (N.D. Ill. Oct. 3, 2013).

pricing strategy allows it to capture customers that would otherwise purchase from higher-priced manufacturers such as Apple or Samsung, which are already licensed, Ericsson would recognize that a royalty rate strictly as a percentage of revenue would lower its return per-device vis-à-vis its other licensees. Lastly, the use of a per-unit floor would also be relevant for potential licensees that engage in alternative revenue models where the device itself is given away for free or sold for a below-market price in hopes of generating revenue through services or advertising, for example.

CONCLUSION

This Court should not adopt the District Court's conclusion that the use of per-unit floors is inherently discriminatory. The use of per-unit royalty rates or running royalty rates (as modified by per-unit floors and caps) is found in real-world negotiations between licensors (including those participating in patent pools) and implementers across a variety of technical standards. Adopting the District Court's finding makes it more challenging to develop a compensation mechanism that properly balances the need to ensure adequate compensation to the SEP holder and the need to ensure that the implementer does not over-pay for the use of the technology in light of the SEP's contribution to the economic value of the final product in question. Using the District Court's conclusion as a guide, royalty rates for SEPs may become detached from their economic value and instead merely become a function of the revenue any given licensee is able to generate off a particular product incorporating the standard.

August 4, 2018

Respectfully submitted,

/s/ Peter J. Ayers
Peter J. Ayers
Counsel of Record
Law Office of Peter J. Ayers, PLLC
2200 Bowman Avenue
Austin, Texas 70703
(512) 771-3070 (telephone)
peter@ayersiplaw.com

Counsel for Amici Curiae Intellectual Property Damages Experts

CERTIFICATE OF SERVICE

I certify that today, August 4, 2018, I electronically filed the foregoing document with the Clerk of the Court for the U.S. Court of Appeals for the Federal Circuit using the appellate CM/ECF system. Participants in the case who are registered CM/ECF users will be served by the appellate CM/ECF system.

August 4, 2018 *<u>/s/ Peter J. Ayers</u>*

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitations of Fed. R. App. P. 29(a)(5) and Fed. Cir. R. 32(a) because this brief contains 4,634 words, (i.e., less than one-half of the 14,000 words for a party's opening brief) excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. R. 32(b).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14-point font.

August 4, 2018 *<u>/s/ Peter J. Ayers</u>*