

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

IPCOM, GMBH & CO. KG,

Plaintiff,

v.

SPRINT SPECTRUM L.P., SPRINTCOM, INC.,
SPRINT COMMUNICATIONS INC., SPRINT
COMMUNICATIONS COMPANY, L.P.,
SPRINT CORPORATION, DEUTSCHE
TELEKOM AG, T-MOBILE US, INC., and T-
MOBILE USA, INC.,

Defendants.

Civil Case No.: 2:20-cv-321-JRG

JURY TRIAL DEMANDED

SECOND AMENDED COMPLAINT

Pursuant to Federal Rule of Civil Procedure 15(a)(2), Plaintiff IPCom GmbH & Co. KG hereby files this Second Amended Complaint¹ against Sprint Spectrum, L.P. (d/b/a Sprint PCS), SprintCom, Inc., Sprint Communications Inc., Sprint Communications Company, L.P., Sprint Corporation, Deutsche Telekom AG, T-Mobile US, Inc., and T-Mobile USA, Inc. (collectively, “Sprint” or “Defendants”), and alleges as follows:

¹ This Second Amended Complaint contains the same counts and allegations as the First Amended Complaint (D.I. 7), which are the subject of pending motions filed by Deutsche Telekom. Pursuant to the Court’s order of April 20, 2021 (D.I. 32), IPCom files this Second Amended Complaint to add defendants T-Mobile US, Inc., and T-Mobile USA, Inc. IPCom reserves any and all rights to further amend the complaint should discovery reveal a basis to do so or if the Court orders amendment in deciding Deutsche Telekom’s motions.

THE PARTIES

1. IPCom GmbH & Co. KG (“IPCom”) is a limited partnership organized under the laws of Germany with its principal place of business at Zugspitzstraße 15, 82049 Pullach, Germany.
2. Deutsche Telekom AG (“Deutsche Telekom”) is an Aktiengesellschaft organized and existing under the laws of the Federal Republic of Germany with its principal place of business in Bonn, Germany.
3. T-Mobile US, Inc. (“T-Mobile”) is a Delaware corporation with its principal place of business at 12920 Southeast 38th Street, Bellevue, Washington 98006 and is an indirect, controlled subsidiary of Deutsche Telekom.
4. T-Mobile USA, Inc. (“T-Mobile USA”) is a Delaware corporation with its principal place of business at 12920 Southeast 38th Street, Bellevue, Washington 98006 and is an indirect, controlled subsidiary of Deutsche Telekom.
5. Sprint Spectrum L.P. d/b/a Sprint PCS (“Sprint PCS”) is a Delaware limited partnership with its principal place of business at 6200 Sprint Parkway, Overland Park, Kansas 66251 and is an indirect, controlled subsidiary of Deutsche Telekom.
6. SprintCom, Inc. (“SprintCom”) is a Kansas corporation with its principal place of business at 6391 Sprint Parkway, Overland Park, Kansas 66251 and is an indirect, controlled subsidiary of Deutsche Telekom.
7. Sprint Communications Inc. (“Sprint Communications Corporation”), is a Kansas corporation with its principal place of business at 6160 Sprint Parkway, Overland Park, Kansas 66251 and is an indirect, controlled subsidiary of Deutsche Telekom.

8. Sprint Communications Company, L.P. (“Sprint Communications”) is a Delaware limited partnership with its principal place of business at 6391 Sprint Parkway, Overland Park, Kansas 66251 and is an indirect, controlled subsidiary of Deutsche Telekom.

9. Sprint Corporation is a Delaware corporation with its principal place of business at 6200 Sprint Parkway, Overland Park, Kansas 66251 and is an indirect, controlled subsidiary of Deutsche Telekom.

10. The Defendants operate one or more wireless telecommunications networks to provide wireless telecommunications services in the United States under brand names including but not limited to “Sprint.” These telecommunications networks have also been used to provide wireless telecommunications services for the Virgin Mobile USA and Boost Mobile brands.

NATURE OF ACTION

11. This is a civil action for infringement of U.S. Patent Nos. 7,333,822 (the “822 Patent”), 10,382,909 (the “909 Patent”), and 6,983,147 (the “147 Patent”) (collectively the “Patents-in-Suit”), arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

JURISDICTION AND VENUE

12. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because it arises under the patent laws of the United States.

13. This Court has personal jurisdiction over the Defendants, which have committed acts of infringement in Texas and this judicial district, or are vicariously liable for the actions of each other in this judicial district in violation of 35 U.S.C. § 271. For instance, Defendants have performed infringing methods, and made and used infringing systems that provide wireless telecommunications services. The Defendants have derived and continue to derive substantial revenue from the sale and use of infringing products and services in this district. In addition,

Sprint Spectrum L.P., Sprint Communications Inc., SprintCom Inc., Sprint Communications Company L.P., Sprint Corporation, and T-Mobile USA, Inc. are registered to do business in Texas, and the Defendants own and/or maintain numerous stores and office locations within Texas. In view of the foregoing, this court possesses both general and specific jurisdiction over the Defendants.

14. Deutsche Telekom AG is subject to this court's personal jurisdiction. Deutsche Telekom AG owns a controlling interest in the remaining defendants, which are indirectly owned and controlled subsidiaries. Deutsche Telekom is not a passive owner of these entities, but instead controls and directs these subsidiaries and has acted in concert with them to provide infringing telecommunications services in Texas and in this judicial district. In view of the foregoing, and as a joint tortfeasor, Deutsche Telekom AG is subject to personal jurisdiction in this district along with its subsidiaries.

15. Alternatively, the court may exercise personal jurisdiction over Deutsche Telekom pursuant to Fed. R. Civ. P. 4(k)(2), which provides that "for a claim that arises under federal law, serving a summons or filing a waiver of service establishes personal jurisdiction over a defendant if: (a) the defendant is not subject to jurisdiction in any state's courts of general jurisdiction; and (b) exercising jurisdiction is consistent with the United States Constitution and laws."

16. IPCom's claim for patent infringement arises under federal law.

17. Deutsche Telekom is not subject to jurisdiction in any state's courts of general jurisdiction.

18. Exercising jurisdiction over Deutsche Telekom in this district would not run afoul of the Constitution, due process, or any laws. Deutsche Telekom facilitated the merger of the T-

Mobile US Inc. and Sprint Corporation group companies and obtained a controlling interest in Sprint Corporation and subsidiaries for the purpose of competing in the United States against rival wireless companies. Deutsche Telekom CEO Timotheus Höttges stated during an earnings call on or about February 19, 2020 that “getting the deal done puts the company on an equal footing and in a position to ramp up its attacks on the competition in the U.S.” He further commented that “[w]e see a light at the end of the tunnel ... Our attempt is going to be the No. 1 in the U.S”² Indeed, Höttges testified on behalf of the merger during the antitrust trial challenging the merger in the Southern District of New York. Deutsche Telekom derives and will derive monetary benefit from Sprint’s infringing network operations in Texas and upon information and belief, continues to exert control over the operations of the company.

19. Deutsche Telekom is aware of IPCom and the Patents-in-Suit and indeed took a license to the patents in June, 2013, which did not extend to the acquired Sprint companies. IPCom notified Deutsche Telekom of the applicability to the Patents-in-Suit to Sprint’s network operations, and acting as Sprint’s agent, Deutsche Telekom engaged in discussions with IPCom over a license for Sprint’s activities. Deutsche Telekom made the decision to refuse to take a license and abate the infringement, thereby forcing IPCom to file suit to redress the Defendants’ patent infringement. For at least the foregoing reasons, exercising jurisdiction over Deutsche Telekom in this district is consistent with the United States Constitution and laws.

20. Sprint maintains a significant physical presence in this judicial district. For example, there are numerous Sprint retail stores within this judicial district, including in Allen, Beaumont, Canton, Denton, Flower Mound, Frisco, Lufkin, Marshall, McKinney, Nacogdoches,

² <https://www.fiercewireless.com/wireless/dt-ceo-sees-light-at-end-tunnel-t-mobile-sprint-combo>.

Paris, Plano, Sulphur Springs, Texarkana, and Tyler, Texas. These stores are branded with Sprint signage and trademarks for the benefit of the shopping public. Sprint uses these stores to sell telecommunications services that infringe the Patents-in-Suit.³ These stores are physical places within the district, are regular and established places of business, and are Sprint's places. For at least these reasons, venue is proper in this judicial district. Sprint resides in this judicial district within the meaning of 28 U.S.C. § 1400(b). Sprint has committed infringement acts within this district and has regular and established places of business here.

21. As a foreign corporation, venue is proper for Deutsche Telekom in this district. 28 U.S.C. § 1391(c)(3).

THE PATENTS-IN-SUIT

U.S. Patent No. 7,333,822

22. On February 19, 2008, the United States Patent and Trademark Office ("USPTO" or "PTO") issued U.S. Patent No. 7,333,822, entitled "Method for Transmitting Messages in a Telecommunication Network." A true and correct copy of U.S. Patent No. 7,333,822 is attached hereto as Exhibit A and incorporated herein by this reference.

23. On July 16, 2008, a third party requester, HTC Corp. filed a request for *Inter Partes* Reexamination of U.S. Patent No. 7,333,822, and the PTO instituted reexamination pursuant to *Inter Partes* Reexamination Control No. 95/001,211. During this reexamination, the patent owner amended some of the claims, canceled other claims, and added new claims. The PTO Examiner subsequently determined that claims 1, 17, 22 and 27-48 are patentable over all

³ T-Mobile-branded stores reside in Texas and in this district and have sold and continue to sell infringing services, as well as products that use the infringing services.

of the prior art cited during the original examination and reexamination. The third-party requester then filed an appeal to the Patent Trial and Appeal Board (“PTAB”). On May 30, 2013, the PTAB issued a Decision on Appeal affirming the Examiner’s determination that these claims are patentable. On September 13, 2013, the PTO issued Inter Partes Reexamination Certificate Number 7,333,822 C1, which is now part of the ’822 patent.

24. ICom is the assignee and owner of all right, title, and interest in and to the ’822 Patent, including the right to assert all causes of action arising under said patent and the right to any and all remedies for infringement, including past damages.

25. The invention of the ’822 Patent pertains to methods for transmitting messages in a mobile telecommunications network that can utilize two kinds of message services, such as: a short message service (“SMS”) and a multimedia messaging service (“MMS”). *See* ’822 Patent, 4:23-29. Such networks may comprise telecommunications equipment including Multimedia Messaging Service Centers (“MMSCs”), Short Message Service Centers (“SMSCs”), wireless base stations, and mobile phones. *Id.*, 2:27-30, 2:66-3:31. The invention of the ’822 Patent is designed, *inter alia*, to solve certain technical problems affecting message transmission. *Id.* For example, in order to transmit messages, telecommunications equipment needs to set up a “connection” (or “session”). *Id.*, 4:25-29. However, setting up these connections requires certain “overhead” defined by the use of network resources, including “bandwidth” and “signaling” resources. *Id.*, 4:25-29, 4:64-5:6. Among other things, the invention of the ’822 Patent reduces the amount of overhead needed to transmit messages within the network. *Id.* This improves efficiency and capacity.

26. The ’822 Patent claims are directed to patent-eligible, non-abstract ideas in that they provide technical solutions to at least the technical problems described above. The claims

relate to the sending of a dedicated MMS message using a short message of the SMS service, wherein the short message may include: a header portion, a data portion having an identification of a type of the dedicated MMS message, and also an identifier for indicating a presence of the dedicated MMS message in the data portion of the short message. *Id.*, 5:50-8:34. In one embodiment, the short message carries a dedicated MMS notification message, which may indicate the presence of another type of MMS message on an MMS server in the telecommunications network. *Id.*, 6:55-7:60. By using the short message to send the dedicated MMS notification message, the telecommunications network is able to dispense with the “overhead” associated with “setting up a connection/session.” *Id.*, 4:25-29, 4:67-5:6. The ’822 Patent further explains that by employing the claimed methods, no “additional signaling for transmitting notifications” is required, and therefore network bandwidth and signaling resources are conserved. *Id.*, 4:67-5:6. Thus, the claimed inventions are directed to patent-eligible, non-abstract ideas because they improve the overall functioning of a telecommunications system. Further, the methods claimed in the ’822 Patent cannot be performed as mental steps by a human, nor do they represent the application of a generic computer to any well-known method of organizing human behavior.

U.S. Patent No. 10,382,909

27. On August 13, 2019, the PTO issued United States Patent No. 10,382,909, entitled “Method for Transmitting Messages in a Telecommunications Network.” A true and correct copy of the ’909 Patent is attached hereto as Exhibit B and incorporated herein by this reference.

28. The ’909 Patent is a Division of application No. 11/975,428, which is a continuation of the ’822 Patent. *See* ’909 Patent, cover page. The ’909 Patent and the ’822

Patent share the same figures and written description. During examination of the '909 Patent, the Examiner reviewed the art cited during prosecution of the '822 Patent, the art cited in the *Inter Partes* Reexamination of the '822 Patent, Control No. 95/001,211, and the PTAB's Decision on Appeal in the reexamination of the '822 Patent. The Examiner subsequently determined the claims of the '909 Patent to be patentable.

29. ICom is the assignee and owner of all right, title, and interest in and to the '909 Patent, including the right to assert all causes of action arising under said patent and the right to any and all remedies for infringement, including past damages.

30. The '909 Patent describes, *inter alia*, methods and apparatus for use in transmitting messages in a mobile telecommunications network that provides SMS and MMS services using MMSCs, SMSCs, wireless base stations, and mobile phones. *See* '909 Patent, 3:3-34, 7:39-52, 8:12-9:26. The invention of the '909 Patent solves technical problems involving the transmission of messages. *Id.* In order to transmit the messages, the telecommunications equipment needs to set up a "connection" (or "session"), but setting up these connections requires certain "overhead" defined by use of network resources, including "bandwidth" resources. *Id.*, 4:11-63. The invention of the '909 Patent reduces the amount of overhead needed to send messages. *Id.* This improves the efficiency and capacity of the network.

31. The '909 Patent claims are directed to patent-eligible, non-abstract ideas because they provide technical solutions to the technical problems described above. The claims relate to sending a dedicated MMS message using a short message of the SMS service. *Id.*, 4:11-5:13. In one embodiment, the short message carries a dedicated MMS notification message, which may indicate the presence of another type of MMS message on an MMS server in the telecommunications network. *See id.*; *see also id.*, 6:30-7:29. By using the short message to

send the dedicated MMS notification message, the telecommunications network is able to dispense with the “overhead” associated with “setting up a connection/session.” *Id.*, 4:11-63. The ’909 Patent further explains that by employing the claimed methods, no “additional signaling for transmitting notifications” is required, and therefore the network bandwidth and signaling resources are conserved. *Id.* Thus, the claimed inventions are also directed to patent-eligible, non-abstract ideas because they improve the overall functioning of a telecommunications system. Further, the methods claimed in the ’909 Patent cannot be performed as mental steps by a human, nor do they represent the application of a generic computer to any well-known method of organizing human behavior.

U.S. Patent No. 6,983,147

32. On January 3, 2006, the PTO issued United States Patent Number 6,983,147, entitled “Method of transmitting signaling information, a master station, a mobile station and message elements.” IPCom is the assignee and owner of all right, title, and interest in and to the ’147 Patent, including the right to assert all causes of action arising under said patent and the right to any and all remedies for infringement, including past damages. A true and correct copy of the ’147 Patent is attached hereto as Exhibit C and incorporated herein by this reference

33. In general, the ’147 Patent describes methods and apparatuses for “transmitting signaling information between a master station and a slave station.” *See* ’147 Patent at Abstract. For example, “a message, which contains information regarding whether data to be sent is processed in the master station to increase the reception quality of this data at the slave station, is transmitted with the signaling information from the master station to the slave station” in a cellular network. *See id.* The invention may include, for example, a “transmitting station” that “transmit[s] information” “regarding whether data to be sent is processed by an additional

transmitting station,” which is “successively assigned to the receiving station to increase a reception quality at the receiving station in accordance with measures relating to a transmission channel between the receiving station and as least one of the transmitting station and the additional transmitting station.” *Id.*, 22:65-23:6.

34. The ’147 Patent claims technical solutions to technical problems in the design and implementation of cellular networks, such as when initiating data transfers between multiple transmitters and a single mobile receiver. The ’147 Patent specification identifies technical drawbacks of traditional cellular networks, including at least, for example “that it is not known in the mobile station whether or not the base station is transmitting the data predistorted over the at least one specially allocated transmission channel. Therefore, the mobile station cannot decide whether or not it must eliminate distortion from the data received by the base station over the specially set-up transmission channel.” *Id.*, 1:31-37.

35. The ’147 Patent claims are directed to a patent-eligible, non-abstract idea. They cover technical solutions to improve computer and electronic communications between cellular transmitters and receivers. For example, the patent identifies numerous specific advantages that the claimed techniques provide compared to traditional cellular networks. *See, e.g., id.* at 1:41-64 (describing “example method[s] according to the present invention” which provide technology capable of at least (1) “[S]etting up a transmission channel from the master station to the slave station, the slave station is able to decide how it may detect the data to be sent by the master station or the data to be sent by the other master station downstream from and assigned to the slave station in order to be able to guarantee optimum data reception”; (2) “If the slave station determines that the data to be sent by the corresponding master station has already been processed in the corresponding master station, then it may omit a complicated distortion

elimination because the data will arrive at the slave station with a suitably increased reception quality”; and (3) “Power consumption at the slave station may be minimized in this manner, which may be advantageous when configuring the slave station as a mobile station with battery operation”). Further, the claimed technologies cannot be performed as mental steps by a human, nor do they represent the application of a generic computer to any well-known method of organizing human behavior.

36. The '147 Patent claims inventive concepts that are significantly more than any patent-ineligible, abstract idea. In particular, the claimed technology, including individual limitations as well as ordered combinations of limitations, were not well-understood, routine, or conventional, and cover multiple advantages, and combinations of advantages, that were not well-understood, routine, or conventional. *See, e.g., id.* at 22:62-23:16.

FACTUAL BACKGROUND

IPCom

37. IPCom is an intellectual property licensing and research & development company. Since its founding in 2007, IPCom has been committed to innovation in the wireless communications market. IPCom creates inventions and files patent applications for those inventions, collaborates with others to develop and patent inventions, and acquires and licenses patents from individual inventors and other institutions.

38. IPCom’s current patent portfolio encompasses over 200 patent families in the field of mobile communications, with more than 1,000 patents registered in Europe, the US and Asia.

39. Research and development are core to IPCom’s philosophy and approach. IPCom’s research and development (“R&D”) team is made up of pioneering scientists and

engineers and is continuously looking for ways to develop and enhance mobile technologies. In the past, IPCom's R&D has contributed to the evolution of UMTS to LTE and further to LTE-A. Currently, IPCom plays an active role in evolving 5G cellular technology.

40. IPCom also offers IP consulting services ("Consulting Services") to assist companies in the development of ideas and new innovations. IPCom's Consulting Services helps inventors transform ideas into successful inventions with real world applications and a tangible market value. IPCom works closely with inventors to safeguard their ideas and maximize the value of their innovation.

41. IPCom is dedicated to maintaining industry standards and continues to collaborate with industry standards setting organizations and third parties to make key contributions to industry bodies including 3GPP, OMA, ETSI, OMTP, Bluetooth SIG, and TCG.

Deutsche Telekom

42. Sprint Corporation and its subsidiaries merged with T-Mobile US Inc. on April 1, 2020. Deutsche Telekom has voting control of approximately 68% of the merged company's shares. As of the date of this filing, Deutsche Telekom continues to possess voting control over a majority of the shares of the merged company. Upon the merger, Deutsche Telekom also gained the right to appoint 9 of 14 directors, and Deutsche Telekom's CEO, Timotheus Höttges, has become the Chairman of the Board of the merged entity.

43. Deutsche Telekom possesses control over the merged entity, including its Sprint subsidiaries. Indeed, in a press release issued by Deutsche Telekom on April 1, 2020, the company represented that, "[t]hese agreements concerning the voting rights and the appointment of members of the Board of Management enable Deutsche Telekom to keep control of the new T-Mobile US in the future and to include the company in its consolidated financial statements as

a fully consolidated subsidiary.”⁴ Further, Timotheus Höttges, CEO of Deutsche Telekom, previously stated in a video address on April 29, 2018, that with respect to the upcoming merger of Sprint Corporation and its subsidiaries and T-Mobile US Inc., “[Deutsche Telekom] will be able as the bigger partner to consolidate and control the new entity”⁵ Deutsche Telekom was a named defendant in an antitrust action filed by the Department of Justice, and was a party to the settlement agreement and order, because of its control over operations of the merger entity. Indeed, in an Interim Group Report published by Deutsche Telekom for January 1, 2020 to June 30, 2020, the company acknowledged that it caused certain actions to be made by the merged entity, including Sprint, to satisfy requirements levied by various government agencies, including the Department of Justice. For instance, Deutsche Telekom stated, “[w]ith the divestiture of Sprint’s prepaid business and the confirmation of an agreement to sell spectrum to DISH, on July 1, 2020, we fulfilled a major prerequisite of the U.S. authorities for approving the merger.”⁶

44. Deutsche Telekom has been aware of the Patents-in-Suit, including their applicability to telecommunications standards, since no later than June 7, 2013, when Deutsche Telekom entered into a license agreement for same. Deutsche Telekom was also aware prior to the April 1, 2020, merger that Sprint operated a nationwide telecommunications network comprising 3G, LTE, and 5G base stations and MMSCs practicing industry standards. Despite

⁴ <https://www.telekom.com/en/media/media-information/archive/new-t-mobile-us-with-combined-resources-to-launch-on-april-1-2020-598134>

⁵ <https://telekom.com/en/media/media-information/archive/merger-t-mobile-us-523420>

⁶ https://www.bvb.ro/info/Raportari/DTE/DTE-RAPORT_S1_2020_DEUTSCHE%20TELEKOM.pdf

having direction and control over Sprint operations, Deutsche Telekom AG has kept this infringing network operating and has made no effort to mitigate its infringement. Further, Deutsche Telekom AG has been negotiating with IPCOM to expand its patent license to include Sprint's network operation, thereby further demonstrating its control over Sprint as well as an agency relationship. However, Deutsche Telekom has so far declined to extend its license to include the Sprint network on reasonable terms. At the same time, Deutsche Telekom has benefited from, and stands to benefit in the future, from the revenues generated by the infringing Sprint network operations. Deutsche Telekom and the merged T-Mobile US Inc., including Sprint Corporation and its subsidiaries, have acted in concert with one another to continue the operation of the infringing Sprint network and to benefit financially therefrom.

45. In view of the foregoing, Deutsche Telekom, is vicariously liable for direct infringement of the '822, '909, and '147 Patents as a joint tortfeasor, for the reasons set forth in Counts I, II, and III.

46. Alternatively, Deutsche Telekom is liable for inducement under 35 U.S.C. § 271(b). More particularly, Deutsche Telekom has been aware of these patents yet has made decisions to not take a license and to continue Sprint's infringing network operations despite having taken a license for similar operations in the past. Deutsche Telekom's actions have aided and abetted Sprint's continued infringement, and Deutsche Telekom has intended to encourage and facilitate such infringement.

47. Because Deutsche Telekom has been aware of these patents since no later than June 7, 2013 and previously took a license for services that practice the same technical standards, Deutsche Telekom's infringement has been willful and is subject to treble damages.

The Sprint Network

48. Sprint is in the business of providing wireless telephony and data services to customers throughout the United States, including in the State of Texas. These wireless services are provided by a wireless network comprising, in part, a network of base transceiver stations for communication with mobile wireless devices (*e.g.*, customer handsets) over radio frequencies in compliance with certain industry standards.

49. Since no later than 2002, Sprint has deployed, owned, maintained, operated, and used 3G mobile telecommunication networks in conformance with certain 3rd Generation Partnership Project 2 (“3GPP2”) standards including at least CDMA2000 1xRTT and CDMA2000 1xEV-DO (Evolution-Data Optimized), hereinafter the “Sprint CDMA Network.” Much of the equipment installed in the accused Sprint CDMA Network, including base transceiver stations, was acquired, and installed and configured with assistance from Sprint’s longtime business partners, Ericsson and Nokia/Alcatel, who designed, manufactured, and sold such 3G telecommunications equipment.

50. Since no later than 2012, Sprint has deployed, owned, maintained, operated, and used an LTE network that has operated in conformance with various Third Generation Partnership Project (“3GPP”) LTE standards, hereinafter the “Sprint LTE Network.” Much of the equipment installed in the accused Sprint LTE Network, including base transceiver stations (a.k.a. eNodeBs) was acquired, and installed and configured with assistance from Sprint’s longtime business partners Ericsson and Nokia/Alcatel, who designed, manufactured, and sold such 4G telecommunications equipment.

51. Since no later than 2018, Sprint has deployed, owned, maintained, operated, and used a 5G network that has operated in conformance with certain 3GPP standards, hereinafter the

“Sprint 5G Network.” Much of the equipment installed in the accused Sprint 5G Network, including base transceiver stations was acquired, and installed and configured with assistance from Sprint’s longtime business partners Ericsson and Nokia/Alcatel, who designed, manufactured, and sold such 5G telecommunications equipment.

52. Sprint also provides SMS and MMS services in the Sprint Network. To support these services, Sprint owns and operates Multimedia Messaging Service Centers (MMSCs) that conform to standards developed by the 3GPP and the Open Mobile Alliance (“OMA”). Mavenir supplies MMSCs and/or other telecommunications equipment and services to Sprint in order to support the processing and transmission of SMS and MMS messages in the Sprint network.

53. The Sprint Network provides more than 50 million connections and operates in over 400 metropolitan markets, including the 125 largest U.S. metropolitan areas. By the end of the first quarter of 2019, the Sprint Defendants had a net operating revenue for fiscal year 2018 of at least \$33.3 billion. The Sprint CDMA Network, Sprint LTE Network, and Sprint 5G Network continue to operate as of the filing of this Amended Complaint.

54. T-Mobile US, Inc., and T-Mobile USA, Inc., are liable for the past and continuing infringement by Sprint network equipment which they acquired title to, ownership of, control over, and assumed operation of, at or subsequent to the time of the merger. Such infringement is unauthorized and unlicensed.

Sprint’s Third-Party Vendors and Partners

55. As discussed above, much of the equipment in Sprint’s CDMA, LTE and 5G Networks was acquired from Sprint’s longtime business partners, Ericsson and Nokia/Alcatel, which have supplied CDMA, LTE, and 5G telecommunications equipment to Sprint, including

3G, LTE, and 5G base stations. This includes 3G and LTE base stations from Alcatel, which merged with Nokia in 2016.

56. In addition, Sprint contracts with Mavenir for MMSCs and/or other telecommunications equipment and messaging services to provide message processing functions for its SMS and MMS services. Mavenir has a complex corporate history, and it comprises portions of Comverse, Inc. and Acision, the combination of which was known as Xura between 2015 and 2017. Sprint uses MMSCs and/or other telecommunications equipment and messaging services branded under all of these company names, which are now controlled by Mavenir.

Ericsson

57. Sprint and Ericsson’s partnership extends beyond a mere customer-supplier relationship. It also includes subcontracting the day-to-day operation of Sprint’s telecommunications network to Ericsson, as well as jointly developing and deploying LTE technology.

58. More particularly, in or around 2009, Sprint began outsourcing the day-to-day operation of at least portions of its network to Ericsson. Under the terms of their contract, Ericsson “provides day-to-day maintenance and monitoring of the network of cell towers and call switching equipment,” while Sprint “maintain[s] ownership and control of [Sprint’s] network, including future investment and strategy.”⁷ To facilitate this transfer of control to Ericsson, Sprint transferred 6,000 employees to Ericsson. Ericsson stated that this contract represented proof “of a long-term partnership between Sprint and Ericsson.”⁸ In 2016, Sprint

⁷ <http://abcnews.go.com/Business/story?id=8046767&page=1>.

⁸ *Id.*

and Ericsson announced that they had renewed portions of the 2009 contract. Both Sprint and Ericsson touted this renewal as a continuation of their long-running partnership.

59. Sprint and Ericsson also worked together in developing and deploying Sprint's LTE Network. For example, in March 2017, Sprint and Ericsson carried out the industry's first demonstration of gigabit time division duplex LTE ("LTE-TDD") system over 60 MHz of spectrum at the 2017 Mobile World Congress. Sprint claimed that this technology would allow Sprint customers to "have a great experience using 4K and even 8K TV and applications such as HD Virtual Reality on the Sprint LTE Plus network."⁹

60. Ericsson maintains a significant physical presence in Texas and this judicial district. Ericsson's headquarters are located at 6300 Legacy Drive, Plano, Texas 75024, which is within this judicial district. Ericsson employs approximately 4500 employees in its Plano headquarters, including hardware and software engineers that have been involved in the development of 3G and LTE base stations, wherein such base stations perform the methods of many of the asserted claims. Ericsson also maintains a 300,000 square-foot factory in Lewisville, Texas, also within this District, which is directed to the development and production of network base stations.

61. Ericsson also operates a design center in Austin, Texas, that focuses on the design and development of Application Specific Integrated Circuits ("ASICs") that "are at the core of

⁹ <https://www.ericsson.com/en/press-releases/2017/2/sprint-and-ericsson-to-demonstrate-live-high-speed-gigabit-class-data-speeds-over-lte-tdd>.

all Ericsson Radio Systems and can be seen as processors that are specifically made for the computation needs of mobile infrastructure.”¹⁰

62. Upon information and belief, Ericsson’s Plano headquarters and its Lewisville and Austin facilities possess highly relevant information about the design, development, standards-compliance, and operation of the accused networks and services, and employ individuals having specialized knowledge about the same.

Nokia/Alcatel

63. Nokia also has a significant presence in Texas and this judicial district. Nokia runs both a data center and training center in Plano, Texas and a manufacturing facility in Lewisville, Texas, where, upon information and belief, Nokia possesses relevant information concerning the accused networks and services.

64. In 2015, Alcatel invested \$55 million in a regional headquarters in Plano, Texas. After acquiring a controlling interest in Alcatel, Nokia rebranded this Plano office as a Nokia location and has since operated it as a training center. This facility services “customers, partners and employees worldwide” and “deliver[s] a top-quality learning experience, tailored to [Nokia’s] customers’ specific requirements and preferences.”¹¹ Upon information and belief, Nokia’s Plano center educates customers on the function and operation of the accused networks and services and employs persons with this relevant knowledge.

65. Nokia maintains additional offices throughout the State of Texas. Most notably, Nokia maintains its U.S. headquarters in Dallas, Texas, where it employs thousands of

¹⁰ <https://www.ericsson.com/en/press-releases/2017/10/ericsson-opens-5g-design-site-in-austin-texas>.

¹¹ <https://learningstore.nokia.com/locations/files/US-Plano.pdf>.

employees, including hardware and software engineers who have been involved in the development of the Sprint's 3G, LTE, and 5G network base stations and have knowledge about the design, operation, standards-compliance, and maintenance of such equipment. Nokia also runs an innovation center in Dallas, Texas where it employs "research scientists and engineers" that, per Nokia, have "invented many of [Nokia's] fundamental technologies that provide the foundation for information and communications networks and all digital devices and systems."¹² These "fundamental technologies" encompass the accused networks and services. Further, Nokia operates a training center in Irving, Texas that it describes as offering the same relevant educational services as its Plano, Texas location.

Mavenir

66. Mavenir maintains a significant physical presence in the State of Texas. Its headquarters are located at 1600 International Parkway, Suite 200, Richardson, Texas 75081. Mavenir employs over 1,000 employees at this location, including a wide range of hardware and software engineers that design and develop Mavenir's radio access network products and features. Upon information and belief, Mavenir's Richardson location employs individuals that have specialized knowledge about the design, development, operation, and configuration of MMSCs and/or other telecommunications equipment used to support the processing of SMS and MMS messages in the Sprint network. Thus, Mavenir's Richardson location possesses relevant documents, and employs witnesses concerning the same.

¹² <https://www.nokia.com/about-us/sustainability/our-approach/innovation/>.

COUNT I

Infringement of the '822 Patent by Sprint

67. All preceding paragraphs are incorporated by reference as if fully restated herein.

68. Sprint has deployed, owned, maintained, operated, and used a nationwide wireless telecommunication network comprising the Sprint CDMA Network, Sprint LTE Network, and Sprint 5G Network. These networks are configured to, and have been used to, receive and transmit SMS and MMS messages with devices connected to the network, such as customer handsets. These networks include MMSCs or similar equipment for processing message traffic and base station transceivers for sending messages to devices connected to the network.

69. Sprint's networks comply with, or implement in pertinent respects, technical standards promulgated by 3GPP, 3GPP2 and the Open Mobile Alliance (OMA) that describe the operation of messaging services. These include, for example:

- 3GPP TS 23.140 version 6.16.0 Release 6 (2009-04) ("TS 23.140");
- 3GPP TS 26.140 version 10.0.0 Release 10 (2011-04) ("TS 26.140");
- 3GPP2 X.S0016-000-B version 1.0 Revision B (June 2004) ("3GPP2 X.S0016-000-B");
- 3GPP2 X.S0016-310-0 version 2.0 (June 2004) ("3GPP2 X.S0016-310-0");
- Multimedia Messaging Service, Architecture Overview, Approved Version 1.1 – 15 Jul 2004, Open Mobile Alliance, OMA-WAP-MMS-ARCH-V1_1-20040715-A ("OMA MMS Architecture");
- Multimedia Messaging Service Client Transactions, Approved Version 1.2 – 01 Mar 2005, Open Mobile Alliance, OMA-MMS-CTR-V1_2-20050301-A ("OMA MMS Client Transactions"); and
- Multimedia Messaging Service Encapsulation Protocol, Approved Version 1.2 – 01 Mar 2005, Open Mobile Alliance, OMA-MMS-ENC-V1_2-20050301-A ("OMA MMS Encapsulation").

70. Defendants have directly infringed, either literally or under the doctrine of equivalents, and continue to infringe, at least claims 1, 32 and 33 of the '822 patent under 35

U.S.C. § 271(a) by transmitting messages in its telecommunications networks using MMSCs and/or other telecommunications equipment that comply with, or implement in pertinent respects, the relevant industry 3GPP, 3GPP2 and OMA messaging standards. By way of non-limiting example, Sprint has directly infringed the claimed methods by transmitting dedicated MMS messages using wireless access protocol (“WAP”) Push messages that include header and data portions that satisfy the claims. *See, e.g.*, TS 23.140, §§ 1, 4 and 5.2; OMA MMS Architecture, § 6; OMA MMS Client Transactions, § 8; OMA MMS Encapsulation, § 8; and 3GPP2 X.S0016-310-0, § 3.2. In the foregoing example, the dedicated MMS messages include, for instance, MMS notification messages. *Id.*

71. Deutsche Telekom and the merged T-Mobile U.S. Inc., including Sprint Corporation and its subsidiaries, have acted in concert with one another to continue the operation of the infringing Sprint Network described above to infringe, either literally or under the doctrine of equivalents, at least claims 1, 32, and 33, and to benefit financially therefrom. Deutsche Telekom has therefore benefited from, and stands to benefit in the future, from the revenues generated by the above infringing Sprint Network operations. In view of the foregoing, Deutsche Telekom, is vicariously liable for direct infringement of the ’822 Patent as a joint tortfeasor, for the reasons set forth above.

72. On or about November 15, 2019, Sprint received a letter from IPCom identifying the ’822 patent, indicating the need for a license, and inviting licensing negotiations. Sprint did not take, and does not have, a license to the ’822 Patent and thus its use of the invention is unauthorized. Sprint has taken no action to avoid or mitigate its infringement despite an objectively high likelihood that its actions constitute infringement. This Complaint provides yet additional notice of Sprint’s continuing infringement of the ’822 Patent. Additionally, Deutsche

Telekom has been aware of the '822 patent and its applicability to the pertinent telecommunications standards since no later than June 7, 2013, when it entered into a license agreement that included the patent to cover substantially the same type of infringing operations. Prior to the filing of this lawsuit, Deutsche Telecom was made even more acutely aware of the '822 patent and its applicability to Sprint's network in the course of licensing negotiations with ICom. Nevertheless, Deutsche Telecom has continued its infringing operations via its Sprint subsidiaries. For at least these reasons, Defendants' infringement has been and continues to be willful.

73. As a direct and proximate consequence of Defendants' infringement of the '822 Patent, ICom has suffered damages in an amount not yet determined for which ICom is entitled to relief.

COUNT II

Infringement of the '909 Patent by Sprint

74. All preceding paragraphs are incorporated by reference as if fully restated herein.

75. Defendants have directly infringed, either literally or under the doctrine of equivalents, at least claims 1, 3 and 6-10 of the '909 patent under 35 U.S.C. § 271(a) by transmitting messages using MMSCs and/or other telecommunications equipment (e.g., base stations) that comply with, or implement in pertinent respects, the relevant industry 3GPP, 3GPP2 and OMA messaging standards. By way of non-limiting example, Defendants have directly infringed these claims by transmitting dedicated MMS messages using WAP Push messages. *See, e.g.*, TS 23.140, §§ 1, 4 and 5.2; OMA MMS Architecture Overview, § 6; OMA MMS Client Transactions, § 8; OMA MMS Encapsulation Protocol, § 8; and 3GPP2 X.S0016-

310-0, § 3.2. In the foregoing example, the dedicated MMS messages include, for instance, MMS notification messages. *Id.*

76. Deutsche Telekom and the merged T-Mobile US Inc., including Sprint Corporation and its subsidiaries, have acted in concert with one another to continue the operation of the infringing Sprint Network described above to infringe, either literally or under the doctrine of equivalents, at least claims 1, 3 and 6-10, and to benefit financially therefrom. Deutsche Telekom has therefore benefited from, and stands to benefit in the future, from the revenues generated by the above infringing Sprint Network operations. In view of the foregoing, Deutsche Telekom, is vicariously liable for direct infringement of the '909 Patent as a joint tortfeasor, for the reasons set forth above.

77. On or about November 15, 2019, Sprint received a letter from IPCom identifying the '909 patent, indicating the need for a license, and inviting licensing negotiations. Sprint did not take, and does not have, a license to the '909 Patent and thus its use of the invention is unauthorized. Sprint has taken no action to avoid or mitigate its infringement despite an objectively high likelihood that its actions constitute infringement. This Complaint provides yet additional notice of Sprint's continuing infringement of the '909 Patent. Additionally, Deutsche Telekom has been aware of the '909 patent and its applicability to the pertinent telecommunications standards since no later than June 7, 2013, when it entered into a license agreement that included the patent to cover substantially the same type of infringing operations. Prior to the filing of this lawsuit, Deutsche Telecom was made even more acutely aware of the '909 patent and its applicability to Sprint's network in the course of licensing negotiations with IPCom. Nevertheless, Deutsche Telecom has continued its infringing operations via its Sprint

subsidiaries. For at least these reasons, Defendants' infringement has been and continues to be willful.

78. As a direct and proximate consequence of Defendants' infringement of the '909 Patent, IPCom has suffered damages in an amount not yet determined for which IPCom is entitled to relief.

COUNT III

Infringement of the '147 Patent by Sprint

79. All preceding paragraphs are incorporated by reference as if fully restated herein.

80. The Sprint LTE Network includes base stations known as eNodeBs for wirelessly communicating with user equipment ("UE", *e.g.*, smart phones). The 4G LTE technical standards promulgated by 3GPP provide for a signaling protocol called Dual Connectivity. Dual Connectivity enables a wireless network to provide additional radio resources to improve reception by user equipment. This feature connects a UE to a first eNodeB serving as a Master eNodeB (MeNB) and then also connecting the UE to a second eNodeB serving as a Secondary eNodeB (SeNB).

81. Dual connectivity is described in several 3GPP technical standards, including at least:

- 3GPP TS 36.300 V. 12.4.0;
- 3GPP TS 36.331 V. 12.4.0; and
- 3GPP TS 36.213 V. 12.4.0.

The Defendants have deployed network equipment that complies with, or implements in pertinent part, the dual connectivity feature described in the applicable 3GPP technical standards.

82. The Defendants have directly infringed, either literally or under the doctrine of equivalents, at least claims 32-36 of the '147 patent under 35 U.S.C. § 271(a) by using, installing, testing, and/or maintaining eNodeBs and other equipment in Sprint's networks resulting in actual use of the Dual Connectivity feature. By way of examples, infringement has occurred and continues to occur when an LTE base station is used in conjunction with an LTE small-cell to both communicate with a UE. By way of further example, infringements occur when an LTE station and a 5G station both communicate with a UE. By way of yet a further example, infringements occur when an LTE base station and a second LTE base station both communicate with a UE.

83. The 4G LTE technical standards promulgated by 3GPP also provide for "handover," a procedure that changes the serving cell of a UE in an RRC_CONNECTED state. Handover enables a wireless network to transfer a UE's connection from one eNodeB to another eNodeB, thus improving reception by the UE. This occurs, for example, when a UE is moving further away from a first eNodeB to which it is connected, and closer to a second eNodeB.

84. Handover is described in several 3GPP technical standards, including at least:

- 3GPP TS 36.300 V8.9.0;
- 3GPP TS 36.331 V8.7.0; and
- 3GPP TS 36.213 V8.8.0.

The Defendants have deployed network equipment that complies with, or implements in pertinent part, the handover feature described in the applicable 3GPP technical standards.

85. The Defendants have directly infringed, either literally or under the doctrine of equivalents, at least claims 1-4 and 6 of the '147 patent under 35 U.S.C. § 271(a) by using, installing, testing, and/or maintaining eNodeBs and other equipment in Sprint's networks

resulting in actual use of the handover feature. By way of example, infringement has occurred and continues to occur when eNodeBs in Sprint's network use the handover feature to transfer UE's between serving cells.

86. Deutsche Telekom and the merged T-Mobile US Inc., including Sprint Corporation and its subsidiaries, have acted in concert with one another to continue the operation of the infringing Sprint Network described above to infringe, either literally or under the doctrine of equivalents, at least claims 1-4, 6, and 32-36, and to benefit financially therefrom. Deutsche Telekom has therefore benefited from, and stands to benefit in the future, from the revenues generated by the above infringing Sprint Network operations. In view of the foregoing, Deutsche Telekom, is vicariously liable for direct infringement of the '147 Patent as a joint tortfeasor, for the reasons set forth above.

87. On or about November 15, 2019, Sprint received a letter from IPCom identifying the '147 Patent, indicating the need for a license, and inviting licensing negotiations. Sprint did not take, and does not have, a license to the '147 Patent and thus its use of the invention is unauthorized. Sprint has taken no action to avoid or mitigate its infringement despite an objectively high likelihood that its actions constitute infringement. This Complaint provides yet additional notice of Sprint's continuing infringement of the '147 Patent. Additionally, Deutsche Telekom has been aware of the '147 patent and its applicability to the pertinent telecommunications standards since no later than June 7, 2013, when it entered into a license agreement that included the patent to cover substantially the same type of infringing operations. Prior to the filing of this lawsuit, Deutsche Telekom was made even more acutely aware of the '147 patent and its applicability to Sprint's network in the course of licensing negotiations with IPCom. Nevertheless, Deutsche Telekom has continued its infringing operations via its Sprint

subsidiaries. For at least these reasons, Defendants' infringement has been and continues to be willful.

88. As a direct and proximate consequence of Defendants' infringement of the '147 Patent, IPCom has suffered damages in an amount not yet determined for which IPCom is entitled to relief.

DEMAND FOR JURY TRIAL

89. IPCom hereby demands a trial by jury on all claims and issues so triable.

PRAYER FOR RELIEF

WHEREFORE, IPCom respectfully requests judgment for themselves and against Defendants as follows:

- a. that this Court adjudge that the Defendants have infringed each of the Patents-in-Suit;
- b. that this Court ascertain and award IPCom damages under 35 U.S.C. § 284 sufficient to compensate for Defendants' infringement, including but not limited to infringement occurring before the filing of this lawsuit;
- c. that this Court adjudge that the Defendants have willfully infringed one or more of the Patents-in-Suit and award IPCom treble damages;
- d. that this Court ascertain and award IPCom any post-judgment ongoing royalties under 35 U.S.C. § 284 as may be appropriate;
- e. that this Court award any applicable pre-judgment and post-judgment interest;
- f. that this Court find this case to be exceptional and award IPCom its attorneys' fees pursuant to 35 U.S.C. § 285; and

- g. that this Court award IPCom such other relief at law or in equity as the Court deems just and proper.

DATED: May 19, 2021

Respectfully submitted,

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Counsel for Plaintiff

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing document and attachments were filed electronically in compliance with Local Rule CV-5(a). As such, this notice was served on all counsel of record who have consented to electronic service as this district requires in accordance with Local Rule CV-5(a)(3)(A) on this 19th day of May, 2021.

/s/ Martin J. Black
Martin J. Black