No. 19-1269

Supreme Court of the United States

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

Petitioners,

ERICSSON, INC.; TELEFONAKTIEBOLAGET LM ERICSSON,

v.

Respondents.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF OF ACT | THE APP ASSOCIATION AS AMICUS CURIAE IN SUPPORT OF PETITIONERS

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INTEREST OF THE AMICUS CURIAE¹

ACT | The App Association (App Association) is an international not-for-profit grassroots advocacy and education organization representing more than 5,000 small business software application developers and technology firms that create the software applications used on mobile devices and in enterprise systems around the globe. Today, the ecosystem the App Association represents is valued at approximately \$1.7 trillion and is responsible for 5.9 million American jobs. Our members lead in developing innovative applications and products across consumer and enterprise use cases, often using standardized technologies, driving the adoption of the internet of things.

The App Association has a keen interest in the proper functioning of the U.S. patent system. Our members include companies that own patents as well as those that license patents, all of which are directly impacted by the courts' approaches to patent rights and litigation. Predictability and fairness in the patent system, particularly with respect to standard

¹ Pursuant to Supreme Court Rule 37.2(a), all parties either provided blanket consent for *amicus* filings or received appropriate notice of and consented to the filing of this brief. Pursuant to Rule 37.6, *amicus* affirms that no counsel for a party authored this brief in whole or in part and that no person other than *amicus* and its counsel made a monetary contribution to its preparation or submission. No person or entity, other than *amicus*, its members, or its counsel, made a monetary contribution to the preparation or submission of this brief.

essential patents (SEPs), is a primary concern for the App Association's thousands of member companies that innovate across consumer and enterprise verticals.

SUMMARY OF THE ARGUMENT

The small business software and hardware technology industry the App Association represents is a driving force behind the growth in the IoT revolution. Underlying the growth and ingenuity of this sector are intellectual property rights, including patents, and the need for a coherent and wellreasoned framework for patent infringement disputes.

App Association members build, rely on, utilize, and innovate from standardized technologies, including technologies for wireless communication. The convergence of computing and communication technologies, driven by the app economy, will continue as a diverse array of industries come together to build the IoT through open standards. Reasonable licensing for SEPs is a "must have" for many small companies, such as our members (and their customers and suppliers), that want to have a legitimate chance to compete in IoT's tech-driven areas. App Association members use technical standards, and specifically the interoperability they provide, to support a wide variety of innovation and absent abuses-to create and promote competition.

To address the unique issues associated with SEPs, many standard-setting organizations (SSOs) have adopted patent policies that require members to, in return for acceptance into a standard voluntarily license the patents necessary for the implementation of the standard on terms that are fair, reasonable, and non-discriminatory ("FRAND"). The FRAND promise—when kept—serves minimize the to opportunities for abuse associated with standardization by providing that patent licenses will remain available to all market participants on terms that are reasonable and that promote a "level playing field" for competition. While no company has an *obligation* to commit its patents to a standard, where a company chooses to do so the FRAND promise acts as a crucial constraint on the abuse of market power associated with SEPs. The public interest function of FRAND breaks down where a company violates its obligation to license on FRAND terms. The harmful effects of such abuses, such as patent hold-up (demanding licensing fees that wildly exceed what parties would reasonably accept apart from the need to avoid losing their sunk investments), have serious implications for developing industries such as the numerous nascent IoT verticals that our members are driving forward.

Due to the proliferation of patents in contemporary technology, and the degree to which networking and telecommunications products depend on standards, SEP holders (even those whose SEPs are of insubstantial or even trivial technical value) can hold up entire industries and markets by refusing to license their SEPs or by licensing their SEPs on unfair or discriminatory terms. It is therefore crucial that FRAND compensation in SEP licenses should be based on the value of the patented invention as determined by its technical merits and scope. Despite their FRAND commitment, some SEP licensors systematically demand licensing fees that wildly exceed what parties would reasonably accept apart from the need to avoid losing their sunk investments, *i.e.*, engaging in patent hold-up. By contrast, licensors that value their SEPs based on technical merits and scope, not on downstream values or uses, reduce the risk of hold-up.

Royalty stacking-the result of the cumulative licensing demands of patent licensors on a licensee combining to make it unreasonable and economically unviable for the licensee to accept the terms of any individual offer to license-threatens countless IoT use cases that build on standardized technologies. SEP royalty stacking effectively consumes a commercial margins. product developer's profit which significantly diminishes incentives to engage in R&D. taxing innovation and prevents technological advancement. The impact of royalty stacking can and should be significantly reduced through FRAND SEP pricing approaches appropriately established in the courts through judicial decisions.

The complexities and balancing of interests required to address them in SEP cases illustrate the benefit of the well-established approach in Federal courts that has judges, rather than juries, interpret the meaning of FRAND terms. Further, such an approach is wellestablished precedent across numerous Federal circuits. The court system's established division of responsibilities between judge and jury have properly

supported the well-established norms of FRAND commitments and FRAND licensing, which are foundations of standards-based innovation. The Federal Circuit's decision departs from precedent and threatens to reduce transparency in court determinations of FRAND licensing amounts. inserting uncertainty into the balance in private negotiations that relv on such FRAND determinations, ultimately jeopardizing the stability of the open standards system.

The App Association agrees with Petitioner that the Federal Circuit misconstrues the FRAND commitment and is confusing contract and equitable estoppel remedies with that of regular patent damage cases. The FRAND commitment is a contract, whether express or implied, that a SEP holder voluntarily makes not to bring infringement suits against any party who agrees to pay FRAND terms in order to access the standard to which the patent(s) is/are essential. As a result (and taking into account the unique competition issues associated with SEPs and FRAND commitments), patent suits are starkly different from FRAND-based suits, and far from equivalent, as the Federal Circuit has nonetheless held.

Building on its conflation, the Federal Circuit has incorrectly determined that a jury should be required in all FRAND cases because of the Seventh Amendment. Yet the nature of the FRAND commitment makes such a dispute between the parties one of specific performance, which this Court has recognized is equitable. We agree with and endorse the Petitioner's rationale establishing that TCL's release payment constitutes intertwined monetary relief that is part of the consideration TCL owes Ericsson in exchange for specific performance of Ericsson's FRAND obligations. Further, the Federal Circuit's decision departs from settled precedent across a number of Federal circuits that do not assign FRAND term determination to juries.

Unless corrected by this court, the Federal Circuit's decision will unduly alter the balance the FRAND construct provides, binding courts across the country to its erroneous approach. It would undermine confidence in the standards process itself, and in courts' approach to FRAND disputes described above, particularly by drastically decreasing transparency. Such impacts would damage the small businesses the App Association represents significantly, including in private patent license negotiations that occur frequently through reducing transparency into courts' approaches to valuation and damages that are often relied upon. The Federal Circuit's divergent approach will also embolden suits to engage in abuse of the patent system and spur a race to the courtroom.

The case at hand represents a significant and damaging departure by the Federal Circuit. Without this Court's intervention, App Association members that rely on open standardized technologies to innovate and compete face an uncertain and turbid environment. The App Association believes that the Federal Circuit's approach at issue stands to upend heavily relied upon constructs in contradiction to the law, requiring correction. We urge this Court to grant the Petitioner's request for a writ of certiorari.

ARGUMENT

I. AMERICAN SMALL BUSINESSES RELY ON A FAIR AND PREDICTABLE PATENT SYSTEM TO GROW AND CREATE AMERICAN JOBS

The App Association represents more than 5,000 small business software application development companies and technology firms located across the mobile economy. Our members develop innovative applications and products to meet the demands for rapid adoption of mobile technology, improve workplace productivity, accelerate academic achievement, monitor health, and support the global digital economy. App Association members play a critical role in developing new products across consumer and enterprise use cases, enabling the rise of the internet of things (IoT). Today, the App Association represents an ecosystem valued at approximately \$1.7 trillion that is responsible for 5.9 million American jobs. Online Platforms and Market *Power, Part 2: Innovation and Entrepreneurship:* Hearing Before the H. Subcomm. on Antitrust. Commercial, and Administrative Law, 116th Cong. 2 (2019) (statement of Morgan Reed, President, ACT | Association) available The App athttps://actonline.org/wp-content/uploads/Online-Platforms-and-Market-Power-Part-2-Innovationand-Entrepreneurship-1.pdf.

IoT is an encompassing concept capturing how everyday consumer and enterprise products use the internet to communicate data collected through sensors and act on that data in a timely and effective way. IoT is expected to enable improved efficiencies in processes, products, and services across every sector. In key segments of the U.S. economy, from agriculture to retail to healthcare and beyond, the rise of IoT is demonstrating efficiencies unheard of even a few years ago. "What is the IoT? Everything you need to know about the Internet of Things right now," ZDNet, available Februarv 3. 2020. athttps://www.zdnet.com/article/what-is-the-internetof-things-everything-you-need-to-know-about-the-iotright-now/.

Ultimately, the largest value-add of IoT is in how new data points become part of what is now commonly referred to as the "big data" ecosystem (which we define to mean structured or unstructured data sets so large or complex that traditional data processing applications are not sufficient for analysis). As sensors become smaller, cheaper, and more accurate, big data analytics enable more efficiencies across consumer and enterprise use cases. IoT deployment will be highly use case-dependent. App Association members, to date, have done well through open application programming interfaces (APIs) and other widely-adopted standards (e.g., TCP/IP) to enable interoperability. For example, in healthcare, a miniaturized and embedded connected medical device must be able to automatically communicate bidirectionally in real-time. This capability enables

healthcare practitioners to monitor patients' biometric data and patients to communicate with caregivers in the event of a medical emergency. Other uses, such as sensors deployed to alert security of an unauthorized presence, may only require the ability to send data to security professionals with minimal (or even no) capability to receive communications. By 2025, there will be an estimated 25.2 billion connected devices in a variety of sectors including gaming, financial, and health across the global digital ecosystem. App Annie, State of the App Economy 2020 (Jan. 2020), https://www.appannie.com/en/go/stateof-mobile-2019/.

The app economy's success – and the growth of IoT – relies on continuous innovation and investment in connected devices, requiring legal frameworks that are consistent and strong. Morgan Reed, Comments of ACT | The App Association to the National Telecommunications and Information Administration regarding the Benefits, Challenges and Potential Roles for the Government in Fostering the Advancement of the Internet of Things (June 2, 2016), http://actonline.org/wp-content/uploads/NTIA-

Comments-on-IoT-Regulations.pdf. Patents allow small business developers protect their to investments, help attract venture capital, establish and maintain competitive position in the marketplace, and level the playing field dealing with established companies and competitors. Small businesses produce 16 times more patents per employee than large patenting firms. "Innovation in Small Businesses" Drivers of Change and Value Use, Business Administration, Small available at https://www.sba.gov/sites/default/files/rs342tot 0.pdf. In the growing IoT space, small businesses need to be reassured that U.S. patent law is applied in a clear, reliable, and predictable manner, particularly when courts are evaluating damages in patent infringement suits. Any departure in the courts from established precedent with respect to patent damages calculations creates uncertainty in the outcome of court cases, and further upends norms in negotiations where court methodologies are relied upon, or influence, negotiations.

The App Association's members' ability to take part in the booming cross-sectoral IoT ecosystem, which will create millions of additional American jobs in the process, heavily depends on the ability to rely on and plan according to legal and business norms and policymaking that appropriately balances creating a pro-innovation environment with the public interest. A core ignitor of growth and ingenuity for small businesses in emerging IoT sectors is, and must continue to be a fair, reliable, and predictable intellectual property rights system, particularly with respect to patents. According to a recent focus group survey, over half of our members have dealt with some type of patent infringement claim. Attempts to abuse the patent system, however unique they may be, must be adjudicated and addressed by the courts to ensure that the patent system can still be relied upon.

II. THE IMPACT OF STANDARDS AND STANDARD-ESSENTIAL PATENTS ON IoT, AND AMERCAN GROWTH AND JOB CREATION

App Association members build, rely on, utilize, and innovate from standardized technologies, including communication. technologies for wireless The convergence of computing and communication technologies, driven by the app economy, will continue as a diverse array of industries come together to build the IoT. As discussed above, IoT is an encompassing technological approach where everyday products use the internet to collect, utilize, and communicate data that was captured through standardized sensors. IoT's seamless interconnectivity will utilize known and yet-to-bedeveloped industry standards, such as 5G, Wi-Fi, LTE, Bluetooth, and countless others. As such, reasonable licensing for SEPs is a "must have" for many small companies, such as our members (and their customers and suppliers), that want to have a legitimate chance to compete in IoT's tech-driven areas.

App Association members use technical standards, and specifically the interoperability they provide, to support a wide variety of innovation and—absent abuses—to create and promote competition. Standardization is particularly critical in today's highly digitized markets. Developed industries, such as medical, automotive, health, manufacturing, and finance, are each evolving to implement wireless technologies as IoT takes shape. Simultaneously, new, highly connected industries and markets implementing wireless standards are just now being created. In each of these markets, "downstream" innovative technologies utilize these "upstream" standardized communication technologies to develop a panoply of unique and diverse products, many of which are developed by App Association members. The benefits of these standards only accrue when

technical standards setting processes are operating as intended. When the system is gamed and abused, standardization processes carry significant competitive risks. Microsoft Corp. v. Motorola, Inc., 1030-31 (9th Cir. 795 F.3d 1024, 2015)"creates (standardization opportunity an for companies to engage in anti-competitive behavior").

To address the unique issues associated with SEPs, many standard-setting organizations (SSOs) have adopted patent policies that require members to, in return for acceptance into a standard voluntarily license the patents necessary for the implementation of the standard on terms that are fair, reasonable, and non-discriminatory ("FRAND"). The FRAND kept—serves promise—when to minimize the opportunities for abuse associated with standardization by providing that patent licenses will remain available to all market participants on terms that are reasonable and that promote a "level playing field" for competition. ETSI, Intellectual Property *Rights Policy*, ¶ 3.1¶

> [T]he ETSI IPR POLICY seeks to reduce the risk to ETSI, MEMBERS, and others applying ETSI STANDARDS . . . that

investment in the preparation, adoption and application of STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD . . . being unavailable. In achieving this objective, the ETSI IPR POLICY seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.

ETSI, *Guidelines for Antitrust Compliance*, § B (noting that the competition interests addressed by the ETSI Policies are "aimed at allowing firms to compete on a level playing field.").

In other words, while no company has an *obligation* to commit its patents to a standard, where a company chooses to do so the FRAND promise acts as a crucial constraint on the abuse of market power associated with SEPs. As the Ninth Circuit has explained, the voluntary FRAND commitment "must be construed in the public interest because it is crafted for the public interest," as it is designed to protect against the abuses and consumer harm that standardization can otherwise enable. Microsoft v. Motorola, 795 F. 3d 1024, 1052 (9th Cir. 2015). The public interest function of FRAND breaks down where a company violates its obligation to license on FRAND terms. The harmful effects of such abuses, such as patent holdup (demanding licensing fees that wildly exceed what parties would reasonably accept apart from the need to avoid losing their sunk investments), have serious implications for developing industries such as the

numerous nascent IoT verticals that our members are driving forward.

Although some large corporations may be able to absorb the cost of FRAND abuses or to seek redress through litigation to prevent them, small business innovators that need reasonable access to SEPs in order to protect and defend their interests easily may find themselves financially barred from similar protections. As a result, small business innovators faced with FRAND abuse may be forced to abandon their business plans involving standards altogether; accept excessive royalty demands made by the SEP holders, and thus transfer the value of their own innovations to entrenched, upstream SEP holders; or change their product's design to avoid the standard impossible for (an task markets requiring interoperability). None of these outcomes are in the public interest or congressional intent.

The net effect of SEP unchecked abuses would be the exclusion of the tens of thousands of American small businesses, not only from established markets, but also within the emerging vertical markets for IoT technologies. Therefore, as abusive behavior with respect to SEPs is alleged, the App Association urges the court to consider the serious implications of this case for the future of industry, including small businesses innovating in IoT.

III. WELL-ESTABLISHED NORMS OF FRAND COMMITMENTS AND FRAND LICENSING ARE FOUNDATIONS OF STANDARDS-BASED INNOVATION, SUPPORTED BY JUDGES' DECISIONS ON EQUITABLE QUESTIONS

A. FRAND valuation principles must correspond to the value of the patented technology

Standards typically incorporate numerous SEPs, sometimes thousands or even tens of thousands per Complex technology standard. products often incorporate hundreds of standards. See Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991, 1992 (2007). For example, an independent study found that 49 different patent holders declared 5,919 patent families essential to the LTE standard. See Cyber Creative Institute Co., Evaluation of LTE essential patents declared to ETSI (June 2013), available at: http://www.cybersoken.com/file/lte03EN.pdf. 87,752 patent declarations, represented through 22,604 patent families, have already been identified in next generation (5G) standards. See IPlytics, Who is leading the 5G patent race? (November 2019), available https://www.iplytics.com/wpat: content/uploads/2019/01/Who-Leads-the-5G-Patent-Race 2019.pdf.

However, with the large number of patents that read on a single product, not all of these patents (including SEPs) represent breakthrough technologies. See Timothy J. Muris, Bipartisan Patent Reform and Competition Policy, AEI Working Paper at 1 (May 2017) (noting that "many" of the 250,000 patents used in a smartphone are "of questionable quality that users of the standards cannot avoid."). As former FTC Chairman Tim Muris has observed, "[t]he economy is awash in low-quality patents, particularly in the crucial high-technology world of Silicon Valley." Id. at 1. The abundance of low-quality patents is no less of an issue for SEPs than it is for non-SEPs. Further, the technical value contributed by many of the patents used in a given standard can be insubstantial. For example, in Microsoft Corp. v. Motorola, Inc., 696 F.3d 872 (9th Cir. 2012) the court determined that the handful of Wi-Fi patents, for which Motorola had sought a royalty of 2.25% of the price of game consoles that incorporated Wi-Fi (among numerous other technologies and standards), "provid[ed] very little contribution to core functionality of the 802.11 [Wi-Fi] Standard." 2013 U.S. Dist. LEXIS 60233 (W.D. Wash. 25 Apr. 2013), aff'd, 795 F.3d 1024 (9th Cir. 2015). Moreover, "the majority of the technologies available to and/or adopted by the 802.11 drafters were in the public domain and not covered by patents." Id. at 50.

And in infringement cases where the validity or infringement of alleged SEPs is necessarily at issue, SEP holders fare poorly. The great majority of asserted SEPs adjudicated in infringement cases have been determined to be invalid or not infringed. *See* RPX Corp., Standard Essential Patents: How Do They Fare? available at https://www.rpxcorp.com/wpcontent/uploads/sites/2/2

015/03/Standard-Essential-Patents-How-Do-They-

Fare.pdf; and John Jurata, Jr. & David B. Smith, Turning the Page: The Next Chapter of Disputes Involving Standard-Essential Patents, CPI Antitrust Chronicle, 15 Oct. 2013. Further, very often supposedly essential patents asserted in court turn out not to cover the technology in the standard. Mark A. Lemley & Timothy Simcoe, How Essential Are Standard-Essential Patents?. 104 Cornell L. Rev. 607 (2019). This is particularly significant because patentees typically assert their strongest patents against alleged infringers. Yet even the best patents that SEP holders assert failed to hold up in litigation. And SEPs determined to be valid and infringed may offer only marginal benefits over alternative technologies that were available at the time of standardization. But once the invention claimed in even a weak patent is included in a standard, any party that utilizes the standard can be required to take a license to the patent. The Court of Appeals for the Federal Circuit described this phenomenon as follows:

> When a technology is incorporated into a standard, it is typically chosen from among different options. Once incorporated and widely adopted, that technology is not always used because it is the best or the only option; it is used because its use is necessary to comply with the standard. In other words. widespread adoption of standard essential technology is not entirely

indicative of the added usefulness of an innovation over the prior art.

Ericsson, Inc. v. D-Link Systems, Inc., 773 F.3d 1201, 1233 (Fed. Cir. 2014) (emphasis added).

Yet. due to the proliferation of patents in contemporary technology, and the degree to which networking and telecommunications products depend on standards, SEP holders (even those whose SEPs are of insubstantial or even trivial technical value) can hold up entire industries and markets by refusing to license their SEPs or by licensing their SEPs on unfair or discriminatory terms. Rather than seeking royalties based on the fair contribution of the patented technology to the standard, a SEP holder can leverage its patent rights to demand compensation far beyond the SEP's technical value.

The App Association supports that holders of patents that are essential to a standard should be reasonably compensated for the use of those SEPs. Indeed, such compensation is at the center of the FRAND bargain: in exchange for inclusion of the patented technology into the standard, the patent holder agrees to license any implementer on FRAND terms. Potential users of the standard choose to use a standard because they are assured they will be able to license the patents essential to the standard on FRAND terms and contributors gain access to a broader market of users willing to license their standard-essential patents than they would licensing them for use outside the standard. This FRAND compensation should be based on the value of the patented invention as determined by its technical merits and scope, as is the case with every patent, whether or not FRAND-encumbered. *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1232 (Fed. Cir. 2014) ("[w]hen dealing with SEPs ... the patentee's royalty must be premised on the value of the patented feature, not any value added by the standard's adoption of the patented technology.").

B. Patent Hold-up's Effect on Pricing and Valuation

While there is no single FRAND rate (instead, range), SEP licensors FRAND is a some systematically demand licensing fees that wildly exceed what parties would reasonably accept apart from the need to avoid losing their sunk investments, *i.e.*, engaging in patent hold-up. Numerous courts have determined appropriate FRAND rates at a mere fraction of what the SEP licensor had initially demanded. For example, in *Microsoft v. Motorola*, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013), for 802.11 SEPs Motorola offered Microsoft 2.25% based on the price of the end product (Xbox 360, approx. \$6.75 based on \$300 retail price) where the court finally decided on FRAND rate for 802.11 SEPs of \$0.03471 cents per unit. Such rulings indicate that SEPs are frequently overvalued by SEP licensors.

Unreasonably inflated licensing fee demands, despite the voluntary FRAND commitment, are indicative of patent hold-up behavior. The licensor can inappropriately leverage the value of the standard by virtue of the fact that its patented technology is locked into the standard and shifting to an alternative is not economically feasible for users of the standard. Holdup enables the licensor to extract more value from the potential licensee than what the patented technology is worth. By contrast, licensors that value their SEPs based on technical merits and scope, not on downstream values or uses, reduce the risk of holdup.

SEP hold-up and its harmful effects can be avoided when licensors abide by the FRAND commitment and seek reasonable royalties calculated based on the smallest saleable unit (SSU) and the licensor's pro rata share of a standard's declared SEPs. Courts should – and do – take measures when addressing SEP disputes to mitigate patent hold-up through their enforcement of the FRAND commitment, reinforcing that the FRAND commitment prohibits deleterious patent hold-up tactics.

C. Royalty Stacking's Effect on Pricing and Valuation

Royalty stacking is the result of the cumulative licensing demands of patent licensors on a licensee. When these demands are combined, they make it unreasonable and economically unviable for the licensee to accept the terms of any individual offer to license.

With numerous previously unconnected products across consumer and enterprise use cases becoming "smart" (*e.g.*, enabled by wireless connectivity that unlocks real time analytics-based decision making), new IoT use cases are threatened by royalty stacking. For example, the use of sensors and wireless connectivity are enabling cities to manage their garbage collection operations based on new intelligence signals collected in rubbish bins and rubbish dumpsters. Across a smart city network, these signals provide timely knowledge to city managers. enabling them to deploy valuable resources much more efficiently. But with the connectivity unlocking these new efficiencies being provided by 4G LTE standardized technology, a standard with more than 5,000 declared SEPs in it, developers of such smart city solutions face the daunting possibility of the demands for so many SEP licenses to "stack" up to exceed the cost of developing and getting a product to market. SEP royalty stacking effectively consumes а commercial product developer's profit margins, which significantly diminishes incentives to engage in R&D. In this way, royalty stacking taxes innovation and prevents technological advancement.

The impact of royalty stacking can and should be significantly reduced through FRAND SEP pricing as described above. Further, harmful SEP royalty stacking can be avoided by taking into account an aggregate SEP royalty rate for the standard as a whole when assessing whether a royalty rate is consistent with a FRAND licensing commitment.

Harmful royalty stacking can be avoided through enforcement of the FRAND commitment by ensuring that reasonable royalties are calculated based on the SSU and the licensor's pro rata share of a standard's declared SEPs and by ensuring that an aggregate SEP royalty rate for the standard as a whole is considered when assessing whether a royalty rate is consistent with a FRAND licensing commitment.

D. Judicial Decisions are Appropriate to Support Well-Established Norms of FRAND Commitments and FRAND Licensing, which are Foundations of Standards-Based Innovation

As discussed above, App Association members rely on technical standards and the interoperability they provide to support a wide variety of innovation and to create and promote competition. The complexities and balancing of interests required to address them described above illustrate the benefit of the wellestablished approach in Federal courts that has judges, rather than juries, interpret the meaning of FRAND terms. Further, such an approach is wellestablished precedent across numerous Federal circuits. See, e.g., Microsoft Corp. v. Motorola, Inc., 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013), aff'd, 795 F.3d 1024, 1040 (9th Cir. 2015); In re Innovatio IP Ventures, LLC Patent Litigation, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013); u-Blox AG v. InterDigital, Inc., 2019 WL 555029 (S.D. Cal. Feb. 12, 2019); Apple Corp. v. Motorola Mobility, Inc., 2012 WL 5416941 (W.D. Wis. Oct. 29, 2012). The court system's established division of responsibilities between judge and jury have properly supported the well-established norms of FRAND commitments and FRAND

licensing, which are foundations of standards-based innovation.

As discussed below, absent the checks provided by judges in FRAND interpretations, the court system will enable SEP holders to demand supra-FRAND terms, including licensing fees, consistent with data cited by the Petitioner demonstrating that larger damage awards are awarded by juries. Further, the Federal Circuit's departure from precedent will degrade transparency in court determination of FRAND licensing amounts. The Petitioner has carefully argued, and the App Association fully supports, that the Federal Circuit's changes to the court system will in turn disrupt the balance in private negotiations that rely on such FRAND determinations, altering the stability of the open standards system.

- IV. THIS COURT MUST ADDRESS THE FEDERAL CIRCUIT'S IMPROPER DECISION TO SHIFT DECISIONS ON EQUITABLE ISSUES TO JURIES
 - A. The Federal Circuit's Decision Failed to Recognize that the Royalties per an Injunction after a FRAND Commitment has been Broken by the SEP Holder are not Patent Infringement Damages

The App Association agrees with Petitioner that the Federal Circuit misconstrues the FRAND commitment and is confusing contract and/or equitable estoppel remedies with that of regular patent damage cases. The FRAND commitment is a contract, whether express or implied, that a SEP holder voluntarily makes not to bring infringement suits against any party who agrees to pay FRAND terms in order to access the standard to which the patent(s) is/are essential. As a result (and taking into account the unique competition issues associated with SEPs and FRAND commitments), patent suits are starkly different from FRAND-based suits, and far from equivalent, as the Federal Circuit has nonetheless held.

Unlike regular patent suits where a plaintiff demonstrates infringement on a valid and enforceable U.S. patent, with remedies offered limited to the United States, FRAND disputes do not require a demonstration of infringement or scope. Further, FRAND disputes may include entire portfolios of SEPs. See Mark A. Lemley & Carl Shapiro, A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents, 28 Berkeley Tech. L.J. 1135 (2013). Sometimes, the SEP count can be in the thousands for certain standards. Brad Biddle et al., How Many Standards in a Laptop? (And Other Questions) Empirical (2010),https://papers.ssrn.com/sol3/papers.cfm?abstract_id= 1619440.

Federal courts have long recognized the significant differences between cases involving FRANDencumbered suits and regular patent suits, with divergences presenting themselves on fundamental levels such as with respect to factors in *Georgia* Pacific. Ericsson v. D-Link, 773 F.3d 1201, 1230-31
(Fed. Cir. 2014). Federal courts regularly note the difference. Microsoft Corp. v. Motorola, Inc., 696 F.3d
872 (9th Cir. 2012); Apple Corp. v. Motorola Inc., Case No. 12-1548 (Fed. Cir. April 25, 2014); Realtek Semiconductor Corp. v. LSI Corp., 2013 WL 2181717
(N.D. Cal. May 20, 2013).

B. The Seventh Amendment does not Provide a Right to a Jury Trial for Specific Performance Issues

Building on its conflation, the Federal Circuit aims to require a jury in all FRAND cases, finding that the Seventh Amendment should apply to those FRAND disputes. Because of the nature of the FRAND commitment, the dispute between the parties at issue is one of specific performance, which this Court has recognized is equitable. Atlas Roofing Co. v. Occupational Safety & Health Review Commission, 430 U.S. 442 (1977). This Court has also held that "a judicial remedy may require one party to pay money to another is not a sufficient reason to characterize relief damages."" the \mathbf{as} 'money Bowen v. Massachusetts, 487 U.S. 879, 893 (1988). We agree with and endorse the Petitioner's rationale establishing that TCL's release payment constitutes intertwined monetary relief that is part of the consideration TCL owes Ericsson in exchange for specific performance of Ericsson's FRAND obligations.

Further, the Federal Circuit's decision departs from settled precedent across a number of Federal circuits that do not assign FRAND term determination to juries. See, e.g., Microsoft Corp. v. Motorola, Inc., 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013), aff'd, 795 F.3d 1024, 1040 (9th Cir. 2015); In re Innovatio IP Ventures, LLC Patent Litigation, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013); u-Blox AG v. InterDigital, Inc., 2019 WL 555029 (S.D. Cal. Feb. 12, 2019); Apple Corp. v. Motorola Mobility, Inc., 2012 WL 5416941 (W.D. Wis. Oct. 29, 2012). The Federal Circuit's opinion now threatens this relied-upon precedent across all Circuits.

Further, we call on the Court to recognize that even typical "classic" patent disputes do not enjoy a Seventh Amendment right to a jury trial. FRAND cases aside, this Court has held that even regular patents cases do not require a jury for all aspects, such as questions of law regarding scope of patent claims or construction claims. *See Markman v. Westview Instruments Corp.*, 517 U.S. 370 (1996); *Teva Pharms. USA v. Sandoz, Inc.*, 574 U.S. 318 (2015).

C. This Court's Action is Needed to Restore the Proper Division of Responsibilities between Judge and Jury, which Supports Well-Established Norms of FRAND Commitments and FRAND Licensing

Unless corrected by this court, the Federal Circuit's decision will unduly alter the balance the FRAND

construct provides, binding courts across the country to its erroneous approach. It would undermine confidence in the standards process itself, and in courts' approach to FRAND disputes described above, particularly by drastically decreasing transparency.

No group needs certainty on this aspect of patent law more than small businesses, including those that the App Association represents. Further, we note that in private patent license negotiations that occur frequently, courts' approaches to valuation and damages are often relied upon. With continued uncertainty due to the Federal Circuit's departure, small businesses would be forced to deal with a lack of insight into methodologies that foster inflated SEP pricing by juries and which contribute royalty stacking, resulting in the potential of having to accept unfavorable licensing terms that would not align with FRAND principles.

Additionally, should the Federal Circuit's approach continue without this Court's review, patent owners may recognize the financial opportunities that arise due to a lack of apportioned damages in a patent infringement case. Such a situation would further embolden suits by abusive patent holders who seek to weaponize the threat of unapportioned and inflated patent judgements as a negotiating tool. The widely recognized delta between awards determined by judge and jury would incent SEP holders to race to the courtroom. Such a negative effect would particularly impact small businesses like the App Associations' members due to the inability to compete in the marketplace as a result of the inflated royalty rates. The case at hand represents a significant and damaging departure by the Federal Circuit. Without this Court's intervention, App Association members that rely on open standardized technologies to innovate and compete face an uncertain and turbid environment. The App Association believes that the Federal Circuit's approach at issue stands to upend heavily relied upon constructs in contradiction to the law, requiring correction.

CONCLUSION

For the foregoing reasons, this Court should grant the petition for a writ of certiorari.

Respectfully submitted,

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