### UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

APPLE INC.,	)
Plaintiff,	)
V.	) C.A. No. 2:21-cv-460
TELEFONAKTIEBOLAGET LM ERICSSON and ERICSSON INC.,	) Jury Trial Demanded )
Defendants.	) ) )

### **COMPLAINT**

Plaintiff Apple Inc. on personal knowledge as to its own acts, and on information and belief as to all other acts, alleges as follows:

### **INTRODUCTION**

1. In December 2015, Apple and Ericsson signed a seven-year license agreement to resolve worldwide litigation, including litigation in which Ericsson asserted patents that it claimed were essential to cellular standards ("SEPs") and that it irrevocably (and voluntarily) promised to license on fair, reasonable, and non-discriminatory ("FRAND") terms. That license agreement remains in force today. That license agreement also should have meant that the parties would not be in court against each other for the duration of the agreement. Notwithstanding that, and even though the parties had not even begun to discuss commercial terms of a renewed agreement,

Ericsson sued Apple in the Netherlands and in this Court.<sup>1</sup> Ericsson's actions violated both its agreement with Apple and its FRAND commitments.

- 2. In the Netherlands, Ericsson secretly went to court on September 29, 2021 and misrepresented Apple's past conduct to obtain a temporary order that barred Apple from seeking judicial protection against Ericsson's strong-arm tactics. When Ericsson eventually served Apple with the secret order it had obtained from the Dutch court and Apple was allowed to tell its side of the story in that Dutch court, including correcting what Ericsson was forced to concede was a misrepresentation about Apple, the Dutch court lifted the temporary order and also denied Ericsson's subsequent attempt to have it reinstated more permanently.
- 3. In this Court, Ericsson's actions were equally illegitimate. Ericsson sent Apple what Ericsson purports is a FRAND offer—merely a summary of Ericsson's publicly demanded license rates—and sued Apple in this Court *six minutes later* for allegedly being unwilling to agree to Ericsson's "sticker price" terms. Ericsson sued rather than negotiate in good faith with Apple, because Ericsson is trying to coerce Apple to pay excessive future royalties in breach of Ericsson's binding FRAND commitments.
- 4. Despite Ericsson's misconduct, Apple remains a willing licensee of Ericsson's patents, and Apple is willing to grant Ericsson a license to Apple's own FRAND-committed patents on FRAND terms. Apple has proposed to Ericsson that the parties simply extend the terms of the parties' 2015 license agreement with limited revisions for changed circumstances. Apple

<sup>&</sup>lt;sup>1</sup> As set forth in Apple's motion to dismiss filed concurrently in Civil Action No. 2:190-cv-00066-JRG, Ericsson's lawsuit breaches the parties' license because it

and fails to state a claim given the existence of that license. To the extent that the Court disagrees with Apple and concludes that such claims can be pursued during the term of the license, Apple is pursuing similar claims against Ericsson—i.e., Counts II through VII.

has also proposed that if the parties cannot agree on terms for a renewed license, the parties have arbitrators set binding FRAND terms. But Ericsson has refused these offers and remains intent on holding up Apple for royalties that are far higher than those Apple already pays for the same patents under the parties' existing agreement. In short, Ericsson is using litigation and strong-arm tactics to demand payments from Apple that are neither fair nor reasonable and are discriminatory.

- 5. Apple brings this Complaint to seek relief for Ericsson's breach of the parties' existing agreement through its premature litigation and its breach of its FRAND commitments. Apple seeks a declaration that Ericsson has breached (i) the parties' current agreement as well as (ii) Ericsson's FRAND obligation to offer FRAND terms for a new license. And because Ericsson has consented to such a procedure in this Court and is contractually bound by its voluntary FRAND commitments, Apple also seeks (iii) a binding judicial determination of FRAND terms for Apple to license Ericsson's SEPs globally, including by reference to the terms previously agreed upon by the parties in their 2015 license.
- 6. In addition, and related to Apple's commitment to a FRAND determination (which would necessarily include analysis of Ericsson's SEPs), Apple seeks (iv) a declaration that certain of Ericsson's claimed SEPs are simply not infringed and not essential, and that no royalties need be paid on those patents.

#### **PARTIES**

- 7. Apple is a corporation organized under the laws of the State of California, having its principal place of business at 1 Apple Park Way in Cupertino, California 95014.
- 8. When Apple unveiled iPhone in 2007, it revolutionized the telecommunications industry and completely redefined what users can do on their mobile phones. iPhone combined three products—a groundbreaking mobile phone, a widescreen iPod music player, and a revolutionary computer/Internet communications device—into one small and lightweight

handheld device with a large, color multi-touch display; a distinctive user interface; and a sophisticated computing platform for mobile apps. Apple patented many of these innovations.

- 9. In 2010, Apple created and defined an entirely new category of devices with iPad. iPad connected users with their apps and content in a much more intimate, intuitive, and fun way. iPad was an elegantly designed computer tablet with a color multi-touch screen and user interface akin to iPhone, and robust functionality that spans both mobile computing and media storage and playback. As a result of its innovative technology and distinctive design, iPad achieved instant success.
- 10. In 2015, Apple shook up the emerging wearables market with Apple Watch. Apple Watch wholly reimagined the computer for the wrist, including a novel user interface that joins a touchscreen and physical buttons. Within months of its release, Apple Watch became a top selling wearable device in the world.
- 11. Apple has continued to revolutionize iPhone, iPad, and Apple Watch with new features, functionalities, technologies, and tools that help users simply do more. Apple's innovations have been recognized with thousands of patents around the world. Apple's iPhone, iPad, and Apple Watch products are the result of Apple's own creative achievement, technical innovation, differentiated technology, and astute business judgment.
- 12. Among many other functions, iPhone as well as certain models of iPad and Apple Watch can send and receive, over cellular networks, telephone calls and/or other voice and video communications, text messages, and Internet data. A mobile wireless device, like iPhone, iPad, or Apple Watch, uses a baseband processor chipset to make cellular communications. The baseband processor chipset is a component that, among other functions, acts as a small wireless radio and "plugs in" to a standardized telecommunications network. Such networks are created and

maintained by cellular service providers, including, for example, AT&T, Verizon, T-Mobile, and U.S. Cellular.<sup>2</sup> For these carrier companies to deploy a 5G network, certain base stations and other related equipment that support the 3GPP 5G NR standard must be installed and utilized. Ericsson is one such manufacturer of 5G base stations and other equipment used by cellular service providers.

- 13. Telefonaktiebolaget LM Ericsson ("LME") is a Swedish corporation having its headquarters at Torshamnsgatan 21, Kista, 164 83 Stockholm, Sweden.
- 14. Ericsson Inc. is a Delaware corporation having a principal place of business at 6300 Legacy Drive, Plano, Texas 75024. Ericsson Inc. is a wholly-owned subsidiary of LME. LME and Ericsson Inc. are referred to herein collectively as "Ericsson."
- 15. Once a handset manufacturer itself, Ericsson faced "a history of problems in handsets, ranging from supply to clunky designs that did not appeal to consumers." "[W]ith annual results that barely met analysts' reduced forecasts," in 2001, Ericsson said that "it would stop manufacturing mobile phones, as it trie[d] to shore up a division that is hemorrhaging cash."
- 16. Ericsson tried to continue in the handset business through a joint venture. But as a history of Ericsson on its website documents, after some initial success, the venture struggled to keep up with competitors, including Apple. As an example, the "Xperia model, also called the X1 and described as a flagship model, was . . . a flop. The Xperia was launched in the autumn of 2008

<sup>&</sup>lt;sup>2</sup> Apple, 5G and LTE. Find the iPhone that's right for your country or region, <a href="https://www.apple.com/iphone/cellular/">https://www.apple.com/iphone/cellular/</a>; Apple, Wireless carrier support and features for iPhone in the United States and Canada, <a href="https://support.apple.com/en-us/HT204039">https://support.apple.com/en-us/HT204039</a>.

<sup>&</sup>lt;sup>3</sup> New York Times, *Ericsson's 2001 Loss Is First in 50 Years*, Jan. 26, 2002, <a href="https://www.nytimes.com/2002/01/26/technology/ericssons-2001-loss-is-first-in-50-years.html">https://www.nytimes.com/2002/01/26/technology/ericssons-2001-loss-is-first-in-50-years.html</a>.

<sup>&</sup>lt;sup>4</sup> New York Times, *Ericsson Plans to Stop Manufacturing Mobile Phones*, Jan. 26, 2001, <a href="https://www.nytimes.com/2001/01/26/business/ericsson-plans-to-stop-manufacturing-mobile-phones.html">https://www.nytimes.com/2001/01/26/business/ericsson-plans-to-stop-manufacturing-mobile-phones.html</a>.

- . . . and was intended to be a clever means of introducing users to the mobile internet. But Xperia had too many bugs. And it could not compete with the iPhone in user-friendliness."<sup>5</sup>
- 17. After the collapse of its handset business, Ericsson transitioned to network infrastructure equipment and other businesses. Those other lines of business include patent licensing and patent assertion. Ericsson reported approximately 100 signed license agreements, and over \$1 billion in licensing revenue in 2020.

### **JURISDICTION**

- 18. This Court has jurisdiction over the federal claims alleged under 28 U.S.C. §§ 1331 and 1338(a). This Court also has supplemental jurisdiction over other claims pursuant to 28 U.S.C. § 1367(a) because those claims form part of the same case or controversy as the federal law claims. This Court may grant declaratory and injunctive relief in this action pursuant to at least 28 U.S.C. §§ 2201 and 2202.
- 19. The Court also has original jurisdiction over Apple's claims pursuant to 28 U.S.C. § 1332, because Apple is a citizen of California, LME is a citizen of Sweden, Ericsson Inc. is a citizen of Texas, and the value of the matter in controversy exceeds \$75,000.
- 20. Venue is proper in this District pursuant to 28 U.S.C. § 1391, because, during the relevant period, Ericsson have and continue to reside in this District.
  - 21. This Court has both general and specific jurisdiction over Ericsson.
  - 22. Ericsson Inc. has its headquarters in Plano, Texas in this District.

<sup>&</sup>lt;sup>5</sup> Ericsson, *The problematic mobile phone sector*, <a href="https://www.ericsson.com/en/about-us/history/changing-the-world/the-future-is-now/the-problematic-mobile-phone-sector">https://www.ericsson.com/en/about-us/history/changing-the-world/the-future-is-now/the-problematic-mobile-phone-sector</a>.

<sup>&</sup>lt;sup>6</sup> Ericsson Annual Report 2020, pdf pp. 7, 17, 18, https://www.ericsson.com/494193/assets/local/investors/documents/2020/annual-report-2020-en.pdf.

- 23. LME is "a holding company operating worldwide through its subsidiaries and affiliated entities. The subsidiaries acted as divisions of the parent, rather than separate and independent entities."<sup>7</sup>
- 24. LME's Annual Report for 2020 confirms that "[t]he Company is composed of a parent company, Telefonaktiebolaget LM Ericsson, with generally fully-owned subsidiaries in many countries of the world." One of the largest operating subsidiaries is the fully-owned telecom vendor company Ericsson Inc., incorporated in the US.<sup>8</sup> Ericsson Inc. thus acts as an agent of LME.
- 25. Ericsson regularly does business or solicits business, engages in other persistent courses of conduct, and derives substantial revenue from products and/or services provided to individuals in Texas. Ericsson, directly and through subsidiaries or intermediaries, has purposefully and voluntarily placed one or more products and/or services in the stream of commerce related to this dispute with the intention and expectation that they will be purchased and used in Texas.
- 26. Further, as described herein, LME breached its license agreement with Apple by filing suit against Apple (together with Ericsson Inc.) before this Court. Moreover, Ericsson licensing executives based in Texas have negotiated with Apple about Ericsson's SEPs, giving rise to the breaches and unlawful conduct alleged herein.

<sup>&</sup>lt;sup>7</sup> Letter to Simpson Thatcher & Bartlett LLP at A-1-A-2, *U.S. v. Telefonaktiebolaget LM Ericsson*, 19-CRIM-884 (S.D.N.Y. Dec. 6, 2019), <a href="https://www.justice.gov/criminal-fraud/file/1226521/download">https://www.justice.gov/criminal-fraud/file/1226521/download</a>.

<sup>&</sup>lt;sup>8</sup> Ericsson Annual Report 2020 at 33, <a href="https://www.ericsson.com/494193/assets/local/investors/documents/2020/annual-report-2020-en.pdf">https://www.ericsson.com/494193/assets/local/investors/documents/2020/annual-report-2020-en.pdf</a>.

### **BACKGROUND**

### A. ETSI and its Intellectual Property Rights Policy

- 27. The European Telecommunications Standards Institute ("ETSI") is an independent, non-profit standard-setting organization ("SSO") that produces globally-accepted standards for the telecommunications industry. ETSI has more than 900 members from 65 countries across five continents. ETSI created or helped to create many telecommunication standards, including the 2G GSM, 3G WCDMA/UMTS, 4G LTE, and 5G NR cellular communication standards.
- 28. ETSI is an Organizational Partner, along with six other regional SSOs, in the Third Generation Partnership Project ("3GPP"). The regional SSO covering the United States is ATIS, the Alliance for Telecommunications Industry Solutions. Another SSO based in the United States, TIA (Telecommunications Industry Association), is an observer of 3GPP activities.
- 29. Under 3GPP's Intellectual Property Rights ("IPR") Policy, individual members "shall be bound by the IPR Policy of their respective Organizational Partner."
- 30. 3GPP produces technical specifications that are adopted by Organizational Partners, such as ETSI, as standards. 3GPP was created to oversee work on global 3G cellular specifications and has subsequently worked on creating 4G and 5G specifications. The 3GPP Organizational Partners agreed that members of a particular Organizational Partner would be bound by the IPR policy of that Organizational Partner when participating at 3GPP.
- 31. Standards are beneficial because they help allow devices made by one company to communicate with devices made by other companies—that is, these devices can speak the same

<sup>&</sup>lt;sup>9</sup> 3GPP Working Procedures, Article 55, https://www.3gpp.org/ftp/Information/Working\_Procedures/3GPP\_WP.htm#Foreword.

language. Standardization helps consumers have confidence that products bought from different manufacturers will interoperate with each other.

- 32. But standards can also lead to problems that harm competition and consumers when companies claim to hold patents essential to the standards, and use that as leverage to demand excessive royalties from product companies. Inclusion of a patent in a standard can confer substantial market power on the holder of that patent. Before adoption of the standard, alternative technologies compete to be included in the standard, and the SSO has the option of determining not to standardize a particular function. But once a standard is adopted and a particular manner of implementing the standard is chosen, using those alternatives often may no longer be feasible. Companies that use the standard—such as by supplying cellular devices that operate on networks using the standard—make substantial investments that are tied to using the standard. Because these companies face substantial switching costs in abandoning the standard and finding an alternative means of providing the same functionality or such switching may be completely infeasible, the industry may become "locked in" to a standard.
- 33. SSOs have adopted IPR policies to address the potential harms from lock-in of a standard, including the risk that SEP holders can hold up users of the standard by taking advantage of their dependence on the standard, and to ensure that standard setting is pro-competitive and not open to abuse.
- 34. ETSI has adopted an IPR Policy, incorporated as Annex 6 of the ETSI Rules of Procedure.<sup>10</sup> The ETSI IPR Policy is governed by the laws of France and provides in Clause 12 that "[a]ny right granted to, and any obligation imposed on, a MEMBER which derives from French law and which are not already contained in the national or supranational law applicable to

<sup>&</sup>lt;sup>10</sup> ETSI IPR Policy, https://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf.

that MEMBER is to be understood as being of solely a contractual nature." There is an expectation that ETSI members will abide by the ETSI IPR Policy.

- 35. ETSI's IPR Policy was designed to benefit all ETSI members, as well as all other parties that wish to use an ETSI standard. In particular, a stated objective of the Policy, described in Clause 3.1, is to "reduce the risk" to those using the standards or other technical specifications "that investment in the preparation, adoption and application of the STANDARDS could be wasted as a result of an ESSENTIAL IPR for a STANDARD or TECHNICAL SPECIFICATION being unavailable."
- 36. To that end, the ETSI IPR Policy provides that owners of IPRs are to be asked if they will voluntarily submit an irrevocable written undertaking or commitment that they are prepared to grant irrevocable licenses to anyone on "fair, reasonable, and non-discriminatory" or FRAND terms and conditions. Clause 6 of ETSI's IPR Policy governs the availability of licenses to essential IPR.<sup>11</sup> In relevant part, Clause 6.1 states:

When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory [FRAND] terms and conditions under such IPR to at least the following extent:

• MANUFACTURE, including the right to make or have made customized components and sub-systems to the licensee's own design for use in MANUFACTURE;

<sup>&</sup>lt;sup>11</sup> The SSOs based in the United States also have IPR policies that govern the availability of licenses to SEPs. Section 10 of ATIS's Operating Procedures for ATIS Forums and Committees sets out the IPR Policy, which, *inter alia*, adopts the American National Standards Institute Patent Policy. Operating Procedures for ATIS Forums and Committees (version 5.5), <a href="https://www.atis.org/wp-content/uploads/01\_legal/docs/OP.pdf">https://www.atis.org/wp-content/uploads/01\_legal/docs/OP.pdf</a>. Clause 3.1.1 of TIA's IPR Policy sets out similar obligations. TIA IPR Policy, <a href="https://www.tiaonline.org/wp-content/uploads/2018/05/TIA\_Intellectual\_Property\_Rights\_Policy.pdf">https://www.tiaonline.org/wp-content/uploads/2018/05/TIA\_Intellectual\_Property\_Rights\_Policy.pdf</a>.

- sell, lease, or otherwise dispose of EQUIPMENT so MANUFACTURED;
- repair, use, or operate EQUIPMENT; and
- use METHODS.

The above undertaking may be made subject to the condition that those who seek licenses agree to reciprocate.

- 37. Clause 15 of the ETSI IPR Policy defines IPR as "any intellectual property right conferred by statute law including applications therefor other than trademarks. For the avoidance of doubt rights relating to get-up, confidential information, trade secrets or the like are excluded from the definition of IPR."
  - 38. Further, Clause 15 the ETSI IPR Policy defines "Essential" as follows:
    - "ESSENTIAL" as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.
- 39. Obtaining voluntary FRAND commitments enables ETSI to include patented technology in its standards with confidence that owners of declared SEPs will not employ holdup tactics to exploit licensees' investments in the standard (e.g., by demanding unreasonable royalties) that would undermine the subsequent widespread adoption of the standards. If a FRAND commitment is not provided, the IPR Policy provides for ETSI to attempt to change the standard to avoid the patent or patent application in question.
- 40. Appendix A to the ETSI IPR Policy provides IPR Declaration forms through which ETSI members can declare IPRs as potentially essential and commit to licensing such IPRs on

FRAND terms and conditions. In particular, the IPR Declaration provides the option to "irrevocably declare[]" that the IPR owner is "prepared to grant irrevocable licenses":

the Declarant hereby irrevocably declares that (1) it and its AFFILIATES are prepared to grant irrevocable licenses under its/their IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy, in respect of the STANDARD(S), TECHNICAL SPECIFICATION(S), or the ETSI Project(s), as identified above, to the extent that the IPR(s) are or become, and remain ESSENTIAL to practice that/those STANDARD(S) or TECHNICAL SPECIFICATION(S) or, as applicable, any STANDARD or TECHNICAL SPECIFICATION resulting from proposals or Work Items within the current scope of the above identified ETSI Project(s), for the field of use of practice of such STANDARD or TECHNICAL SPECIFICATION; and (2) it will comply with Clause 6.1bis of the ETSI IPR Policy with respect to such ESSENTIAL IPR(s).

- 41. Under the ETSI FRAND regime, a party that has made a voluntary FRAND commitment has "irrevocably" committed its willingness to grant licenses to users of the standard. By contrast, a user of the standard owes no contractual obligation to ETSI or SEP holders; rather, that user has the option to take a license to SEPs on FRAND terms. SEP holders and users of the standard are thus in very different positions—while SEP holders can be compelled as a matter of contract law to honor their voluntary FRAND commitments, users have made no such commitments.
- 42. Patents are also national rights, and a court lacks the authority to adjudicate the merits of patents from other countries. But in a dispute over FRAND terms for a global portfolio, the parties can consent to a court's authority to resolve the controversy without having to address the merits of all patents.
- 43. Ericsson has previously consented to this Court's ability to set global FRAND terms in a breach of contract claim. In litigation against Samsung—where Ericsson alleged that Samsung breached its binding FRAND contractual commitments to ETSI as to its global SEP

portfolio—Ericsson consented to this Court's authority to adjudicate a FRAND dispute on a global basis. For example, Ericsson advocated that "the Court has clear authority to hear Ericsson's FRAND claims." Further, pointing to cases in which both sides either consented to or sought adjudications on a global basis (*e.g.*, *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872 (9th Cir. 2012)), Ericsson contended that "U.S. courts of appeals have affirmed district courts' subject-matter jurisdiction to adjudicate breach of FRAND claims on a global basis." As set forth herein, Apple consents to this Court determining FRAND terms for Ericsson's global declared SEP portfolio as part of Apple's breach of contract claim. Given that the parties have previously entered cross-licenses and Ericsson will need to renew its license to Apple's SEPs at the expiration of the 2015 License, Apple is also willing to have the Court adjudicate terms for Apple's SEPs as part of the overall resolution of the parties' FRAND licensing dispute, if Ericsson wishes to do so. 14

### B. Apple's Cellular SEP Licensing Program

44. Apple is committed to promoting fair, reasonable, and non-discriminatory licensing of SEPs. Apple values invention, respects intellectual property, and recognizes the pertinent role of developing voluntary industry standards. Apple believes that standardization is beneficial when it advances marketplace cooperation and interoperability, allowing consumers to have confidence that products reliably interact with other products. Apple's differentiating features drive demand for all Apple products, while standards allow interoperability with other products around the world.

<sup>&</sup>lt;sup>12</sup> Ericsson's Response in Opposition to Samsung's Motion to Dismiss Ericsson's FRAND-Related Claims at 1, *Ericsson Inc. v. Samsung Elecs. Co., Ltd.*, No. 2:20-cv-380-JRG (E.D. Tex. Mar. 17, 2021), ECF 81.

<sup>&</sup>lt;sup>13</sup> *Id.* at 7.

<sup>&</sup>lt;sup>14</sup> A patent licensor cannot force a prospective licensee to participate in a rate-setting process—the prospective licensee is under no contractual duty to take a license. (In contrast, a FRAND commitment imposes a contractual duty to *offer* FRAND terms to FRAND-committed patents.) Thus, Ericsson will need to consent to rate-setting on Apple's own SEPs. Apple stands ready to do so in this case, if Ericsson wishes.

- 45. The core principles guiding Apple's approach to FRAND licensing of SEPs were addressed by Apple a decade ago in a letter to ETSI. Since then, Apple's approach has retained these core principles with some modifications to reflect changes in the law and evolution of the cellular industry, along with Apple's continuing experience dealing with third parties attempting to abuse the FRAND licensing process.
- 46. As part of its commitment to transparency, Apple's FRAND principles are spelled out clearly on its website, <a href="https://www.apple.com/legal/intellectual-property/frand/">https://www.apple.com/legal/intellectual-property/frand/</a>. They include the following:
  - Both SEP licensors and licensees should negotiate transparently and willingly based on an exchange of relevant information.
  - Traditional patent law and burdens of proof should be applied to test the merits of SEPs and owners' royalty demands, just as they are for all patents.

#### • FRAND Royalty Base

- There should be a common FRAND royalty base that applies equally to all SEP licensors and SEP licensees.
- o The common royalty base for SEPs should be no more than the smallest salable unit where all or substantially all of the inventive aspects of the SEP are practiced.
- This base should be further apportioned to isolate the SEP value, separate and apart from prior art, non-patented features, other patented technologies, standardization itself, and contributions and innovations of others (i.e., materials, manufacturing, marketing, etc.).
- o For cellular standards, the smallest salable unit should be at most the baseband chip.

### • FRAND Royalty Rate

- o A FRAND royalty rate should be proportional among SEP licensors and comparable among SEP licensees.
- A SEP licensor's pro rata share of declared SEPs is an objective reference point in a FRAND negotiation.

- An objective reasonable royalty rate protects against SEP licensors being unjustly enriched through excessive royalties (i.e., royalty stacking) to the detriment of both SEP licensees and other SEP licensors and contributors, as well as consumers.
- An objective reasonable royalty rate applied to a common royalty base protects SEP licensees from cumulative, excessive royalties.
- ASP or use-based methodologies for determining FRAND royalties are a back-door for SEP licensors to discriminate between licensees, to charge different royalties for the same SEPs, and to capture value attributable to licensee innovations.

### C. Ericsson's SEP Licensing Program

- 47. Ericsson has a portfolio of SEPs it has declared essential to the cellular standards ETSI has promulgated and for which it has made voluntary, irrevocable commitments to ETSI to license on FRAND terms and conditions in return for the benefit of being able to license the large number of companies that use globally-adopted standards.
- 48. As Ericsson has long described its approach to licensing SEPs, the SEP holder's proportionate share of SEPs is an important consideration in determining FRAND royalties—i.e., the larger the share of the SEP stack, the higher the royalties; the lower the share of the SEP stack, the lower the royalties. For example, in a 2002 press release, Ericsson and other industry participants stressed setting rates "proportional" to each company's number of SEPs<sup>15</sup>:

Industry leaders NTT DoCoMo, Ericsson, Nokia and Siemens today reached a mutual understanding to introduce licensing arrangements whereby essential patents for W-CDMA are licensed at rates that are proportional to the number of essential patents owned by each company.

Nokia Press Release, Industry leaders NTT DoCoMo, Ericsson, Nokia and Siemens, and Japanese manufacturers reach a mutual understanding to support modest royalty rates for the W-DCMA technology worldwide, Nov. 6, 2002, available at <a href="https://www.sec.gov/Archives/edgar/data/924613/000110465902006769/j6199\_6k.htm">https://www.sec.gov/Archives/edgar/data/924613/000110465902006769/j6199\_6k.htm</a>.

Likewise, in a 2006 submission to ETSI made with other ETSI members, Ericsson took the position that "compensation under FRAND must reflect the patent owner's proportion of all essential patents." <sup>16</sup>

- 49. In 2007, Ericsson's then-Chief Financial Officer, Karl-Hendrik Sundstrom, described Ericsson's efforts to get "more essentials"—i.e., more SEPs—to benefit Ericsson in cross licensing.<sup>17</sup>
- 50. Also in 2007, Ericsson explained that "[i]n practice, FRAND means reasonable accumulated IPR costs where the contributors are compensated proportionally in relation to their patent portfolio within a standard." Similarly, in a 2012 submission to the International Telecommunications Union, Ericsson elaborated on the concept of proportionality for determining royalties and the need to justify a requested royalty in bilateral negotiations: "It is Ericsson's position that patent holders need to consider their contribution to a particular standard, in relation to other contributions, when setting their FRAND royalty, and that a FRAND offer needs to be substantiated by argument in bilateral negotiation, where the licensee is also allowed to challenge such substantiation." 19

<sup>&</sup>lt;sup>16</sup> Ericsson, Motorola, Nokia, *Proposal for IPR Policy Reform to ETSI*, Jan. 10-11, 2006.

<sup>&</sup>lt;sup>17</sup> LM Ericsson Q2 2007 Earnings Call Transcript at 18 (July 20, 2007) (alteration supplied).

<sup>&</sup>lt;sup>18</sup> Ericsson, Ericsson Intellectual Property – A driver for state-of-the-art telecommunications technology, Feb. 2007.

<sup>&</sup>lt;sup>19</sup> Jonas Sundborg, *Ericsson on FRAND and SEP Litigation* at 5, ITU Patent Roundtable, Oct. 10, 2012.

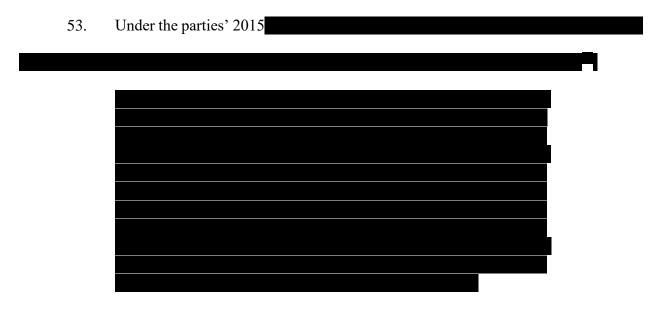
### D. Apple and Ericsson's 2015 License

51. On December 21, 2015, Ericsson announced that it entered a new license with Apple for Ericsson's cellular SEPs<sup>20</sup>:

Ericsson and Apple have agreed on a global patent license agreement between the two companies. The agreement includes a cross license that covers patents relating to both companies' standard-essential patents (including the GSM, UMTS and LTE cellular standards), and grants certain other patent rights. In addition, the agreement includes releases that resolve all pending patent-infringement litigation between the companies.

As part of the seven-year agreement, Apple will make an initial payment to Ericsson and, thereafter, will pay on-going royalties.

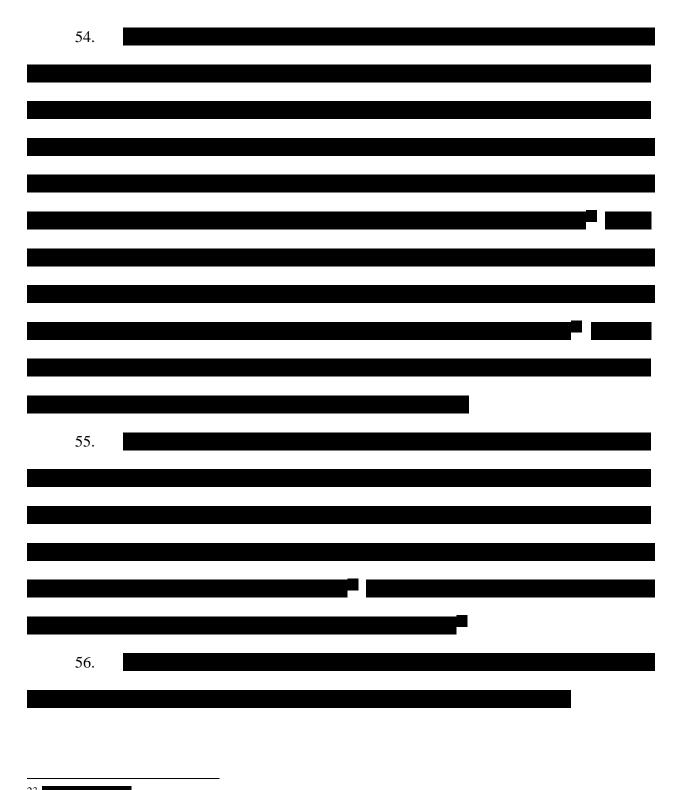
52. Ericsson further disclosed that "[i]ncluding positive effects from the settlement, and including the ongoing IPR business with all other licensees, Ericsson estimates full year 2015 IPR revenues will amount to SEK 13-14 b," which in 2015 translated to approximately \$1.5-1.6 billion.<sup>21</sup>

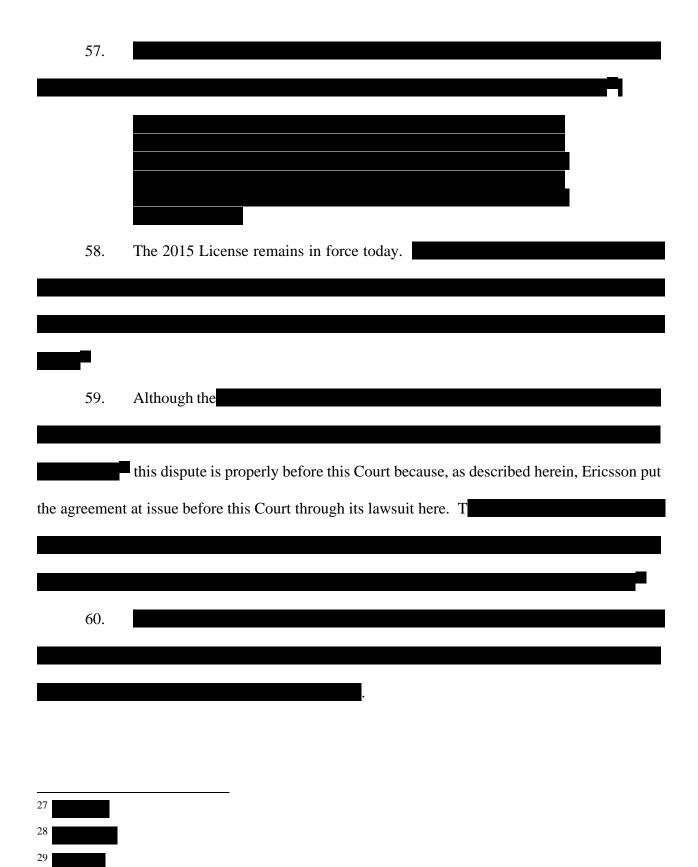


<sup>&</sup>lt;sup>20</sup> Ericsson Press Release, *Ericsson and Apple Sign Global Patent License Agreement, Settle Litigation* (Dec. 21, 2014).

<sup>&</sup>lt;sup>21</sup> *Id*.

<sup>22</sup> 





 $^{30}$  *Id*.

# E. Apple and Ericsson's Discussions of a New License and Ericsson's Premature Litigations

- 61. Over the course of the past decade, and especially in the years following the parties' 2015 license agreement, Apple's involvement in the development of standardized technologies and participation in various aspects of SSO policy discussion has deepened. Apple participates in approximately over 100 diverse SSOs, including ETSI, and Apple has contributed to the advancement of a wide range of standards, including those developed by 3GPP.
- 62. Apple has also invested resources toward cultivating its cellular SEP portfolio, both organically and through strategic acquisitions. For example, Apple has actively participated in the development of the 5G specifications at 3GPP. When Apple acquired Intel's smartphone modem business in 2019, it also acquired Intel's patents for then-existing and future wireless technology. Apple holds over 17,000 wireless technology patents, ranging from protocols for cellular standards, including 3GPP, to modem architecture and modem operation.
- 63. Since the parties' 2015 agreement, Ericsson's overall share of declared cellular SEPs has decreased by approximately 25% while Apple's share has increased by approximately 500%. Today, Apple holds a share of declared 5G patent families that is comparable to Ericsson's share. Given these facts, under any cross license between Ericsson and Apple, Apple's net payments to Ericsson should decrease as compared to under the 2015 license.
- 64. Starting in late 2020, Ericsson and Apple began high-level discussions regarding a schedule for negotiating renewal of their license agreement in advance of the expiration of its seven-year term. Throughout the parties' discussions, Apple has made it clear that it is willing to take a license to Ericsson's SEP portfolio on FRAND terms, and do so irrespective of Ericsson taking a license to Apple's SEP portfolio.

- 65. Ericsson and Apple agreed that the license negotiations would be conducted under a non-disclosure agreement. Ericsson refused to provide any patent-specific materials until the non-disclosure agreement was in effect. Ericsson insisted that the parties stick to the last non-disclosure agreement agreed upon by the parties for the 2015 license negotiations, and, for the sake of continuity and expediency, Apple agreed.
- 66. Less than two weeks after signing the non-disclosure agreement, on June 9, 2021, Apple proposed a detailed schedule for technical discussions, including the information to be exchanged between the parties. Apple advised that it would be prepared to start technical discussions earlier than the July 2, 2021 date that Ericsson requested so that the parties would have time for a full and robust technical discussion.
- 67. On June 18, 2021, Ericsson responded to Apple's proposed schedule by delaying the start of discussions even further, until the end of August, to accommodate Ericsson's European summer holidays.
- 68. On June 25, 2021, Apple stated its disappointment at the delayed start of the parties' technical discussions and exchange of claim charts until the end of August. Apple requested that Ericsson consider whether it was prepared to start earlier. Apple also requested that the parties exchange their respective list of SEPs in early July in order for each side to understand what the other believed it needed to license.
- 69. On July 2, 2021, Ericsson refused Apple's request to exchange lists of SEPs, instead offering to discuss providing a list of all SEPs after the parties' technical discussions of claim charts were completed.
- 70. Apple reiterated its request to exchange lists of SEPs on July 13, 2021. In response, Ericsson refused to provide a specific list of patents and instead referred Apple to all declarations

Ericsson has made to ETSI: "As for a list of Ericsson's declarations, that information is publicly available and can be located on the ETSI website (https://ipr.etsi.org/)."

- 71. On August 20, 2021, the parties exchanged the first of three rounds of technical information, with both sides providing SEP claim charts. The parties met on September 21, 2021 to discuss feedback on a subset of the first round of exchanged technical information, per the parties' agreement. On September 27, 2021, the parties exchanged the second round of technical information, with both sides providing SEP claim charts. The parties met on October 26, 2021 to discuss feedback on a subset of the second round of exchanged technical information, per the parties' agreement. On November 1, 2021, the parties exchanged the third and final round of technical information, with both sides providing SEP claim charts. The parties met on November 30, 2021 to discuss feedback on a subset of the third round of exchanged technical information, per the parties' agreement. During these discussions, Apple raised concerns about the essentiality of a subset of the technical information Ericsson provided.
- 72. One day before the first technical meeting, on September 20, 2021, Ericsson requested business discussions to be set up in parallel to the technical discussions, and offered to "provide an update on Ericsson's overall business, our licensing program and present our cross-license proposal."
- 73. On September 29, 2021, Apple requested that the business discussions—tentatively scheduled for October 5, 2021 pending Ericsson's confirmation of its availability—include an exchange of certain additional patent information to facilitate understanding the scope and value of the parties' respective cellular SEP portfolios. Apple did not condition business (or technical) discussions on Ericsson's willingness to provide the requested information. Specifically, Apple requested, for each patent family that Apple or Ericsson contends contains one or more active,

declared cellular SEPs, identifying (a) representative patent number; (b) the standard(s) to which the party claims it is essential; (c) exemplary standard section citations for the representative patent, if available; (d) related family members for the representative patent; (e) additional citations to standard sections for the related patents, if available; (f) whether such patent (or application it depends from) existed as of the parties' prior agreement in 2015. Apple also proposed that the parties identify all declared cellular SEPs that were active (i.e., either an actively pending application or an issued, unexpired patent) in 2015, but that have since expired or are no longer owned, because such information would assist the parties in using the 2015 agreement as a starting point for commercial terms, in that the patents added since 2015 can be better compared to those still remaining from 2015.

- 74. Unbeknownst to Apple, on September 29, 2021—the same day that Apple sent a letter to Ericsson outlining its goals for the parties' first business meeting—Ericsson secretly initiated litigation against Apple in the Netherlands, as described more fully below.
- 75. Ericsson responded to Apple's request the next day, on September 30, 2021, declining to exchange the specific items during the business discussions, as Ericsson "believe[d] that much of the information has been or will soon be exchanged in connection with our ongoing technical discussions." In that same correspondence, Ericsson confirmed the October 5, 2021 meeting. Ericsson again said nothing about the proceeding it had already initiated in the Netherlands.
- 76. On October 4, 2021, at 2:25 p.m. Pacific time, Ericsson emailed Apple that "[i]n advance of our business meeting tomorrow, we wanted to provide you with an advance copy of our licensing presentation. As you will see, Ericsson is willing to continue to offer Apple our publicly announced 5G multimode rate of \$5 per phone (with a \$1 early signing discount), a rate

which we will continue to honor assuming we execute a license relatively quickly." Ericsson's email did not mention that it had already sued Apple in the Netherlands. And Ericsson has subsequently contended that this email provided Apple with an "offer"—notwithstanding that it simply ignored the terms of the parties' prior agreement in favor of Ericsson's "sticker prices."

- 77. **Just six minutes later**—at 2:31 p.m. Pacific—Ericsson sued Apple again, this time by complaining to this Court that "[t]he negotiations made clear there is a dispute between Apple and Ericsson as to the essentiality, and value, of Ericsson's essential patent portfolio."<sup>31</sup>
- 78. Notwithstanding that the 2015 License remains in force Ericsson seeks declarations that "Ericsson has complied with its commitment to ETSI that it is prepared to grant licenses to its Essential Patents on fair, reasonable, and nondiscriminatory terms" and "that Ericsson has complied with the ETSI IPR Policy in all respects, and all other applicable laws that would affect Ericsson's prospective license to Apple."<sup>32</sup>
  - 79. Ericsson alleges that FRAND licensing is typically reciprocal<sup>33</sup>:

Ericsson's [sic] has conditioned its FRAND Commitment upon reciprocity, as expressly permitted by Clause 6.1 of the ETSI IPR Policy. Specifically, Ericsson has stated that its FRAND Commitment pertaining to its Essential Patents is subject to the "condition that those who seek licenses agree to reciprocate." As a manufacturer of cellular infrastructure equipment, Ericsson typically negotiates cross-license agreements that provide Ericsson a reciprocal license to the other company's technology.

Further, Ericsson also acknowledges that "Ericsson has also consummated two prior licenses with Apple pursuant to its FRAND Commitment. Ericsson's previous two licenses with Apple were

<sup>&</sup>lt;sup>31</sup> Original Complaint ¶ 54, *Ericsson Inc. v. Apple Inc.*, No. 2:21-cv-376 (E.D. Tex. Oct. 4, 2021).

<sup>&</sup>lt;sup>32</sup> *Id*. at 17.

 $<sup>^{33}</sup>$  *Id*. ¶ 41.

cross-licenses where Ericsson also received a license from Apple."<sup>34</sup> Further, Ericsson alleges that the parties' current negotiations are directed to a "new cross-license."<sup>35</sup>

- 80. Ericsson concedes that Apple owns a "cellular patent portfolio" to which Apple has added patents through acquisition, including patents Apple acquired from Intel in 2019.<sup>36</sup> But Ericsson alleges that "Apple owns a smaller patent portfolio compared to Ericsson and other major contributors to the 3GPP technical specifications" and so "[f]or the foreseeable future, Apple expects to be a net payor of royalties for cellular essential patents." Accordingly, Ericsson alleges that Apple has determined that notwithstanding owning SEPs, it "stands to benefit financially if it can devalue essential patent royalty rates." Ericsson thus accuses Apple of seeking to devalue all SEPs—including Apple's own.
- 81. Ericsson repeatedly alleges that Apple's public positions on SEP licensing violate FRAND, including:
  - "Apple's self-proclaimed and highly publicized FRAND licensing principles (many of which have been expressly rejected by courts and by the industry)";<sup>39</sup>
  - Apple "requiring royalties be calculated on the now-rejected SSPPU theory";<sup>40</sup>
  - "Nor has Apple retreated from its prior public assertions that the only way to comply with FRAND is to adhere to Apple's self-declared methodology for licensing essential patents, despite court decisions that flatly rejected Apple's approach to cellular essential patent licensing";<sup>41</sup>

<sup>&</sup>lt;sup>34</sup> *Id*. ¶ 43.

 $<sup>^{35}</sup>$  *Id*. ¶ 52.

 $<sup>^{36}</sup>$  *Id*.  $\P$  45.

<sup>&</sup>lt;sup>37</sup> *Id*.

<sup>&</sup>lt;sup>38</sup> *Id*.

 $<sup>^{39}</sup>$  *Id*. ¶ 9.

<sup>&</sup>lt;sup>40</sup> *Id*. ¶ 10.

<sup>&</sup>lt;sup>41</sup> *Id*. ¶ 16.

- "Another Apple devaluation tactic is to assert that the FRAND Commitment requires essential patent owners to base their royalties on an artificial and unduly restrictive royalty base that has been rejected by the industry and courts";<sup>42</sup> and
- "Apple's inflexible licensing position has been rejected by the industry, by ETSI, and by the courts." <sup>43</sup>
- 82. Ericsson thus accuses Apple of devaluing not just others' SEPs but Apple's own SEPs and violating Apple's FRAND commitments,
- 83. Further, Ericsson alleges that, notwithstanding Apple's current license to Ericsson's patents, "there is a dispute between Apple and Ericsson as to the essentiality, and value, of Ericsson's essential patent portfolio."<sup>44</sup>
- 84. In addition to its October 4, 2021 case in this Court, Ericsson also has pursued litigation in the Netherlands. There, on September 29, 2021, Ericsson approached a court in secret, without giving prior notice to Apple, to obtain a temporary order stopping Apple from preventing or interfering with Ericsson's pursuit of injunctions or infringement litigation throughout the world—in other words, Ericsson sought from the Dutch court an anti-anti-suit injunction to prevent Apple from obtaining anti-suit injunctions against Ericsson anywhere in the world.
- 85. On October 4, 2021, without Apple's knowledge of Ericsson's claims or giving Apple an opportunity to contest them, and thus without having heard from Apple at all, the Dutch court granted Ericsson's request and issued a temporary order prohibiting Apple from seeking an anti-suit injunction against Ericsson patent assertions in the Netherlands with the threat of a penalty of  $\in 10$  million for a violation, to be increase by  $\in 1$  million per day to a maximum fine of  $\in 100$

 $<sup>^{42}</sup>$  *Id*. ¶ 49.

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>&</sup>lt;sup>44</sup> *Id*. ¶ 54.

million—notwithstanding that Apple is currently licensed to Ericsson's patents. But in pursuing its requests, Ericsson misled the Dutch court. Ericsson argued that there was a risk that Apple would seek such an anti-suit injunction because Apple had previously done so against Qualcomm, writing that "[i]n its most recent global dispute with Qualcomm, Apple also in fact applied for an ASI."<sup>45</sup> This was a misrepresentation. In that case, it was Qualcomm, not Apple, that sought an anti-suit injunction. *See Apple Inc. v. Qualcomm Inc.*, No. 317CV00108GPCMDD, 2017 WL 3966944, at \*1 (S.D. Cal. Sept. 7, 2017) ("Before the Court is a motion for anti-suit injunction filed by Defendant and Counterclaim-Plaintiff Qualcomm Incorporated").

86. Ericsson also informed the Dutch court that, notwithstanding the parties' license, it would seek rulings against Apple that certain of its SEPs are essential to the 4G and/or 5G standard and are valid: "Ericsson intends to initiate *inter partes* actions shortly after the submission of the present writ of summons and also prior to the expiry of the aforementioned license with Apple. Ericsson will, amongst others, request the court in The Netherlands to already confirm that the patents relied on are indeed valid and essential to the 4G and/or 5G standards." Ericsson also attached to its filing two draft summonses for enforcement of European patents that are licensed under the 2015 License. When asked by the Dutch court at a November 18, 2021 hearing about its strategy for the two enforcement actions, Ericsson's counsel explained that Ericsson intends to later amend its prayer for relief to seek to enjoin Apple from infringing those patents. Ericsson's counsel elaborated that Ericsson's intent is that it get a head start in litigation and not lose time having to wait until the 2015 License expires before bringing suit against Apple.

 $<sup>^{45}</sup>$  Ericsson Writ of Summons Interim Relief Proceedings ¶ 94 (English translation served by Ericsson).

<sup>&</sup>lt;sup>46</sup> *Id*. ¶ 18.

- 87. After hearing Apple's arguments on October 8, the Dutch court lifted the temporary injunction in an October 18 order. The court concluded that, stripped of its reliance on the *Qualcomm* case, Ericsson had offered no proof that Apple presented sufficient threat that it would seek an anti-suit injunction against Ericsson.
- 88. In addition to its request for a temporary injunction, Ericsson also requested that the Dutch court, after hearing from Apple, enjoin Apple from pursuing anti-suit injunctions on a longer-term and on global basis. But on December 16, 2021, the Dutch court rejected Ericsson's request for such an injunction of global applicability against Apple.
- 89. On October 5, 2021, Apple wrote to Ericsson to inform it that Ericsson is "contractually barred from bringing" its lawsuits in this Court and in the Netherlands. Ericsson responded on October 5, 2021, stating that, despite suing first in the Netherlands and then in this Court, "we do not wish to derail our negotiation track."
- 90. On October 10, 2021, Apple again wrote to Ericsson, describing that "the day before the first business discussion was set to occur, Ericsson filed actions in various courts, clearly breaching Ericsson's contractual commitments and disrupting the negotiations." Ericsson has refused to withdraw its lawsuits.
- 91. Ericsson chose litigation over negotiation because it is interested in obtaining significantly more from Apple in royalties than under the parties' prior license—even considering the change in the parties' respective SEP holdings since then in a way that benefits Apple. Ericsson's assertions to Apple now about suing first and negotiating later differ sharply from Ericsson's position when HTC sued Ericsson in the midst of negotiations. Then, Ericsson was unequivocal that such tactics foreclosed meaningful negotiations:

- "[B]efore Ericsson could respond to HTC's offer, and while Ericsson believed the parties were still negotiating in good faith, HTC sued Ericsson . . . shutting the door on continued business negotiations." <sup>47</sup>
- "HTC unilaterally put an end to the parties' negotiations when it filed a lawsuit against Ericsson." 48
- "HTC's lawsuit demonstrates that HTC never intended to negotiate with Ericsson in good faith, had no plans to pay a FRAND royalty for Ericsson's essential patents, and would not offer a FRAND license (or any license at all) for its essential patents."
- 92. On October 27, 2021, notwithstanding Ericsson's conduct, Apple tried again to resolve the parties' dispute by proposing binding arbitration of FRAND terms. Although Ericsson has claimed it is willing to arbitrate, Ericsson refused to accept Apple's proposal without offering any valid justification why. As Apple explained to Ericsson in a December 14, 2021 letter, Ericsson's conduct demonstrates that it is not really interested in arbitration despite its claims to the contrary.
- 93. On November 19, 2021, Apple wrote to Ericsson to propose extending the parties' existing license with some modifications to account for changes since 2015. These included was generous to Ericsson in light of the fact that Ericsson's share of SEPs had declined since 2015, while during that same period Apple's share had grown significantly, and the fact Ericsson declined Apple's offer.

<sup>&</sup>lt;sup>47</sup> Defendants Telefonaktiebolaget LM Ericsson and Ericsson Inc.'s First Amended Answer and Counterclaims at 2, *HTC Corp. v. Telefonaktiebolaget LM Ericsson*, No. 6:18-cv-00243-JRG (E.D. Tex. June 4, 2018), ECF 89.

<sup>&</sup>lt;sup>48</sup> *Id*. at 26.

<sup>&</sup>lt;sup>49</sup> *Id.* at 27.

- 94. On November 22, 2021, Apple wrote to Ericsson about its breaches of the 2015 License and again asked whether Ericsson would dismiss its improper lawsuits against Apple. Apple also asked Ericsson whether it would insist on using its publicly announced rates as the basis for negotiation rather than the terms of the parties' existing agreement. Ericsson's response did not answer those questions, instead claiming that they had been previously addressed by Ericsson during the parties' negotiations.
- 95. On December 17, 2021, Apple informed Ericsson that Apple had filed this Complaint to request the Court's assistance in resolving the parties' dispute. Given its request in this Complaint that this Court set FRAND terms for a global license to Ericsson's declared SEPs, Apple proposed that the parties agree not to pursue any patent claims in the interim and, in particular, not to pursue any claims for injunctions that would be used as leverage to derail the setting of FRAND terms.
- 96. Apple's concern about Ericsson's holdup strategy is well founded. Ericsson has a history of seeking injunctions on both declared SEPs and non-essential patents ("NEPs") as a means to coerce licensees to accept non-FRAND royalties. Indeed, in 2015 when Ericsson sued Apple in the International Trade Commission in two different cases, one asserting SEPs and one NEPs, and sought to exclude Apple products from importation into the United States, Ericsson was candid about its strategy. In both cases, Ericsson explained that, where licensees "are unwilling [to] enter into a license agreement, Ericsson invests in patent enforcement litigation to

motivate those unwilling licensees to license the applicable Ericsson patent portfolios."<sup>50</sup> Ericsson elaborated that "[i]n those patent enforcement proceedings, Ericsson asserts representative patents from the applicable portfolios."<sup>51</sup>

#### F. Ericsson's 5G Patents

- 97. Ericsson purports to be the owner of U.S. Patent No. 10,374,768 ("'768 patent"). On August 6, 2019, the '768 patent, entitled "Efficient SRS Resource Indication Methods," issued to Robert Mark Harrison, Sebastian Faxér, Andreas Nilsson, and Sven Petersson. LME is listed as the assignee on the face of the '768 patent. A copy of the '768 patent is attached to this Complaint as Exhibit 1.
- 98. The '768 patent has been declared to ETSI by Ericsson to be essential to the 5G standard,<sup>52</sup> and it is one of the patents for which Ericsson seeks royalties from Apple under a global license.
- 99. The '768 patent is not essential to any Apple-practiced standard or infringed by Apple.
- 100. Ericsson purports to be the owner of U.S. Patent No. 10,644,724 ("'724 patent"). On May 5, 2020, the '724 patent, entitled "Shift Values For Quasi-cyclic LDPC Codes," issued to

<sup>&</sup>lt;sup>50</sup> Verified Complaint of Ericsson Inc. and Telefonaktiebolaget LM Ericsson Under Section 337 of the Tariff Act of 1930, as Amended ¶ 118, Certain Electronic Devices, Including Wireless Communication Devices, Tablet Computers, Digital Media Players, and Cameras, Inv. No. 337-TA-952 (Feb. 26, 2015); Verified Complaint of Ericsson Inc. and Telefonaktiebolaget LM Ericsson Under Section 337 of the Tariff Act of 1930, as Amended ¶ 160, Certain Wireless Standard Compliant Electronic Devices, Including Communication Devices and Tablet Computers, Inv. No. 337-TA-953 (Feb. 26, 2015).

<sup>&</sup>lt;sup>51</sup> *Id*.

<sup>&</sup>lt;sup>52</sup> ISLD-201711-028, available at https://ipr.etsi.org/DynamicReporting.aspx.

Sara Sandberg, Mattias Andersson, and Yufei Blankenship. LME is listed as the assignee on the face of the '724 patent. A copy of the '724 patent is attached to this Complaint as Exhibit 2.

101. The '724 patent has been declared to ETSI by Ericsson to be essential to the 5G

standard,<sup>53</sup> and it is one of the patents for which Ericsson seeks royalties from Apple under a global

license.

102. The '724 patent is not essential to any Apple-practiced standard or infringed by

Apple.

103. Ericsson purports to be the owner of U.S. Patent No. 11,039,312 ("'312 patent").

On June 15, 2021, the '312 patent, entitled "Handling of Multiple Authentication Procedures in

5G," issued to Vesa Lehtovirta, Noamen Ben Henda, David Castellanos Zamora, and Monica

Wifvesson. LME is listed as the assignee on the face of the '312 patent. A copy of the '312 patent

is attached to this Complaint as Exhibit 3.

104. The '312 patent has been declared to ETSI by Ericsson to be essential to the 5G

standard,<sup>54</sup> and it is one of the patents for which Ericsson seeks royalties from Apple under a global

license.

105. The '312 patent is not essential to any Apple-practiced standard or infringed by

Apple.

COUNT I
(Breach of the 2015 License Agreement)

106. Apple restates and incorporates by reference each of the allegations set forth above.

107. The

<sup>53</sup> ISLD-201711-020.

<sup>54</sup> ISLD-202005-001; ISLD-202010-028.

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- 108. On October 4, 2021, Ericsson filed a complaint in this Court that acknowledges that Apple has SEPs that are subject to FRAND commitments and accuses Apple of conduct that breaches FRAND.
- 110. As a result of Ericsson's breaches of the 2015 License, Apple has been injured, including sustaining injury to its business and property, including Apple's costs and expenses relating to negotiations with Ericsson and defending against Ericsson's complaints in this Court and in the Netherlands and in pursuing this action, in an amount to be determined at trial.

# COUNT II (Breach of Ericsson's FRAND Contractual Commitments)

111. Apple restates and incorporates by reference each of the allegations set forth above.

- 112. As set forth above, by committing to license its declared SEPs to users of ETSI's cellular standards on FRAND terms, Ericsson entered into contractual commitments with ETSI and its members, including Apple.
- 113. Every party producing products that support ETSI cellular standards, including Apple, is an intended third-party beneficiary of Ericsson's contractual commitments to ETSI—specifically Ericsson's commitment to grant licenses on FRAND terms to all that make, use, or sell products supporting the ETSI cellular standards.
- 114. Ericsson is obligated to offer a license to its essential patents to Apple consistent with the ETSI IPR Policy, including that such a license be on FRAND terms.
- 115. Apple was entitled to rely on Ericsson's FRAND commitments, both as an ETSI member and as a third-party beneficiary.
- 116. Ericsson breached its FRAND commitments in its conduct with Apple in multiple ways. By initiating litigation in the Netherlands on September 29, 2021 and in this Court on October 4, 2021—even before the parties began their commercial discussions and when the parties' current agreement remains in force—Ericsson breached its commitments to be prepared to license its cellular SEPs on FRAND terms and conditions. As Ericsson acknowledged in its litigation with HTC, a party that prematurely resorts to litigation in this manner is not genuinely interested in reaching a license on FRAND terms and conditions but in improperly using the leverage of litigation to its advantage.
- 117. In addition, to the extent that Ericsson's October 4, 2021 communication of its public rates can be considered an offer—as Ericsson claims—it is not FRAND,

118. As a result of these multiple contractual breaches, Apple has been injured, including in its business and/or property. Ericsson's refusal to offer a license to Apple on FRAND terms has deprived Apple of its right to obtain a license to Ericsson's SEPs and exposed Apple to the risk of future patent infringement claims by Ericsson. In addition, Ericsson's refusal to offer a license on FRAND terms and conditions has consumed the time of Apple employees who have negotiated with Ericsson. Apple also has been forced to defend groundless litigations and has incurred substantial expense in doing so.

### **COUNT III** (Breach of Duty of Good Faith)

- 119. Apple restates and incorporates by reference each of the allegations set forth above.
- 120. As set forth above, by committing to license its declared SEPs to users of ETSI's cellular standards on FRAND terms, Ericsson entered into contractual commitments with ETSI and its members, including Apple.
- 121. Every party producing products that support ETSI cellular standards, including Apple, is an intended third-party beneficiary of Ericsson's contractual commitments to ETSI—specifically Ericsson's commitment to grant licenses on FRAND terms to all that make, use, or sell products supporting the ETSI cellular standards.
- 122. Ericsson's FRAND commitments to ETSI are governed by French law. Under French law, a party to a contract has an obligation to perform its contractual obligations in good faith. The duty of good faith requires Ericsson to negotiate with Apple for a license to Ericsson's SEPs in good faith.
- 123. Ericsson has breached its obligation of good faith. As set forth above, even before the parties engaged in commercial discussions about a renewed license, Ericsson sued Apple in this Court and in the Netherlands. Moreover, Ericsson sued Apple during the term of the parties'

current license and months before expiration. In addition, to the extent that Ericsson's October 4, 2021 communication of its public rate can be considered an offer—as Ericsson claims—it was not made in good faith, including

124. As a result of Ericsson's breaches of its obligation of good faith, Apple has been injured, including in its business or property. Ericsson has wasted the time of Apple employees who have negotiated with Ericsson. Apple also has been forced to defend groundless litigations and has incurred substantial expense in doing so.

# **COUNT IV**(Declaration of FRAND Royalties for Ericsson's Global Cellular SEP Portfolio)

- 125. Apple restates and incorporates by reference each of the allegations set forth above.
- 126. As set forth above, by committing to license its declared SEPs to users of ETSI's cellular standards on FRAND terms, Ericsson entered into contractual commitments with ETSI and its members, including Apple.
- 127. Every party producing products that support ETSI cellular standards, including Apple, is an intended third-party beneficiary of Ericsson's voluntary contractual commitments to ETSI—specifically Ericsson's commitment to grant licenses on FRAND terms to all that make, use, or sell products supporting the ETSI cellular standards.
- 128. As set forth above, Ericsson has chosen to engage in litigation rather than good faith negotiation to reach agreement on FRAND terms and conditions for Apple to license its cellular SEPs.
  - 129. In addition, Ericsson's public licensing rates are not FRAND, including

- 130. Ericsson has thus failed to provide Apple with FRAND terms and conditions for a license to its cellular SEPs.
- 131. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment and Ericsson has consented to this Court setting such terms.
- 132. Apple is entitled to a judicial declaration that sets FRAND terms and conditions for a global license to Ericsson's cellular SEPs, including by reference to the terms previously agreed upon by the parties in their 2015 license.

# COUNT V (Declaratory Judgment of Non-Essentiality and Non-Infringement of U.S. Patent No. 10,374,768)

- 133. Apple restates and incorporates by reference each of the allegations set forth above.
- 134. Representative claim 1 of the '768 patent reads as follows (claim element enumeration added for convenience):

[pre]	1. A method in a wireless device, operable in a cellular wireless communication network, of identifying reference signal resources to be used in a transmission by the wireless device, the method comprising:
[a]	receiving signaling configuring the wireless device with a plurality of reference signal resource groups, each group comprising a plurality of reference signal resources;
[b]	receiving an indication, in a control channel, of a selection of reference signal resources to be used, wherein each of the plurality of reference signal resources to be used is selected from a different one of the plurality of reference signal resource groups such that reference signal resources belonging to the same reference signal resource group are not selected for simultaneous use; and
[c]	transmitting a reference signal to a network node in the network using the indicated selection of reference signal resources,
[d]	wherein the indication of the plurality of reference signal resources to be used includes a bit field, the length of the bit field depending on a maximum number of MIMO layers that the wireless device is capable of transmitting and a number of reference signal resources in a corresponding one of the reference signal resource groups.

- 135. The '768 patent is not essential to the 5G standard, including, but not limited to, the standard described in 3GPP Technical Specification ("TS") 38.211 v15.7.0, TS 38.212 v15.7.0, TS 38.214 v15.7.0, TS 38.211 v15.7.0, and/or TS 38.331 v15.7.0, at least because, by way of non-limiting example, the 5G standard does not require the following claim limitations: 1.[b] and 1.[d].
- 136. No claim of the '768 patent has been or is infringed, either directly, contributorily, or by inducement, literally or under the doctrine of equivalents, by Apple or the purchasers of Apple's products through the manufacture, use, importation, sale, and/or offer for sale of Apple's products, at least because, by way of non-limiting example, Apple's products do not satisfy the following claim limitations: 1.[b] and 1.[d].
- 137. As a result of the acts described in the foregoing paragraphs, there exists a definite and concrete, real and substantial, justiciable controversy between Apple and Ericsson regarding the non-essentiality and non-infringement of the '768 patent with respect to Ericsson's 5G licensing demand. This controversy is of sufficient immediacy and reality to warrant the issuance of a Declaratory Judgment.
- 138. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that Apple does not infringe and has not infringed any claim of the '768 patent.

### **COUNT VI**

# (Declaratory Judgment of Non-Essentiality and Non-Infringement of U.S. Patent No. 10,644,724)

- 139. Apple restates and incorporates by reference each of the allegations set forth above.
- 140. Representative claim 7 of the '724 patent reads as follows (claim element enumeration added for convenience):

[pre]	7. A method for use in a wireless transmitter of a fifth generation, 5G, new radio, NR wireless communication network, the method comprising:
[a]	encoding information bits for transmission in a 5G NR wireless network using a low-density parity check (LDPC) code and a parity check matrix (PCM), the PCM being partitioned into square sub-matrices of size Z×Z and being described by a base matrix and a shift vector, the shift vector using a shift size Z=7*2 <sup>j</sup> , where j is one of 0, 1, 2, 3, 4 and 5; and
[b]	transmitting the encoded information bits to a 5G NR wireless receiver,
[c]	wherein the base matrix has one entry for each Z×Z sub-matrix, the entry being 0 corresponding to the sub-matrix being a null matrix, and the entry being 1 corresponding to the sub-matrix being a cyclic-permutation matrix obtained from a Z×Z identity matrix by shifting columns to the right by k elements,
[d]	wherein non-zero entries in the base matrix are described by triples (e, r, c) denoting that the non-zero entry with number e is in row r and column c of the base matrix, the triples being given by:{LONG LIST OF TRIPLETS}
[e]	wherein for the non-zero entry with number e the number k is defined by a shift coefficient given by mod(Ve, Z), with Ve denoting the e-th element of the shift vector and the shift vector is: {LONG ARRAY OF NUMBERS}.

- 141. The '724 patent is not essential to the 5G standard, including, but not limited to, the standard described in 3GPP TS 3GPP TS 38.212 v15.7.0, at least because, by way of non-limiting example, the 5G standard does not require the following claim limitation: 7.[c].
- 142. No claim of the '724 patent has been or is infringed, either directly, contributorily, or by inducement, literally or under the doctrine of equivalents, by Apple or the purchasers of Apple's products through the manufacture, use, importation, sale, and/or offer for sale of Apple's products, at least because, by way of non-limiting example, Apple's products do not satisfy the following claim limitation: 7.[c].
- 143. As a result of the acts described in the foregoing paragraphs, there exists a definite and concrete, real and substantial, justiciable controversy between Apple and Ericsson regarding the non-essentiality and non-infringement of the '724 patent with respect to Ericsson's 5G

licensing demand. This controversy is of sufficient immediacy and reality to warrant the issuance of a Declaratory Judgment.

144. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that Apple does not infringe and has not infringed any claim of the '724 patent.

# COUNT VII (Declaratory Judgment of Non-Essentiality and Non-Infringement of U.S. Patent No. 11,039,312)

- 145. Apple restates and incorporates by reference each of the allegations set forth above.
- 146. Representative claim 15 of the '312 patent reads as follows (claim element enumeration added for convenience):

[pre]	15. A method in an electronic device configured to communicate through a wireless air interface with a home public land mobile network, PLMN, and visiting PLMNs, the method comprising:
[a]	transmitting a first authentication request to a first PLMN to authenticate the electronic device;
[b]	generating a first security key used for integrity protection of messages delivered from the home PLMN to the electronic device upon successful authentication based on the first authentication request;
[c]	transmitting a second authentication request to a second PLMN to authenticate the electronic device;
[d]	generating a second security key used for integrity protection of the messages delivered from the home PLMN to the electronic device upon successful authentication based on the second authentication request;
[e]	receiving a protected message from the home PLMN;
[f]	determining which of the first security key and the second security key is a latest security key; and
[g]	using the latest security key to determine contents of a message received from the home PLMN.

- 147. The '312 patent is not essential to the 5G standard, including, but not limited to, the standard described in 3GPP TS 33.501 v16.7.1, at least because, by way of non-limiting example, the 5G standard does not require the following claim limitation: 15.[e].
- 148. No claim of the '312 patent has been or is infringed, either directly, contributorily, or by inducement, literally or under the doctrine of equivalents, by Apple or the purchasers of Apple's products through the manufacture, use, importation, sale, and/or offer for sale of Apple's products, at least because, by way of non-limiting example, Apple's products do not satisfy the following claim limitation: 15.[e].
- 149. As a result of the acts described in the foregoing paragraphs, there exists a definite and concrete, real and substantial, justiciable controversy between Apple and Ericsson regarding the non-essentiality and non-infringement of the '312 patent with respect to Ericsson's 5G licensing demand. This controversy is of sufficient immediacy and reality to warrant the issuance of a Declaratory Judgment.
- 150. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that Apple does not infringe and has not infringed any claim of the '312 patent.

#### PRAYER FOR RELIEF

- 151. Apple requests that the Court grant the following relief:
  - a. Enter judgment in favor of Apple;
  - b. On Apple's Count I, adjudge and decree that Ericsson is liable for breach of the parties' 2015 license agreement;
  - c. On Apple's Count II, adjudge and decree that Ericsson is liable for breach of its FRAND commitments;

d. On Apple's Count III, adjudge and decree that Ericsson is liable for breach

of its duty of good faith in negotiations with Apple for its FRAND-

committed patents;

e. On Apple's Count IV, declare FRAND terms and conditions for a license

for Apple to Ericsson's global portfolio of cellular SEPs, including by

reference to the terms previously agreed upon by the parties in their 2015

license;

f. On Apple's Counts V to VII, declare that U.S. Patent Nos. 10,374,768,

10,644,724, and 11,039,312 are not essential to the 5G standard, and Apple

does not infringe them;

g. Enter judgment against Ericsson for the amount of damages Apple proves

at trial;

h. Award to Apple its costs and expenses associated with this case, together

with interest; and

i. Grant such other and further relief as the Court may deem just and proper

under the circumstances.

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Respectfully submitted,

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