IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

HUAWEI TECHNOLOGIES CO. LTD., **Plaintiff,** **v.** **T-MOBILE US, INC. and T-MOBILE USA, INC.,** **Defendants.**	**Civil Action No. _____** **JURY TRIAL DEMANDED**

ORIGINAL COMPLAINT FOR DECLARATORY JUDGMENT

OF COMPLIANCE WITH STANDARD ESSENTIAL PATENT FRAND OBLIGATIONS

1. Plaintiff Huawei Technologies Co. Ltd. ("Huawei") files this Original Complaint for Declaratory Judgment that Huawei has complied with its FRAND obligations to license certain patents to T-Mobile US, Inc. and T-Mobile USA, Inc. (collectively "T-Mobile" or "Defendant") and alleges as follows:

NATURE OF ACTION

2. This is a patent case regarding Huawei's obligation to offer a license to certain U.S. patents essential for network systems and services to implement, practice, or comply with 4G[1] standards promulgated by standards setting organization ETSI ("Huawei's 4G Wireless Network Essential Patents").

3. Huawei is prepared to grant a license to Huawei's 4G Wireless Network Essential Patents on terms and conditions that are fair, reasonable, and non-discriminatory ("FRAND").

[1] 4G includes ETSI/3GPP standards Release 8 and subsequent releases, covering LTE and related upper layer technologies such as SAE/EPC, IMS and PCC. Example 4G networks include E-UTRAN-based systems.

Huawei brings this action because T-Mobile has refused Huawei's FRAND offer, but continues to practice, use, or otherwise comply with 4G standards covered by Huawei's 4G Wireless Network Essential Patents by operation of its cellular telecommunications network.

4. Specifically, T-Mobile is an unwilling patent licensee in the face of Huawei's good faith offers to license Huawei's 4G Wireless Network Essential Patents under FRAND terms. Indeed, because T-Mobile continues to willfully practice Huawei's 4G Wireless Network Essential Patents without a license, Huawei was forced to bring four patent infringement actions involving 14 exemplary patents selected from Huawei's 4G Wireless Network Essential Patents against T-Mobile in this Court.[2]

5. Huawei now brings this Declaratory Judgment action to establish that Huawei has complied with its FRAND commitment regarding Huawei's 4G Wireless Network Essential Patents and that T-Mobile is an unwilling licensee of Huawei's 4G Wireless Network Essential Patents. Therefore, Huawei asks this Court for a declaration that Huawei has complied with its FRAND commitment to offer licenses to Huawei's 4G Wireless Network Essential Patents.

THE PARTIES

6. Huawei Technologies Co. Ltd. is a Chinese corporation with its principal place of business at Bantian, Longgang District, Shenzhen, People's Republic of China.

7. Defendant T-Mobile US, Inc. is a Delaware corporation with its principal place of business at 12920 SE 38th Street, Bellevue, Washington 98006. On information and belief, T-Mobile US, Inc. may be served through its registered agent for service, Corporation Service Company, 2711 Centerville Rd. Suite 400, Wilmington, Delaware 19808.

[2] *See* 2:16-cv-52, 2:16-cv-55, 2:16-cv-56, and 2:16-cv-57.

8. Defendant T-Mobile USA, Inc. is a Delaware corporation with its principal place of business at 12920 SE 38th Street, Bellevue, Washington 98006, and is a wholly-owned subsidiary of T-Mobile US, Inc. On information and belief, T-Mobile USA, Inc. may be served through its registered agent for service, Corporation Service Company, 211 E. 7th St. Suite 620, Austin, Texas 78701-3218. On information and belief, Defendant T-Mobile USA, Inc. has research and development facilities at 7668 Warren Pkwy, Frisco Bridges Tech Campus, Frisco, Texas 75034.

HUAWEI

9. By way of background, Huawei was founded in 1987 and in just 28 years has become a global leader of information and communication technology ("ICT"). Huawei's telecom network equipment, IT products and solutions, and smart devices, such as telepresence products, transport and core network equipment, fixed and radio access products, and fiber infrastructure products, are deployed and used in 170 countries and regions and serve over one-third of the world's population. Indeed, together with telecom carriers, Huawei has built over 1,500 networks. *See* Huawei's 2015 Annual Report at 2 (available at http://www.huawei.com/en/about-huawei/annual-report).

10. In fiscal year 2015, Huawei is a world technology leader with over $60 billion in sales, ranking in the top 45 percent of Global Fortune 500 in 2015. *See* Huawei's 2015 Annual Report at 9; http://fortune.com/global500/. In April 2016, Huawei announced "its Carrier Services achieved strong year-on-year growth, generating US $12.06 billion in annual revenue worldwide." http://www.huawei.com/en/news/2016/4/Revenue-Hits-$12B.

11. Huawei has heavily invested in R&D routinely spending over 10% of its annual revenue on innovation. In 2015 alone, Huawei invested $9.18 billion (15.1% of its total 2015

revenue) in research and development. *See* Huawei's 2015 Annual Report at 42. About 45% of Huawei's global workforce – over 79,000 employees in 2015 – work in R&D. And, in the past decade, Huawei has invested over $36 billion in research and development. Huawei's R&D efforts are focused on addressing current customer needs, as well as long-term technology research and standardization. In pursuit of these goals, Huawei has thousands of scientists and top engineers in the United States, Europe, and Japan, and 16 research and development centers and 36 joint development centers throughout the world, including the United States. *See* Huawei's 2015 Annual Report. Huawei's research and development investment in the U.S. exceeded $1.2 billion as of 2015.

12. Huawei's dedication to R&D in the telecommunications industry over the past three decades has been a major contributor to telecommunication advances from the Wire Link Age, into the Wireless Age, and developing from 2G to 3G to 4G, with current progress toward 5G. *See*, *e.g.*, http://www.huawei.com/minisite/5g/en/.

13. As a result of Huawei's substantial R&D investment:

- In 2010, Huawei was ranked the fifth most innovative company in the entire world by Fast Company.
- In 2011 at the LTE North America Awards, Huawei won awards for "Best Contribution to R&D for LTE" and "Best Contribution to LTE Standards."
- In 2012 at the IMS World Forum, Huawei also won the "Most innovative service launch enabled by IMS" with its "Convergent Conference" solution, in 2013 the "Best Integrated IMS Solution" award, and in 2014 the "Best VoLTE Product" for its end-to-end (E2E) voice and video over LTE (V2oLTE) solution and "Most Innovative Virtualized IMS Solution" for its Cloud IMS solution.

- In 2014 at the LTE World Summit, Huawei won numerous awards, such as the "Best LTE traffic management product" and "Innovation in HetNet development" awards, and in 2015 the "Best NFV Innovation of the Year" and "Biggest Contribution to 5G Development" awards.[3] Notably, Huawei was the only company that won two awards in both years.
- In 2015, Huawei was named one of the World's 50 Most Innovative Firms by Boston Consulting Group (BCG).

14. During the past 20 years, Huawei has driven the mobile industry forward through collaborations on commercialization, innovation, and standardization. According to Current Analysis, a leading independent analysis group to the network industry (*see* http://www.currentanalysis.com/about/), Huawei is the clear overall leader due to the strength of its 3GPP wireless communication portfolio, offering a broad variety of network solution options including high- and low-capacity offerings and a range of power output levels and architectures.

15. Huawei actively contributes to core network-related standards through its participation in worldwide Standard Setting Organizations ("SSOs"), such as ETSI/3GPP, IETF, ITU-T, GSMA, CCSA, IMTC, SIP Forum, MSF, NGMN, OMA, 3GPP2, and oneM2M. *See, e.g.*, http://webapp.etsi.org/3gppmembership/Results.asp?Member=ATIS&Member=ETSI. By the end of 2015, Huawei was engaged in over 300 SSOs, industry alliances, and open source communities. In 2015 alone, Huawei submitted more than 5,400 proposals, bringing its total number of submissions to more than 43,000. *See* Huawei's 2015 Annual Report at 42. In addition, Huawei has obtained 76 leadership positions, such as chairs, rapporteurs, and editors, in these core network technology related SSOs. At 3GPP, Huawei's contribution to wireless

[3] *See*, *e.g.*, http://pr.huawei.com/en/news/hw-443059--biggestcontributionto5gdevelopment-.htm#.VyokNISDFBc.

standards has been particularly strong. Indeed, since 2013, Huawei had more of its contributions to 3GPP's 4G standard-setting effort approved than any other company in the world.

16. As a result of its investments in innovation and contributions to the industry, Huawei and its affiliates have developed a substantial patent portfolio of over 50,300 issued patents worldwide. For the past two years, Huawei and its affiliates have filed the most international (PCT) patent applications of any company in the world. In 2015, Huawei and its affiliates obtained 1,268 patents issued by the U.S. Patent & Trademark Office, the 23rd most of any company. The same year, Huawei obtained 503 issued patents from the European Patent Office, the 9th most of any company. In total, Huawei and its affiliates hold over 12,000 issued patents and pending applications in the United States. Huawei's large patent portfolio includes Huawei's 4G Wireless Network Essential Patents.

HUAWEI'S 4G WIRELESS NETWORK ESSENTIAL PATENTS

17. Huawei's 4G Wireless Network Essential Patents are patents declared essential to ETSI, which is a leading SSO "dealing with telecommunications, broadcasting and other electronic communications networks and services." http://www.etsi.org/about/what-we-are. According to ETSI, "[w]e are an independent, not-for-profit organization, widely respected for our neutrality and trustworthiness," and we "exist for all those who need to be involved in the standardization of telecommunications and pride ourselves on being open." *Id*.

18. ETSI has "over 800 members drawn from 64 countries across five continents." http://www.etsi.org/about/who-we-are. These many hundreds of members include "all the relevant players," including manufacturers, network operators, service and content providers, and others. *Id*.

19. To facilitate the globalization of technologies and standards, ETSI helped found and is an organizational partner of 3GPP. *See* http://www.etsi.org/about/what-we-do/global-collaboration and http://www.3gpp.org/about-3gpp/partners. 3GPP, or the Third Generation Partnership Project, "develops specifications for advanced mobile communications." http://www.etsi.org/about/what-we-do/global-collaboration. Specifically, 3GPP "covers:

- radio access
- the core transport network
- service capabilities
- codecs
- security
- quality of service

The specifications also provide hooks for non-radio access to the core network, and for interworking with Wi-Fi networks." http://www.etsi.org/about/what-we-do/global-collaboration/3gpp; *see also* http://www.3gpp.org/.

20. Standards generally, and ETSI standards specifically, "rely on technical contributions from various sources. These contributions may contain patented technologies and other protected rights which are commonly known as Intellectual Property Rights."[4] http://www.etsi.org/about/how-we-work/intellectual-property-rights-iprs. Indeed, ETSI asserts: "Intellectual property plays an important role in standardization, especially in the

[4] IPRs are defined by ETSI as: "The legal rights granted with the aim to protect the creations of the intellect. These rights include Industrial Property Rights (e.g. patents, industrial designs and trademarks) and Copyright (right of the author or creator) and Related Rights (rights of the performers, producers and broadcasting organisations)." http://www.etsi.org/about/how-we-work/intellectual-property-rights-iprs.

telecommunications and electronic communications sector." http://www.etsi.org/images/files/IPR/etsi-guide-on-ipr.pdf.

21. In 1994, an ETSI IPR Policy was "adopted by the 21st General Assembly on 23 November 1994 and incorporated in the ETSI Directives as Annex 6 to the ETSI Rules of Procedure." http://www.etsi.org/images/files/IPR/etsi-guide-on-ipr.pdf. According to ETSI, the ETSI IPR Policy "is highly regarded around the world. We work constantly to improve it, consulting widely with our members, the EPO, the EC, the United States Government and relevant partner organisations, to meet the needs of our members, public authorities and the ICT industry in general." http://www.etsi.org/images/files/AnnualReports/etsi-annual-report-april-2016.pdf.

22. The current ETSI IPR Policy, available at http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf,[5] "seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs." *Id*. at ¶ 3.1. The ETSI IPR Policy specifically notes that owners of intellectual property rights, such as Huawei, "should be adequately and fairly rewarded for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS." *Id*. at ¶ 3.2.

23. Under the ETSI IPR Policy, "[w]hen an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI," the IPR owner should declare that it is "prepared to grant irrevocable licences on fair, reasonable and

[5] Online version of ETSI Rules of Procedure, 18 November 2015, at Annex 6: ETSI Intellectual Property Rights Policy.

non-discriminatory ("FRAND") terms and conditions under such IPR."[6,7] http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf at ¶ 6.1.

24. The ETSI IPR Policy is governed by French law. *See* http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf at ¶ 12.

25. As required by ETSI's IPR Policy and Huawei's agreement thereto, Huawei is prepared to grant FRAND licenses to Huawei's 4G Wireless Network Essential Patents, including those related to the foregoing example standards. *See* https://ipr.etsi.org/. Ex. A identifies patents and applications, as well as the associated declarations and standards that Huawei has made to ETSI, that Huawei expects would be included in a FRAND license to Huawei's 4G Wireless Network Essential Patents.

26. As examples only, Huawei has numerous patents essential to comply with 3GPP / ETSI Standards such as 23.060, 23.203, 23.380, 23.401, 23.402, 23.237, 29.274, and 33.401. These example standards relate to General Packet Radio Service (GPRS); Service description; Stage 2, Policy and charging control architecture, IMS Restoration Procedures, General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access, Architecture enhancements for non-3GPP accesses, IP Multimedia Subsystem (IMS) Service Continuity; Stage 2, 3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunneling Protocol for Control plane (GTPv2-C); Stage 3, and 3GPP System Architecture Evolution (SAE); Security architecture, respectively. Ex. A

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[6] ETSI defines "Essential" where "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." http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf at ¶ 15 (6).

[7] ETSI notes "An undertaking pursuant to Clause 6.1 with regard to a specified member of a PATENT FAMILY shall apply to all existing and future ESSENTIAL IPRs of that PATENT FAMILY." *Id*. at ¶ 6.2.

lists additional standards relevant to 4G networks and 4G services for which Huawei has declared essential U.S. patents.

27. In view of the foregoing, Huawei has a strong and prominent portfolio of patents essential to these 4G standards that T-Mobile practices through its network infrastructure. By way of comparison, while ETSI lists a number of declarations from Huawei, ETSI does not list any declarations from T-Mobile or its predecessors. *See* ipr.etsi.org. And, while WIPO ranked Huawei as No. 1 for international patent applications across all industries for the second year in a row, WIPO does not list T-Mobile – or its controlling shareholder – at all. *See* http://www.wipo.int/pressroom/en/articles/2016/article_0002.html. In terms of recent patent grants, while the U.S. Patent and Trademark Office lists Huawei among its top 50 patentees for 2015 (with a total of 799 U.S. patents granted in 2015), the U.S. Patent and Trademark Office lists T-Mobile many hundreds of spots later for 2015 (with a total of 50 U.S. patents granted in 2015). *See* http://www.uspto.gov/web/offices/ac/ido/oeip/taf/topo_15.pdf.

T-MOBILE

28. T-Mobile, through its 4G standard-related networks and 4G standard-related network services, has used and is using Huawei's 4G Wireless Network Essential Patents without a license.

29. T-Mobile operates 4G wireless networks across the country. Additionally, T-Mobile and/or its authorized retailers operate T-Mobile stores throughout the United States, including operating T-Mobile stores in this District, such as in Longview, Texas. *See* http://www.t-mobile.com/store/cell-phone-longview-tx-3333.html.

30. T-Mobile's 4G wireless networks include those branded as MetroPCS. Specifically, T-Mobile's 2015 Annual Report notes that "T-Mobile US, Inc. was formed in 2013

through the business combination between T-Mobile USA and MetroPCS Communications, Inc. ('MetroPCS')." T-Mobile 2015 Annual Report, pg. 4 (available at http://investor.t-mobile.com/Cache/1500084635.PDF?O=PDF&T=&Y=&D=&FID=1500084635).

31. T-Mobile has grown and continues to grow its 4G wireless networks despite not having a license to Huawei's patents that enable the networks. For example, T-Mobile admits that:

> We have substantially completed the process of upgrading our network to LTE, which provides our customers with the fastest nationwide LTE services. Our LTE network now covers 305 million people, compared to 265 million people as of December 31, 2014. In addition, we are currently in the process of building out our network to utilize our low-band 700 MHz A-Block spectrum licenses, which will boost network reach, improve in-building coverage and extend coverage to more areas.

Id. at p. 6. As another example, T-Mobile acknowledges the extent and purpose of its networks:

> Our nationwide network covers all major metropolitan areas and approximately 91% of people in the U.S., excluding roaming coverage. Over the last three years, we have continued to build out our network to concentrate our cell sites where our customers need data most. We had approximately 64,000 cell sites, including macro sites and certain distributed antenna system ("DAS") network nodes as of December 31, 2015 compared to approximately 61,000 cell sites as of December 31, 2014.

Id. This unlicensed expansion includes the MetroPCS brand:

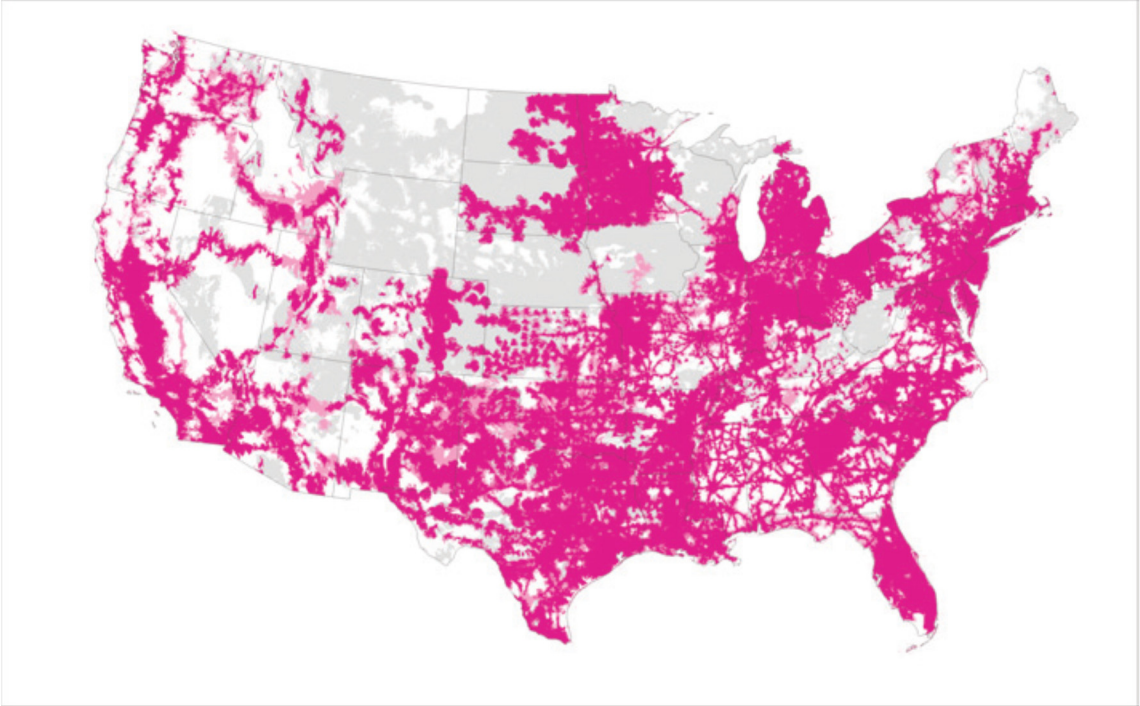
> The migration of customers from the MetroPCS CDMA network onto T-Mobile's LTE and Evolved High Speed Packet Access Plus ("HSPA+") network provides faster network performance for MetroPCS customers with compatible handsets.

Id. at p. 7.

32. T-Mobile, including through its affiliates, is a member of various SSOs that promulgate specifications and standards. For example, T-Mobile, including through its affiliates, is a 3GPP member organization and has knowledge of ETSI specifications promulgated by 3GPP. *See, e.g.*,

http://webapp.etsi.org/3gppmembership/Results.asp?Member=ATIS&Member=ETSI.

33. T-Mobile's 4G wireless networks in the United States are used by customers to place and receive cellular phone calls, in addition to being used to send and receive data services, which are offered by or on behalf of T-Mobile. T-Mobile promotes and advertises the use of its services, including its 4G wireless networks, which is operable in this District, and throughout the United States. *See, e.g.,* http://www.t-mobile.com/coverage.html. Indeed, T-Mobile's 2015 Annual Report includes a map of T-Mobile's LTE/HSPA/GSM network coverage in the U.S.:



34. T-Mobile proclaims that "T-Mobile is the fastest growing wireless company in the U.S. based on customer growth in 2015. T-Mobile provides wireless communications services, including voice, messaging and data, to over 63 million customers in the postpaid, prepaid and wholesale markets," and it touts the importance of "offering our customers a great service on a nationwide 4G Long-Term Evolution ('LTE') network." *Id*. at 3.

35. According to T-Mobile, a "customer is generally defined as a SIM card with a unique T-Mobile identity number which is associated with an account that generates revenue.

Branded customers generally include customers that are qualified either for postpaid service utilizing phones or mobile broadband devices (including tablets), where they generally pay after incurring service, or prepaid service, where they generally pay in advance. Wholesale customers include M2M and MVNO customers that operate on our network, but are managed by wholesale partners." T-Mobile 2015 Annual Report, pg. 29.

36. Access to T-Mobile's 4G networks is offered by T-Mobile in accordance with various "rate plans" by which T-Mobile sets the price that its users pay for accessing the wireless networks or offered by T-Mobile to users through its wholesale partners. T-Mobile offers these "rate plans" through, for example, T-Mobile stores and websites. When purchased from T-Mobile, on information and belief, such "rate plans" authorize third parties, such as customers and users, to access T-Mobile's 4G wireless networks. See, e.g., http://www.t-mobile.com/cell-phone-plans.html; http://www.t-mobile.com/cell-phone-plans/mobile-internet.html.

37. According to T-Mobile, its networks benefit T-Mobile's business and customers. *See id*. at 5 ("The ongoing success of our Un-carrier proposition and continued modernization of the network has strengthened T-Mobile's position as a provider of dependable high-speed LTE service. Additionally, we have continued to focus on retaining customers by delivering an improved wireless customer experience.").

T-MOBILE'S REFUSAL TO ENGAGE IN GOOD FAITH FRAND NEGOTIATIONS

38. To protect Huawei's intellectual property rights (and the interests of other actual or prospective licensees), Huawei contacted T-Mobile on June 6, 2014 to discuss Huawei's Licensing Program, including Huawei's 4G Wireless Network Essential Patents on 4G networks. Huawei specifically identified example patents from its portfolio, including certain of Huawei's

4G Wireless Network Essential Patents, and specific services offered by T-Mobile related to Huawei's 4G Wireless Network Essential Patents, such as IMS and EPC.

39. To facilitate the exchange of confidential information during the negotiation discussions, Huawei offered that the parties enter into a mutual non-disclosure agreement. A mutual non-disclosure agreement is customary in licensing discussions and allows Huawei, for example, to provide T-Mobile non-public information such as an initial analysis regarding T-Mobile's infringement of Huawei's 4G Wireless Network Essential Patents and detailed licensing terms specifically tailored for T-Mobile.

40. On June 23, 2014, T-Mobile refused to sign any mutual non-disclosure agreement and rejected the idea of exchanging information under such a mutual non-disclosure agreement.

41. On June 30, 2014, Huawei reiterated to T-Mobile Huawei's need for a mutual non-disclosure agreement. Huawei sent T-Mobile a draft mutual non-disclosure agreement and agreed to allow T-Mobile to disclose certain information to T-Mobile's suppliers.

42. On September 3, 2014, T-Mobile responded and continued to refuse to enter into any non-disclosure agreement. Such refusals by T-Mobile to engage in discussions regarding a non-disclosure agreement made further substantive licensing negotiations difficult and thus, essentially stalled the licensing negotiations.

43. On January 16 and 30, 2016, Huawei notified T-Mobile that it had filed patent infringement actions against T-Mobile and reiterated its desire to engage in amicable licensing discussions with T-Mobile. Huawei also sent T-Mobile a list of 181 exemplary patents from Huawei's 4G Wireless Network Essential Patents and another draft mutual non-disclosure agreement.

44. On February 5, 2016, T-Mobile responded – for the first time – that it would be willing to enter into an appropriate non-disclosure agreement and identified several terms that it wanted to include in the non-disclosure agreement. T-Mobile also stated in that letter: "Rest assured that when and if Huawei deems it appropriate to make a FRAND offer, T-Mobile will give such an offer reasoned and full consideration."

45. In a February 22, 2016 communication, in order to move forward on the discussions, Huawei agreed to many of T-Mobile's demands and sent T-Mobile a revised non-disclosure agreement. There, Huawei – again – noted "Huawei holds numerous patents on wireless networks [and] T-Mobile will wish to ensure that it secured the necessary license rights to operate its wireless networks and sell its products and services."

46. Instead of T-Mobile conducting good faith negotiations to obtain those necessary license rights to Huawei's patent portfolio, it continued to delay any substantial discussions through its next letter of March 7, 2016. For example, while agreeing to continue to finalize a "mutually-acceptable NDA," T-Mobile simultaneously demanded detailed information – such as a detailed offer and licensee names – "on a non-confidential basis." While proclaiming this agreement to continue to finalize the NDA, T-Mobile waited nearly one month to offer comments on Huawei's good faith revisions to the draft NDA.

47. Despite the fact that negotiation of the terms of the NDA were still bogged down, Huawei voluntarily provided to T-Mobile a detailed licensing offer for Huawei's 4G Wireless Network Essential Patents under FRAND terms on April 1, 2016. Among other things, this offer took into account Huawei's extensive research and development investment in this area over the past twenty years, Huawei's position as one of the top owners of 4G Wireless Network Essential Patents, the possibility that some (but not all) third-party-supplied components in T-Mobile's

network might be licensed to certain of Huawei's 4G Wireless Network Essential Patents, and the fact that T-Mobile cannot operate its core wireless network without the use of Huawei's 4G Wireless Network Essential Patents.

48. Huawei's April 1, 2016 FRAND offer ("Huawei's FRAND Offer") included terms under which T-Mobile would receive a license to Huawei's 4G Wireless Network Essential Patents to use and operate T-Mobile's 4G Standard Conforming Networks and to sell and offer to sell T-Mobile 4G Standard Conforming Services. Specifically, Huawei's FRAND Offer identified the patents as:

> U.S. patents owned by Huawei which must be infringed in order to be compliant with specifications adopted by ETSI/3GPP as standards for its Release 8 and subsequent releases required for E-UTRAN-based systems, covering LTE and related upper layer technologies, including but not limited to SAE/EPC, IMS and PCC ("4G Technologies").

Next, Huawei's FRAND Offer included a specific royalty rate for each T-Mobile 4G Subscriber, which Huawei stated "takes into consideration among other things that (1) the license is for Huawei's U.S. 4G Standard Essential Patents; (2) the license is for TMUS' uses of 4G Standard Conforming Networks and sales of 4G Standard Conforming Services (not TMUS' sale of terminal devices); and (3) TMUS's 4G standard conforming networks use some equipment licensed by Huawei."

49. In addition to Huawei's FRAND Offer, Huawei was prepared to submit to binding arbitration to resolve any disputes in finalizing license terms. To continue Huawei's showing of good faith, Huawei's April 1 letter suggested – among other things – the arbitration hearing occur in the United States, as well as requesting a stay to Huawei's pending patent infringement suits against T-Mobile during the arbitration.

50. On April 6, 2016, after almost two years since Huawei first asked T-Mobile to sign an NDA, and after receiving Huawei's FRAND Offer, T-Mobile for the first time provided a revised draft NDA to Huawei. But, in this long-delayed response, T-Mobile expressly changed a customary NDA (already tailored to T-Mobile) to try to force Huawei into agreeing to T-Mobile's unreasonable demands for rates on only a few of Huawei's 4G Wireless Network Essential Patents practiced by T-Mobile: "By entering into this Agreement and prior to receiving any Confidential Information from T-Mobile, Huawei expressly agrees to provide a written offer providing its asserted FRAND terms to T-Mobile [for each identified patent]."

51. On May 2, 2016, roughly one month later, T-Mobile sent a response to Huawei's FRAND Offer. Instead of negotiating in good faith from Huawei's proposal, T-Mobile flatly rejected Huawei's FRAND Offer, Huawei's arbitration proposal, and continued its delaying tactics. For example, T-Mobile first argued: "What is relevant here are Huawei's FRAND commitments that it would be 'prepared to grant irrevocable licences on fair, reasonable and non-discriminatory terms.' (ETSI IPR Policy Section 6.1)." Then, without any detail or specific objection, T-Mobile affirmatively asserted that Huawei's FRAND Offer was "fundamentally inconsistent with Huawei's FRAND obligations."

52. On May 11, 2016, T-Mobile sent another letter affirmatively alleging – again without support – Huawei "violate[d] the commitment it made that it would be prepared to license its patents on FRAND terms and conditions."

53. On May 13, T-Mobile's counsel separately sent a revised NDA, which Huawei promptly accepted and executed. On May 17, Huawei sent the signed NDA to T-Mobile for final execution. Huawei also sent a letter stating that – upon receiving the signed NDA –

Huawei would send claim charts to T-Mobile and that confidential information was still requested from T-Mobile for further negotiations to be productive.

54. On June 3, 2016, T-Mobile's counsel returned a signed NDA to Huawei, almost exactly two years from Huawei's initial request for signing the NDA. On the same day, however, T-Mobile separately sent a letter to Huawei refusing to meet in face-to-face negotiations, refusing to provide any information under the NDA, and strangely complaining that Huawei had not provided requested information.

55. On June 11, 2016, Huawei sent dozens of example claim charts detailing T-Mobile's infringement of certain of Huawei's Essential Patents. Huawei also again offered an in-person meeting in June with T-Mobile to discuss the patents and again requested necessary information from T-Mobile to facilitate the negotiations. Moreover, Huawei confirmed that it has honored – and will continue to honor – its existing commitments and agreements, including those with companies who might be former or current vendors to T-Mobile. To the point, Huawei's FRAND offer was already based on, among other things, the possibility that some (but not all) third-party-supplied components in T-Mobile's network might be licensed to certain of Huawei's 4G Wireless Network Essential Patents and the fact that T-Mobile cannot operate its core wireless network without the use of Huawei's 4G Wireless Network Essential Patents. Huawei then reiterated that T-Mobile has still refused to provide any contrary information regarding its use of third party-supplied components or its position that the use of third party components should allegedly excuse T-Mobile's unlicensed operation of its larger network. To date, T-Mobile has not responded to Huawei, or indicated in any way that it is interested in meeting with Huawei to further negotiations.

56. At least in view of the foregoing, Huawei has been prepared to grant T-Mobile a license to Huawei's 4G Wireless Network Essential Patents, which is consistent with Huawei's FRAND commitment to ETSI and the benefiting public. Huawei remains committed to offering T-Mobile a license pursuant to Huawei's FRAND Offer of April 1. T-Mobile, on the other hand, has been unwilling to engage in any good faith license negotiations and is accordingly an unwilling licensee to Huawei's 4G Wireless Network Essential Patents. Because T-Mobile alleges a violation of Huawei's FRAND commitment, Huawei has no choice but to file this action with this Court to assure the public that Huawei's actions are consistent with its FRAND commitment to ETSI that underscore today's networking and other standards.

OTHER RELATED PATENT CASES

57. In addition to this Declaratory Judgment action, Huawei has filed in this Court four infringement actions involving 14 of Huawei's 4G Wireless Network Essential Patents.[8]

58. For example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification ("TS") 23.401, titled "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access." 3GPP currently publishes TS 23.401, release 13, SP-71, version 13.6.1, which was released on March 24, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.401/23401-d61.zip. TS 23.401 generally relates to both roaming and non-roaming scenarios for IP connectivity using the E-UTRAN (LTE) platform and covers aspects of such connectivity, including mobility between E-UTRAN

[8] *See* note 2 *supra*.

and pre-E-UTRAN 3GPP radio access technologies, policy control and charging, and authentication.

59. TS 23.401 was developed by the System Architecture Working Group 2 (known variously as "SA WG2," "SA2," or "S2"), in which Huawei played a leading role. For example, at 3GPP SA2 meeting number 61, Huawei (in conjunction with others) proposed S2-074831, which suggested that the user equipment send an attach request message to an LTE system with an indicator that the attach type was a handover attach. This example proposal was revised to S2-075847 and approved. The proposed mechanism that Attach Type indicates "Handover" when the UE moves from non-3GPP accesses was written into 3GPP TS 23.401 Release 8. As another example, at 3GPP SA2 meeting number 65, Huawei (in conjunction with others) proposed S2-084381, which suggested a cause information element indicating a handover from a 3GPP network to a non-3GPP network and which was approved and written into 3GPP TS 23.401. Huawei holds several patents essential to TS 23.401, including U.S. Patent 8,537,779 ("the '779 patent"), and 8,031,677 ("the '677 patent"). The '779 patent was declared essential to TS 23.401 on March 14, 2011. *See* ISLD-201104-007. The '677 patent was declared essential to TS 23.401 on February 25, 2011. *See* ISLD-201103-012.

60. As another example, at 3GPP SA2 meeting number 57, Huawei proposed S2-071692, which refined the inter radio access technology (RAT) handover procedure from an LTE network to a non-LTE network. This example proposal was revised to S2-072158, then S2-072288, and approved. The proposed inter RAT handover procedure was written into 3GPP TS 23.401 by at least Release 8. Huawei holds several patents essential to TS 23.401, including U.S. Patent 8,325,675 ("the '675 patent") and U.S. Patent 8,908,627 ("the '627 patent"), which is

a continuation of the ’675 patent. The ’675 patent and ’627 patent were declared essential to TS 23.401 on February 25, 2011. *See* ISLD-201103-012.

61. As another example, Huawei’s 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 23.402, titled “Architecture enhancements for non-3GPP accesses.” 3GPP currently publishes TS 23.402, release 13, SP-71, version 13.5.0, which was released on March 15, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.402/23402-d50.zip. TS 23.402 generally relates to both roaming and non-roaming scenarios for providing IP connectivity using non-3GPP access to the evolved 3GPP Packet Switched domain. The specification covers aspects of such connectivity, including mobility between 3GPP and non-3GPP accesses, policy control and charging, and authentication, related to the usage of non-3GPP accesses.

62. The 3GPP SA2 Architecture group – in which Huawei has a leadership role – developed TS 23.402. For example, at 3GPP SA2 meeting number 63, Huawei proposed S2-081059, which suggested that a handover indication be included in the create default bearer request message so as to differentiate an initial attach from a handover attach. This example proposal was revised to S2-081922 and was presented by Huawei and others and approved. The proposed mechanism for indicating a Handover Attach and including a Handover Indication in the Create Default Bearer Request message to the PDN GW was written into 3GPP TS 23.402 Release 8. Huawei holds several patents essential to TS 23.402, including U.S. Patent 8,638,750 (“the ’750 patent”) and the ’779 patent. The ’750 patent and the ’779 patent were declared essential to TS 23.402 on March 14, 2011. *See* ISLD-201104-007.

63. As a further example, Huawei’s 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 23.237, titled “IP Multimedia Subsystem (IMS)

Service Continuity; Stage 2." 3GPP currently publishes TS 23.237, release 13, SP-70, version 13.1.0, which was released on December 15, 2015 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.237/23237-d10.zip. TS 23.237 defines procedures for seamlessly maintaining a handset's active voice and/or data sessions when the handset roams from one network to another (*e.g.*, from 4G to 3G or vice versa).

64. TS 23.237, along with its predecessors TS 23.206 and TS 23.806, was developed by SA2, in which Huawei played a leading role. For example, at SA2 meeting number 46, Huawei presented, in conjunction with others, proposal S2-051215 (a revision of S2-051197, in turn a revision of S2-051070), which suggested anchoring voice calls at a node in the user's home IMS network to assure service continuity during handover. SA2 approved the proposal. Huawei holds multiple patents essential to TS 23.237, including U.S. Patent No. 8,625,527. On October 8, 2011, Huawei declared as essential to TS 23.206 the Chinese national stage application of the PCT application that also resulted in the '527 patent in the United States. *See* ISLD-201110-001. TS 23.206 was incorporated into TS 23.237, which, at least as early as Version 8.0.0, included the feature of anchoring calls at a Service Continuity Control Access Server (SCC AS) in the user's home IMS network.

65. As yet another example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 33.401, titled "3GPP System Architecture Evolution (SAE); Security architecture." 3GPP currently publishes TS 33.401, release 13, SP-71, version 13.2.0, which was released on March 17, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/33_series/33.401/33401-d20.zip. TS 33.401 defines security features, mechanisms, and procedures used in the Evolved Packet System, Evolved

Packet Core, and Evolved UTRAN, including the derivation and handling of security keys protecting a user's communications with the network.

66. TS 33.401 was developed by the System Architecture Working Group 3 (known variously as "SA WG3," "SA3," or "S3"), in which Huawei played a leading role. For example, at SA3 meeting number 49bis, Huawei proposed S3a070945, which suggested a procedure for handling encryption keys during idle mode mobility from UTRAN to E-UTRAN, including the use of context request and context response messages to transfer keys between an SGSN and MME. SA3 approved that proposal. At least as early as version 8.1.0, TS 33.401 included the use of context request and context response messages to transfer keys between an SGSN and MME. Huawei holds multiple patents essential to TS 33.401, including U.S. Patent No. 9,060,268. Huawei holds multiple patents essential to TS 33.401, including U.S. Patent Nos. 9,060,268 and 9,241,261. Huawei declared the '268 patent as essential to TS 33.401 on May 28, 2015, and declared the '261 patent claims as essential to TS 33.401 on March 14, 2011. *See* ISLD-201506-028; ISLD-201104-007.

67. As another example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 23.060, titled "General Packet Radio Service (GPRS); Service Description." 3GPP currently publishes TS 23.060, release 13, SP-71, version 13.6.0, which was released on March 15, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.060/23060-d60.zip. TS 23.060 generally defines the service description for GPRS, which is a packet bearer service and a main part of the packet domain.

68. The 3GPP SA2 Architecture group – in which Huawei has a leadership role – developed TS 23.060. For example, at 3GPP SA2 Architecture meeting number 54, Huawei (in

conjunction with others) proposed S2-062756, which suggested how to analyze the impact of an Error Indication if direct tunnel functionality was enabled, and it presented a solution to Error Indications for SGSN-controlled bearer optimization. This example proposal was revised to S2-063365 and approved. Huawei holds several patents essential to TS 23.060, including U.S. Patent 8,867,339 ("the '339 patent"). The '339 patent was declared essential to TS 23.060 on February 25, 2011. *See* ISLD-201103-012.

69. As a further example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 23.380, titled "IMS Restoration Procedures." 3GPP currently publishes TS 23.380, release 13, CP-71, version 13.2.0, which was released on March 17, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.380/23380-d20.zip. TS 23.380 generally relates to the procedures required in 3GPP IP Multimedia Subsystem (IMS) to handle a Serving Call Session Control Function (S-CSCF) or a Proxy Call Session Control Function (P-CSCF) service interruption scenario with minimum impact to the service for the end user.

70. The 3GPP TSG Core Network and Terminals WG4 group – in which Huawei is a contributor – developed TS 23.380. For example, at 3GPP meeting number 39bis, Huawei submitted 14 proposals relating to IMS Restoration, including C4-081649, which presented various backup and update procedures for S-CSCF data. Huawei holds several patents essential to TS 23.380, including U.S. Patent 8,719,617 ("the '617 patent") and 8,069,365 ("the '365 patent"). The '617 and '365 patents were declared essential to TS 23.380 on March 14, 2011. *See* ISLD-201104-007.

71. In yet another example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 29.274, titled "Evolved General Packet Radio

Service (GPRS) Tunnelling Protocol for Control Plane (GTPv2-C)." 3GPP currently publishes TS 29.274, release 13, CP-71, version 13.5.0, which was released on March 17, 2016 and is available at http://www.3gpp.org/ftp/Specs/archive/29_series/29.274/29274-d50.zip. TS 29.274 generally specifies the stage 3 of the control plane of the GPRS Tunneling Protocol.

72. The 3GPP TSG Core Network and Terminals WG4 group – in which Huawei is a contributor – developed TS 29.274. For example, at 3GPP TSG CT WG4 meeting number 42, Huawei submitted C4-090263, which made formal amendments with respect to Cause IE that resulted in increased network dependability and enhanced user experience. C4-090263 was incorporated into C4-090798, which was approved by the group. Huawei holds several patents essential to TS 29.274, including U.S. Patent 9,235,462 ("the '462 patent"). The '462 patent was declared essential to TS 29.274 on March 14, 2011. *See* ISLD-201104-007.

73. In yet another example, Huawei's 4G Wireless Network Essential Patents include those essential to 3GPP Technical Specification 23.203, titled "Policy and charging control architecture." TS 23.203 incorporates TS 23.125, which is titled "Overall high level functionality and architecture impacts of flow based charging; Stage 2."[9] TS 23.125, release 7, version 7.0.0 was released on June 19, 2007 and is available at http://www.3gpp.org/ftp/Specs/archive/23_series/23.125/23125-700.zip.

74. The 3GPP SA2 Architecture group – in which Huawei has a leadership role – developed TS 23.125. For example, at 3GPP SA2 Architecture meeting number 39, Huawei (in conjunction with others) proposed S2-041454, which introduced using charging rule identifiers. At that same meeting, Huawei suggested adding use cases to the Flow Based

[9] "The functionality of 23.125 (Flow based Charging) has been combined with Policy Control functionality from Rel-7 onwards into a single new TS: TS 23.203 (Policy and Charging Control - PCC)." *See 3GPP specification: 23.125*, 3GPP.ORG (Apr. 2, 2016), http://www.3gpp.org/DynaReport/23125.htm. The 23.125 release was withdrawn as a result. *Id.*

Charging, modifying and adding charging actions, and updating the message flow when provisioning charging rules in the Ry interface, in S2-041456, S2-041461, S2-041610, respectively. These proposals were all approved. Huawei holds several patents essential to TS 23.125, including U.S. Patent 8,531,971 ("the '971 patent") and U.S. Patent 8,798,575 ("the '575 patent"). The '971 patent was declared essential to TS 23.125 on April 29, 2005, and the '575 patent was declared essential to TS 23.125 on August 29, 2005. *See* ISLD-200505-003; ISLD-200509-005.

75. Each of the foregoing example declarations were made pursuant to Section 6.1 of the ETSI IPR Policy. Specifically, under the ETSI IPR Policy, "[w]hen an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI," Huawei declared that it is "prepared to grant irrevocable licences on fair, reasonable and non-discriminatory ('FRAND') terms and conditions under such IPR." http://www.etsi.org/images/files/IPR/etsi-ipr-policy.pdf at ¶ 6.1. Huawei is prepared to license anyone, including T-Mobile, on FRAND terms.

76. At the core of all of these patent cases is whether Huawei has met its FRAND obligations with regard to Huawei's 4G Wireless Network Essential Patents that T-Mobile is using without a license. Therefore, given T-Mobile's unwillingness to engage in good faith negotiations, this Declaratory Judgment action offers the Court – and the parties – an efficient avenue for resolving this patent dispute.

JURISDICTION AND VENUE

77. This Court has subject matter jurisdiction over Huawei's claims for declaratory judgment that *inter alia* it has not breached its FRAND commitment under 28 U.S.C. § 1332.

78. The amount in controversy exceeds $75,000.

79. Venue is proper in this judicial district under 28 U.S.C. §§ 1391 and 1400(b). On information and belief, T-Mobile has engaged in activities including: transacting business in this district and purposefully directing its business activities, including the use of its networks in this District, and the sale or offer for sale of services to this District to aid, abet, or contribute to the infringement of third parties in this District.

80. The Court has personal jurisdiction over T-Mobile at least because it has continuous business contacts in the State of Texas and in this District. T-Mobile has engaged in business activities including transacting business in this District and purposefully directing its business activities, including the use of its networks in this District, and the sale or offer for sale of services to third parties in this District. Furthermore, on information and belief, T-Mobile USA, Inc. operates a Network Operations Center (NOC) in Frisco, Texas, that monitors its network 24-hours a day to ensure a quick response to outages and emergencies.

COUNT ONE: DECLARATORY JUDGMENT THAT HUAWEI HAS COMPLIED WITH ITS FRAND COMMITMENT

81. Huawei re-alleges and incorporates by reference Paragraphs 1-80 above, as if fully set forth herein.

82. As described above, Huawei is a successful contributor to ETSI and 3GPP standards. Based on those contributions, Huawei voluntarily committed to ETSI to offer licenses to Huawei's 4G Wireless Network Essential Patents related to ETSI 4G standards. *See* https://ipr.etsi.org/.

83. Because of T-Mobile's unlicensed practice of Huawei's 4G Wireless Network Essential Patents, Huawei offered to engage in good-faith negotiations with T-Mobile to meet Huawei's obligations under the ETSI IPR Policy. Pursuant to the ETSI IPR Policy, Huawei was

prepared – and is prepared – to grant T-Mobile a license to Huawei's 4G Wireless Network Essential Patents under Huawei's FRAND Offer of April 1, 2016.

84. But T-Mobile is an unwilling licensee. As described above in paragraphs 38-56, T-Mobile has refused to negotiate a portfolio license and even refused binding arbitration on friendly terms. Indeed, T-Mobile expressly alleged that Huawei's proposed licensing terms are "fundamentally inconsistent with Huawei's FRAND obligations" and that Huawei "violate[d] the commitment it made that it would be prepared to license its patents on FRAND terms and conditions."

85. There is a dispute between Huawei and T-Mobile regarding whether Huawei's actions and offers to T-Mobile for a license to Huawei's 4G Wireless Network Essential Patents complied with Huawei's commitment to be prepared to grant a license to Huawei's 4G Wireless Network Essential Patents on terms and conditions consistent with ETSI's IPR Policy, and any applicable laws. Indeed, as described above in paragraphs 57-76, certain of Huawei's 4G Wireless Network Essential Patents have been asserted against T-Mobile in this Court because of T-Mobile's willful practice without a license.

86. Huawei requests that the Court declare that (a) Huawei has complied with its obligations under its FRAND commitment; and (b) the terms and conditions offered by Huawei to T-Mobile regarding a license to Huawei's 4G Wireless Network Essential Patents are consistent with Huawei's FRAND commitment.

DEMAND FOR JURY TRIAL

87. Huawei hereby demands trial by jury on all claims and issues so triable.

PRAYER FOR RELIEF

88. Wherefore, Huawei respectfully requests that this Court enter judgment in its favor as follows:

A. Adjudge and declare that Huawei has complied with its FRAND commitment in its negotiations with T-Mobile regarding a license to Huawei's 4G Wireless Network Essential Patents;

B. Adjudge and declare that the terms and conditions offered by Huawei to T-Mobile regarding a license to Huawei's 4G Wireless Network Essential Patents are consistent with Huawei's FRAND commitment; or, in the alternative, to declare the terms and conditions necessary to meet Huawei's FRAND commitment;

C. Adjudge and declare that T-Mobile is an unwilling licensee to Huawei's 4G Wireless Network Essential Patents; and

D. Award such other relief as this Court deems just and proper.

Dated: July 5, 2016

Respectfully submitted,

By: */s/ Thomas H. Reger II*

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