UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION

TRAXCELL TECHNOLOGIES, LLC, Plaintiff,	)	
	)	**Civil Action No. 6:22-cv-00991**
v.	)	
T-MOBILE USA, INC., SPRINT COMMUNICATIONS COMPANY, LP, SPRINT CORPORATION, SPRINT SPECTRUM, LP AND SPRINT SOLUTIONS, INC. ERICSSON, INC., NOKIA OF AMERICA CORP., NOKIA SOLUTIONS AND NETWORKS OY, and SAMSUNG ELECTRONICS AMERICA, INC. Defendants.	)	**JURY TRIAL DEMANDED**

PLAINTIFF'S SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Traxcell Technologies, LLC ("Traxcell") files this Second Amended Complaint,[1] and demand for jury trial seeking relief from patent infringement by T-Mobile USA, Inc. ("T-Mobile"); Sprint Spectrum LLC and Sprint Solutions, Inc. (collectively "Sprint");[2] Ericsson, Inc. ("Ericsson"); Nokia of America Corp. ("Nokia Corp."); Nokia Solutions and Networks Oy ("Nokia Finland"); and, Samsung Electronics America, Inc. ("Samsung") (collectively referred to as "Defendants"), alleging infringement of the claims of U.S. Pat. No. 10,448,209 ("the '209 patent") and U.S. Pat. No. 10,390,175 ("the '175 patent") (collectively referred to as "Patents-in-Suit"), as follows:[3]

I. THE PARTIES

[1] The '209 patent, the '175 patent, and the '196 patent have prosecution history disclaimers for at least the claim term *computer*.
[2] Sprint and T-Mobile merged beginning on April 29, 2018 and was approved April 1, 2020.
[3] This Second Amended Complaint is filed before any defendant has answered.

1. Plaintiff Traxcell is a Texas Limited Liability Company, with its principal place of business located at Traxcell Technologies LLC, 617 North 4th Street, Suite "S," Waco, TX 76701.

2. T-Mobile Wireless is a Delaware corporation with its principal place of business at One T-Mobile Way, Basking Ridge, New Jersey and a registered agent for service of process at CT Corp System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136. On information and belief, T-Mobile Wireless Personal Communications, LP sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 2448 W Loop 340 Suite 24a, Waco, TX 76711.

3. Ericsson is a corporation, with its principal place of business located at 6300 Legacy Drive, Plano, Texas 75024 and may be served with process at its registered agent Capitol Corporate Services, Inc. 206 E. 9th Street, Suite 1300, Austin, Texas 78701. On information and belief, Ericsson sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district.

4. (Intentionally left blank)

5. (Intentionally left blank)

6. Sprint Spectrum LLC is a Delaware Limited Liability Corporation with its principal place of business at 6200 Sprint Parkway, Overland Park, Kansas 66251 and a registered agent for service at Corporation System, 211 E. 7th Street, Suite 620, Austin, Texas 78701-3218. On information and belief, Sprint Spectrum, LP sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that

perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 2448 W Loop 340 Suite 24a, Waco, TX 76711.

7. Sprint Solutions, Inc. is as Delaware Corporation with its principal place of business at 6200 Sprint Parkway, Overland Park, Kansas 66251 and a registered agent for service at Corporation System, 211 E. 7th Street, Suite 620, Austin, Texas 78701-3218. On information and belief, Sprint Solutions, Inc. sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 2448 W Loop 340 Suite 24a, Waco, TX 76711.

8. Nokia Corp is a corporation organized and existing under the laws of Delaware, with a principal places of business located at (1) 6000 Connection Drive, MD E4-400, Irving, TX 75039; (2) 601 Data Dr., Plano, TX 75075; and, (3) 2400 Dallas Pkwy., Plano, TX 75093, and a registered agent for service of process at National Registered Agents, Inc, 16055 Space Center, Suite 235, Houston, TX 77062. On information and belief, Nokia Corp. sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 10431 Morado Cir building 5 suite 200, Austin, TX 78759.

9. Nokia Finland is a is a corporation organized and existing under the laws of Finland, with a principal place of business 6000 Connection Drive, MD E4-400, Irving, TX 75039 and a registered agent for service of process at National Registered Agents, Inc, 16055 Space Center, Suite 235, Houston, TX 77062. On information and belief, Nokia sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces

products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 10431 Morado Cir building 5 suite 200, Austin, TX 78759. (Nokia Corp. and Nokia Finland are collectively referred to as "Nokia.")

10. Samsung is a corporation organized and existing under the laws of the state of New York, maintains its principal place of business at 85 Challenger Road, Ridgefield Park, NJ 07660, and has a registered agent for service of process at CT Corporation System, located at 1999 Bryan Street. Suite 900, Dallas, TX 75201. On information and belief, Samsung America sells and offers to sell products and services throughout Texas, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in Texas and this judicial district, including at 3900 N Capital of Texas Hwy, Austin, TX 78746.

II. JURISDICTION AND VENUE

11. This is an action for patent infringement arising under the patent laws of the U.S., 35 U.S.C. §§ 1 et. seq. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

12. This Court has personal jurisdiction over T-Mobile because: T-Mobile is present within or has minimum contacts within the State of Texas and this judicial district; T-Mobile has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; T-Mobile regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from T-Mobile's business contacts and other activities in the State of Texas and in this judicial district.

13. Venue is proper in this district under 28 U.S.C. § 1400(b). T-Mobile has committed acts of infringement and has a regular and established place of business in this District.

14. This Court has personal jurisdiction over Ericsson because: Ericsson is present within or has minimum contacts within the State of Texas and this judicial district; Ericsson has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Ericsson regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Ericsson's business contacts and other activities in the State of Texas and in this judicial district.

15. Venue is proper in this district under 28 U.S.C. § 1400(b). Ericsson has committed acts of infringement and has a regular and established place of business in this District, including at least 1703 W 5th St, Austin, TX 78703.

16. This Court has personal jurisdiction over Sprint because: Sprint is present within or has minimum contacts within the State of Texas and this judicial district; Sprint has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Sprint regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Sprint's business contacts and other activities in the State of Texas and in this judicial district.

17. Venue is proper in this district under 28 U.S.C. § 1400(b). Sprint has committed acts of infringement and has a regular and established place of business in this District.

18. This Court has personal jurisdiction over Nokia Corp. because: Nokia Corp. is present within or has minimum contacts within the State of Texas and this judicial district; Nokia Corp. has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Nokia Corp. regularly conducts business within the State of Texas and

within this judicial district; and Plaintiff's cause of action arises directly from Nokia Corp.'s business contacts and other activities in the State of Texas and in this judicial district.

19. Venue is proper in this district under 28 U.S.C. § 1400(b) because Nokia Corp. has committed acts of infringement and has a regular and established place of business in this District.

20. This Court has personal jurisdiction over Nokia Finland because: Nokia Finland is present within or has minimum contacts within the State of Texas and this judicial district; Nokia Finland has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Nokia Finland regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Nokia Finland's business contacts and other activities in the State of Texas and in this judicial district.

21. Venue is proper in this district under 28 U.S.C. § 1400(b) because Nokia Finland has committed acts of infringement and has a regular and established place of business in this District, including at least 1703 W 5th St, Austin, TX 78703.

22. This Court has personal jurisdiction over Samsung because: Samsung is present within or has minimum contacts within the State of Texas and this judicial district; Samsung has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Samsung regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Samsung's business contacts and other activities in the State of Texas and in this judicial district.

23. Venue is proper in this district under 28 U.S.C. § 1400(b) because Samsung has committed acts of infringement and has a regular and established place of business in this District.

V. INFRINGEMENT (‘209 Patent (Attached as exhibit A))

24. On October 15, 2019, U.S. Patent No. 10,448,209 (“the ‘209 patent”) entitled “WIRELESS NETWORK AND METHOD WITH COMMUNICATIONS ERROR TREND ANALYSIS” was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the ‘209 patent by assignment.

25. The ‘209 Patent’s Abstract states, “A mobile wireless network and a method of operation provide tracking of mobile devices and case file generation initiated upon detecting communications errors. The case files contain trends corresponding to the communications errors by analyzing parameters of the communications. The trends are compared to stored patterns that represent particular error types and resolutions so that corrective action can be taken on the network.”

A. T-Mobile and Sprint

26. The preliminary exemplary chart attached as Exhibits B and C provides notice of Traxcell’s allegations of infringement against T-Mobile and Sprint.[4] For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON;[5] and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[6]

[4] Sprint network architecture is different than T-Mobile network architecture.
[5] It is understood that at least a portion of Sprint’s C-SON is licensed from Cisco, but C-SON not provided by Cisco would not be licensed.
[6] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

27. T-Mobile and Sprint make, use, offer to sell, and/or sell within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions such that T-Mobile and Sprint infringe claims 1–18 of the ‘209 patent, literally or under the doctrine of equivalents.

28. More specifically, T-Mobile and Sprint make, use, offers to sell, and/or sell within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions for monitoring trends such that T-Mobile and Sprint infringe claims 1–18 of the ‘209 patent, literally or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it. T-Mobile and Sprint’s equipment providers include Ericsson, Nokia and Samsung.

29. Again more specifically, T-Mobile and Sprint put its wireless network into use, and or causes T-Mobile and Sprint subsidiaries or family of companies, vendors, partners to put components of the wireless network in use, and controls it by using the wireless network to perform or have performed on it the claimed functions, as charted in Exhibits B and C. For example, a component of the system of computers that is used in providing access to an indication of location of a wireless device may be controlled by one or more T-Mobile and Sprint subsidiaries or family of companies, vendors, or partners. In addition to Exhibits B and C and the facts alleged herein, additional relevant facts are recited in Traxcell’s Infringement Contentions.

30. Again more specifically, T-Mobile and Sprint receive the benefits of the claims from the patent’s teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless

network. Benefits of practicing the claims of the '209 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '209 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '209 patent enable network operators to allocate resources in a very efficient way and reduce costs.

31. Again more specifically, T-Mobile And Sprint receive the benefits of the claims of the '209 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device; and,

    i. the like.

32. T-Mobile and Sprint put the inventions claimed by the '209 Patent into service (i.e., used them); but for T-Mobile and Sprint's actions, the claimed-inventions embodiments involving T-Mobile and Sprint's products and services would never have been put into service. T-Mobile's acts complained of herein caused those claimed-invention

embodiments as a whole to perform, and T-Mobile and Sprint obtaining monetary and commercial benefit from it.

33. Defendant has and continues to induce infringement from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile and Sprint on October 31, 2017. T-Mobile has actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (e.g., U.S. wireless networks, wireless-network components that use performance measurements to suggest corrective actions and controlling access to location information) such to cause infringement claims 1-18 of the '209 patent, literally or under the doctrine of equivalents. Moreover, T-Mobile and Sprint have known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to T-Mobile by the U.S. Patent and Trademark Office during prosecution of one of T-Mobile and Sprint's patent applications. Further, Sprint, with which T-Mobile merged, received a letter from Traxcell in 2007 enclosing a copy of the application that issued as the '284 patent. More specifically, T-Mobile and Sprint have known or should have known of the '209 patent since being sued previously by Traxcell on other family related patents and a reasonable company would monitor the family of patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Sprint's lawyers that he had other family related patents.

34. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile and Sprint on October 31, 2017. T-Mobile and Sprint have actively encouraged or

instructed others (e.g., its customers, and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, T-Mobile and Sprint have known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to T-Mobile and Sprint by the U.S. Patent and Trademark Office during prosecution of one of T-Mobile/Sprint's patent applications. More specifically, T-Mobile and Sprint have known or should have known of the '209 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile and Sprint on other family related patents and a reasonable company would monitor the family of patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Sprint's lawyers in the other litigation that he had other family related patents.

35. T-Mobile and Sprint have caused and will continue to cause Traxcell damage by infringing the '209 patent.

B. Ericsson

36. The preliminary exemplary chart attached as Exhibit H provides notice of Traxcell's allegations of infringement against Ericsson for its network equipment supplied to T-Mobile and Sprint. For purposes of this complaint, a wireless network comprises at least:

(1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[7]

37. Ericsson makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Ericsson infringes claims 1–18 of the '209 patent, literally or under the doctrine of equivalents.

38. More specifically, Ericsson makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Ericsson infringes claims 1–18 of the '209 patent, literally or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

39. Again more specifically, Ericsson receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network, including through at least tracking a wireless device and assessing its performance. Benefits of practicing the claims of the '209 include the ability to tune a wireless network

[7] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '209 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '209 patent enable network operators to allocate resources in a very efficient way and reduce costs.

40. Again more specifically, Ericsson receives the benefits of the claims of the '209 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device;

    i. Tracking a wireless devices; and,

    j. the like.

41. Ericsson put the inventions claimed by the '209 Patent into service (i.e., used them); but for Ericsson's actions, the claimed-inventions embodiments involving Ericsson's products and services would never have been put into service. Ericsson's acts

complained of herein caused those claimed-invention embodiments as a whole to perform, and Ericsson obtaining monetary and commercial benefit from it.

42. Defendant has and continues to induce infringement from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile on October 31, 2017, where Ericsson assisted in the defense as discussed herein. Ericsson has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[8] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Ericsson network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Moreover, Ericsson has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Ericsson by the U.S. Patent and Trademark Office during prosecution of one of Ericsson's patent applications. More specifically, Ericsson has known or should have known of the '209 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile on other family related patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by T-Mobile's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents and a reasonable company

[8] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum LLC; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

would monitor the family of patents. Further, Ericsson was put on Notice of Traxcell's family of patents by the letter attached as Exhibit F.

43. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile on October 31, 2017, where Ericsson assisted in the defense as discussed herein. Ericsson has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[9]Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Ericsson network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Ericsson has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Ericsson by the U.S. Patent and Trademark Office during prosecution of one of Ericsson's patent applications. More specifically, Ericsson has known or should have known of the '209 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile on other family related patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by T-Mobile's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents and a reasonable company

[9] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum LLC; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

would monitor the family of patents. Further, Ericsson was put on Notice of Traxcell's family of patents by the letter attached as Exhibit F.

44. Ericsson has caused and will continue to cause Traxcell damage by infringing the '209 patent.

C. Nokia

45. The preliminary exemplary chart attached as Exhibit B provides notice of Traxcell's allegations of infringement against Nokia. For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[10]

46. Nokia makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Nokia infringes claims 1–18 of the '209 patent, literally or under the doctrine of equivalents.

47. More specifically, Nokia makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Nokia infringes claims 1–18 of the '209 patent, literally or

[10] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

48. Again more specifically, Nokia receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network. Benefits of practicing the claims of the '209 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '209 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '209 patent enable network operators to allocate resources in a very efficient way and reduce costs.

49. Again more specifically, Nokia receives the benefits of the claims of the '209 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device; and,

    i. the like.

50. Nokia put the inventions claimed by the '209 Patent into service (i.e., used them); but for Nokia's actions, the claimed-inventions embodiments involving Nokia's products and services would never have been put into service. Nokia's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Nokia obtaining monetary and commercial benefit from it.

51. Nokia has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[11] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Nokia network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Moreover, Nokia has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Nokia by the U.S. Patent and Trademark Office during prosecution of one of Nokia's patent applications. More specifically, Nokia has known or should have known of the '209 patent since it was previously sued by Traxcell on other family related patents. As well, a letter dated December 5, 2007 was sent to Nokia to discuss the patent applications sent to Nokia in August of 2007, attached as Exhibit D. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Nokia's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents.

[11] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

52. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit. Nokia has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[12] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Nokia has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Nokia by the U.S. Patent and Trademark Office during prosecution of one of Nokia's patent applications. More specifically, Nokia has known or should have known of the '209 patent since it was sued in a lawsuit brought by Traxcell against Nokia on other family related patents. As well, a letter dated December 5, 2007 was sent to Nokia to discuss the patent applications sent to Nokia in August of 2007, attached as Exhibit D. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Nokia's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents. Nokia was assisting T-Mobile in its defense.

53. Nokia has caused and will continue to cause Traxcell damage by infringing the '209 patent.

[12] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by or merged with T-Mobile USA, Inc.

D. Samsung

54. The preliminary exemplary chart attached as Exhibit C[13] provides notice of Traxcell's allegations of infringement against Samsung. For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[14]

55. Samsung makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Samsung infringes claims 1–18 of the '209 patent, literally or under the doctrine of equivalents.

56. More specifically, Samsung makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Samsung infringes claims 1–18 of the '209 patent, literally or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

[13] Chart contains Sprint network infrastructure and components by Samsung.
[14] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

57. Again more specifically, Samsung receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network. Benefits of practicing the claims of the '209 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '209 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '209 patent enable network operators to allocate resources in a very efficient way and reduce costs.

58. Again more specifically, Samsung receives the benefits of the claims of the '209 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device; and,

    i. the like.

59. Samsung put the inventions claimed by the '209 Patent into service (i.e., used them); but for Samsung's actions, the claimed-inventions embodiments involving Samsung's products and services would never have been put into service. Samsung's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Samsung obtaining monetary and commercial benefit from it.

60. Samsung has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[15] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Samsung network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Moreover, Samsung has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Samsung by the U.S. Patent and Trademark Office during prosecution of one of Samsung's patent applications. More specifically, Samsung has known or should have known of the '209 patent since it was previously sued by Traxcell on other family related patents and a reasonable company would monitor the family of patents. As well, in 2007, Samsung was contacted by letter concerning Traxcell's patent applications. No response was received.

61. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit. Samsung has actively encouraged or instructed others (e.g., its customers, such

[15] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

as T-Mobile, the Sprint Companies,[16] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '209 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Samsung has known and should have known of the '209 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Samsung by the U.S. Patent and Trademark Office during prosecution of one of Samsung's patent applications. More specifically, Samsung has known or should have known of the '209 patent since it was sued in a lawsuit brought by Traxcell against Samsung on other family related patents and a reasonable company would monitor the family of patents. As well, in 2007, Samsung was contacted by letter concerning Traxcell's patent applications. No response was received.

62. Samsung has caused and will continue to cause Traxcell damage by infringing the '209 patent.

VII. INFRINGEMENT '175 Patent (Attached as exhibit E))

63. On August 20, 2019, U.S. Patent No. 10,390,175 ("the '175 patent"), attached as Exhibit E, entitled "Mobile wireless device tracking and notification system" was duly

[16] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the '175 patent by assignment.

64. The '175 Patent's Abstract states, "A mobile wireless network and a method of operation provide tracking of mobile devices either in a passive mode or an active mode. In the passive mode, fault detection triggers generation of a case file associated with the device experiencing the fault. In the active mode, a user of the system can specify tracking mobile devices by sector or one or more mobile devices by identifier. Notifications can be generated in response to detection of a fault, or when a device enters a predetermined geographic region.."

A. T-Mobile and Sprint

65. The preliminary exemplary chart attached as Exhibits I and J provide notice of Traxcell's allegations of infringement against T-Mobile and Sprint. For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[17]

66. T-Mobile and Sprint make, use, offer to sell, and/or sell within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions such that T-Mobile and Sprint infringe claims 1–18 of the '175 patent, literally or under the doctrine of equivalents.

[17] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

67. More specifically, T-Mobile and Sprint make, use, offer to sell, and/or sell within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions for monitoring trends such that T-Mobile and Sprint infringe claims 1–18 of the '175 patent, literally or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it. Sprint and T-Mobile's equipment providers include Ericsson, Nokia and Samsung.

68. Again more specifically, T-Mobile and Sprint put its wireless network into use, and or causes T-Mobile and Sprint subsidiaries or family of companies, vendors, partners to put components of the wireless network in use, and controls it by using the wireless network to perform or have performed on it the claimed functions, as charted in Exhibits I and J. For example, a component of the system of computers that is used in providing access to an indication of location of a wireless device may be controlled by one or more T-Mobile and Sprint subsidiaries or family of companies, vendors, or partners. In addition to Exhibits I and J and the facts alleged herein, additional relevant facts are recited in Traxcell's Infringement Contentions.

69. Again more specifically, T-Mobile and Sprint receive the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network. Benefits of practicing the claims of the '175 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view, including through at least tracking a wireless device and assessing its performance. This includes better voice quality, fewer dropouts, and improved handoff

procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '175 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '175 patent enable network operators to allocate resources in a very efficient way and reduce costs.

70. Again more specifically, T-Mobile and Sprint receive the benefits of the claims of the '175 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device

    i. Tracking of one or more wireless devices; and,

    j. the like.

71. T-Mobile and Sprint put the inventions claimed by the '175 Patent into service (i.e., used them); but for T-Mobile and Sprint's actions, the claimed-inventions embodiments involving T-Mobile and Sprint's products and services would never have been put into service. T-Mobile and Sprint's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and T-Mobile and Sprint obtaining monetary and commercial benefit from it.

72. Defendant has and continues to induce infringement from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile and Sprint on October 31, 2017. T-Mobile and Sprint has actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (e.g., U.S. wireless networks, wireless-network components that use performance measurements to suggest corrective actions and controlling access to location information) such to cause infringement claims 1-18 of the '175 patent, literally or under the doctrine of equivalents. Moreover, T-Mobile and Sprint have known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to T-Mobile and Sprint by the U.S. Patent and Trademark Office during prosecution of one of T-Mobile and Sprint's patent applications. More specifically, T-Mobile and Sprint have known or should have known of the '175 patent since being sued previously by Traxcell on other family related patents and a reasonable company would monitor the family of patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Sprint's lawyers that he had other family related patents.

73. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile and Sprint on October 31, 2017. T-Mobile and Sprint have actively encouraged or instructed others (e.g., its customers, and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use

performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, T-Mobile and Sprint have known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to T-Mobile and Sprint by the U.S. Patent and Trademark Office during prosecution of one of T-Mobile and Sprint's patent applications. More specifically, T-Mobile and Sprint have known or should have known of the '175 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile and Sprint on other family related patents and a reasonable company would monitor the family of patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Sprint's lawyers in the other litigation that he had other family related patents.

74. T-Mobile and Sprint have caused and will continue to cause Traxcell damage by infringing the '175 patent.

B. Ericsson

75. The preliminary exemplary chart attached as Exhibit G provides notice of Traxcell's allegations of infringement against Ericsson for its network equipment supplied to T-Mobile and Sprint. (https://www.ericsson.com/en/press-releases/2018/9/t-mobile-and-ericsson-sign-major-$3.5-billion-5g-agreement) For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one

base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[18]

76. Ericsson makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Ericsson infringes claims 1–18 of the '175 patent, literally or under the doctrine of equivalents.

77. More specifically, Ericsson makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Ericsson infringes claims 1–18 of the '175 patent, literally or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

78. Again more specifically, Ericsson receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network, including through at least tracking a wireless device and assessing its performance. Benefits of practicing the claims of the '175 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This

[18] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '175 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '175 patent enable network operators to allocate resources in a very efficient way and reduce costs.

79. Again more specifically, Ericsson receives the benefits of the claims of the '175 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device;

    i. Tracking a wireless devices; and,

    j. the like.

80. Ericsson put the inventions claimed by the '175 Patent into service (i.e., used them); but for Ericsson's actions, the claimed-inventions embodiments involving Ericsson's products and services would never have been put into service. Ericsson's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Ericsson obtaining monetary and commercial benefit from it.

81. Defendant has and continues to induce infringement from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile on October 31, 2017, where Ericsson assisted in the defense as discussed herein. Ericsson has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[19] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Ericsson network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Moreover, Ericsson has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Ericsson by the U.S. Patent and Trademark Office during prosecution of one of Ericsson's patent applications. More specifically, Ericsson has known or should have known of the '175 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile on other family related patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by T-Mobile's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents and a reasonable company would monitor the family of patents. Further, Ericsson was put on Notice of Traxcell's family of patents by the letter attached as Exhibit F.

[19] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

82. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit but reasonably from the issuance of the patent as it issued after Traxcell sued T-Mobile on October 31, 2017, where Ericsson assisted in the defense as discussed herein. Ericsson has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[20]Cellco Partnershiop and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Ericsson network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Ericsson has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Ericsson by the U.S. Patent and Trademark Office during prosecution of one of Ericsson's patent applications. More specifically, Ericsson has known or should have known of the '175 patent since it was brought into defend a lawsuit brough by Traxcell against T-Mobile on other family related patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by T-Mobile's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents and a reasonable company would monitor the family of patents. Further, Ericsson was put on Notice of Traxcell's family of patents by the letter attached as Exhibit F.

[20] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

83. Ericsson has caused and will continue to cause Traxcell damage by infringing the '175 patent.

C. Nokia

84. The preliminary exemplary chart attached as Exhibit I provides notice of Traxcell's allegations of infringement against Nokia. For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[21]

85. Nokia makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Nokia infringes claims 1–18 of the '175 patent, literally or under the doctrine of equivalents.

86. More specifically, Nokia makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Nokia infringes claims 1–18 of the '175 patent, literally or

[21] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

87. Again more specifically, Nokia receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network, including through at least tracking a wireless device and assessing its performance. Benefits of practicing the claims of the '175 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '175 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '175 patent enable network operators to allocate resources in a very efficient way and reduce costs.

88. Again more specifically, Nokia receives the benefits of the claims of the '175 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

    h. Access to location information of a wireless device;

i. Tracking a wireless device; and,

j. the like.

89. Nokia put the inventions claimed by the '175 Patent into service (i.e., used them); but for Nokia's actions, the claimed-inventions embodiments involving Nokia's products and services would never have been put into service. Nokia's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Nokia obtaining monetary and commercial benefit from it.

90. Nokia has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[22] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Moreover, Nokia has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Nokia by the U.S. Patent and Trademark Office during prosecution of one of Nokia's patent applications. More specifically, Nokia has known or should have known of the '175 patent since it was previously sued by Traxcell on other family related patents and a reasonable company would monitor the family of patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Nokia's lawyers in the other litigation that he had other family related patents and a

[22] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

reasonable company would monitor the family of patents. Further, Nokia was put on Notice of Traxcell's family of patents by the letter attached as Exhibit D.

91. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit. Nokia has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[23] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Nokia has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Nokia by the U.S. Patent and Trademark Office during prosecution of one of Nokia's patent applications. More specifically, Nokia has known or should have known of the '175 patent since it was sued in a lawsuit brought by Traxcell against Nokia on other family related patents. Further, specifically, Mark Jefferson Reed testified in a deposition taken by Nokia's lawyers in the other litigation that he had other family related patents and a reasonable company would monitor the family of patents and a reasonable company would monitor the family of patents. Nokia was assisting T-Mobile in its defense. Further, Nokia was put on Notice of Traxcell's family of patents by the letter attached as Exhibit D.

[23] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

92. Nokia has caused and will continue to cause Traxcell damage by infringing the '175 patent.

D. Samsung

93. The preliminary exemplary chart attached as Exhibit J provides notice of Traxcell's allegations of infringement against Samsung. For purposes of this complaint, a wireless network comprises at least: (1) Radio Access Network comprising at least one base station controller, at least one transceiver, and at least one antenna; (2) a system of computers, the system of computers comprising computers associated with the at least one base station controller(s); computers functioning for network optimization, including at least computers implementing D-SON and C-SON; and, computers functioning for locating wireless devices; and, (3) one or more wireless devices.[24]

94. Samsung makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Samsung infringes claims 1–18 of the '175 patent, literally or under the doctrine of equivalents.

95. More specifically, Samsung makes, uses, offers to sell, and/or sells within or imports into the U.S. wireless networks, wireless-network components, and related services that use performance measurements to suggest corrective actions and controlling access to location information such that Samsung infringes claims 1–18 of the '175 patent, literally

[24] A wireless device is considered within the wireless network when in RF communication. However, a processor of such wireless device may also be considered outside or inside the network.

or under the doctrine of equivalents by putting the entire claimed invention into use, controlling it, and obtaining benefit from it.

96. Again more specifically, Samsung receives the benefits of the claims from the patent's teaching systems and methods that wireless networks utilize to collect, store, and process information relating to the location of users in order to optimize a wireless network, including through at least tracking a wireless device and assessing its performance. Benefits of practicing the claims of the '175 include the ability to tune a wireless network in order to improve quality of service ("QoS") from a wireless user's point of view. This includes better voice quality, fewer dropouts, and improved handoff procedures if QoS deteriorates near the edge of a cell. Practicing the claims of the '175 patent also provides for an increase in the number of users who can simultaneously use a network. Furthermore, the claims of the '175 patent enable network operators to allocate resources in a very efficient way and reduce costs.

97. Again more specifically, Samsung receives the benefits of the claims of the '175 providing:

    a. Increased automation for higher network performance with lower cost;

    b. Network Quality Optimization: the user experience;

    c. Reduction in Power/Energy Consumption (reduced OPEX);

    d. Reduction in Carbon Dioxide Emissions;

    e. Reduction in Operational Costs: field management, coverage optimization, capacity optimization, operational efficiency (including personnel costs);

    f. Reduction in the need for Over-Dimensioning;

    g. Reduction or deferment of CAPEX;

h. Access to location information of a wireless device;

i. Tracking a wireless device; and,

j. the like.

98. Samsung put the inventions claimed by the '175 Patent into service (i.e., used them); but for Samsung's actions, the claimed-inventions embodiments involving Samsung's products and services would never have been put into service. Samsung's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Samsung obtaining monetary and commercial benefit from it.

99. Samsung has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[25] Cellco Partnership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including Samsung network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Moreover, Samsung has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Samsung by the U.S. Patent and Trademark Office during prosecution of one of Samsung's patent applications. More specifically, Samsung has known or should have known of the '175 patent since it was previously sued by Traxcell on other family related patents and a reasonable company would monitor the family of patents.

[25] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

100. Defendant has and continues to contributorily infringe from at least the filing date of the lawsuit. Samsung has actively encouraged or instructed others (e.g., its customers, such as T-Mobile, the Sprint Companies,[26] Cellco Parttnmership and/or the customers of their related companies), and continues to do so, on how to use its products and services e.g., U.S. wireless networks, wireless-network components (including network components) that use performance measurements to suggest corrective actions and controlling access to location information) such as to cause infringement of one or more of claims 1–18 of the '175 patent, literally or under the doctrine of equivalents. Further, there are no substantial noninfringing uses for Defendant's products and services. Moreover, Samsung has known and should have known of the '175 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Samsung by the U.S. Patent and Trademark Office during prosecution of one of Samsung's patent applications. More specifically, Samsung has known or should have known of the '175 patent since it was sued in a lawsuit brought by Traxcell against Samsung on other family related patents and a reasonable company would monitor the family of patents.

101. Samsung has caused and will continue to cause Traxcell damage by infringing the '175 patent.

VIII. PRAYER FOR RELIEF

WHEREFORE, Traxcell respectfully requests that this Court:

i. enter judgment that Defendants have infringed the Patents-in-Suit;

[26] Sprint Companies include Sprint Communications Company, L.P.; Sprint Spectrum, L.P.; Sprint Solutions, Inc.; and all other entities owned or controlled by Sprint Corporation, at any time. The Sprint Companies are believed to have been acquired by T-Mobile USA, Inc.

ii. award Traxcell damages in an amount sufficient to compensate it for Defendants' infringement of the Patents-in-Suit, in an amount no less than a reasonable royalty, together with prejudgment and post-judgment interest and costs under 35 U.S.C. § 284;

iii. award Traxcell an accounting for acts of infringement not presented at trial and an award by the Court of additional damage for any such acts of infringement by Defendants;

iv. declare this case to be "exceptional" under 35 U.S.C. § 285 and award Traxcell its attorneys' fees, expenses, and costs incurred in this action against each Defendant;

v. declare this case to be "exceptional" under 35 U.S.C. § 285 and award Traxcell its attorneys' fees, expenses, and costs incurred in this action against each Defendant;

vi. a decree addressing future infringement that either (i) awards a permanent injunction enjoining Defendants' and its agents, servants, employees, affiliates, divisions, and subsidiaries, and those in association with Defendants, from infringing the claims of the Patents-in-Suit or (ii) award damages for future infringement in lieu of an injunction, in an amount consistent with the fact that for future infringement the Defendants will be adjudicated infringers of a valid patent, and trebles that amount in view of the fact that the future infringement will be willful as a matter of law;

vii. award Traxcell such other and further relief as this Court deems just and proper.

JURY DEMAND

Traxcell hereby requests a trial by jury on issues so triable by right.

Respectfully submitted,

Ramey LLP

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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure, I hereby certify that all counsel of record who have appeared in this case are being served today with a copy of the foregoing via the Court's CM/ECF system.

/s/ William P. Ramey, III
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