UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

SKYHOOK WIRELESS, INC. and SKYHOOK HOLDING, INC.

Plaintiffs,

v.

UNWIRED LABS (INDIA) PVT. LTD.,

Defendant.

Civil Action No.: 1:19-cv-12316-RGS

DEMAND FOR JURY TRIAL

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Skyhook Wireless, Inc. and Skyhook Holding, Inc. (together "Skyhook" or "Plaintiffs") complain of Defendant Unwired (India) Pvt. Ltd. as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code, against Defendant Unwired Labs (India) Pvt. Ltd. ("Unwired") relating to five U.S. patents owned by Plaintiffs: 7,397,424; 7,696,923; 7,856,234; 8,837,363; and 8,909,245 (collectively, the "Patents-in-Suit").

PARTIES

2. Plaintiff Skyhook Wireless, Inc. ("Skyhook Wireless") is a corporation organized under the laws of the State of Delaware, with a principal place of business at 41 Farnsworth Street, Boston, Massachusetts 02210. Skyhook Wireless is an operating company that specializes in Wi-Fi location positioning technology and related services.

- 3. Plaintiff Skyhook Holding, Inc. ("Skyhook Holding") is a corporation organized under the laws of the State of Delaware. Skyhook Holding is the parent company to and 100% owner of Skyhook Wireless.
- 4. Plaintiffs are the named assignees of, own all right title and interest in, and have standing to sue for patent infringement of the Patents-in-Suit. Skyhook Wireless is the named assignee of U.S. Patent Nos. 7,856,234; 8,837,363; and 8,909,245. Skyhook Holding in the named assignee of U.S. Patent Nos. 7,397,424 and 7,696,923.
- 5. Defendant Unwired is an Indian corporation, with its principal place of business at Plot 128, Rd 72, Jubilee Hills, Hyderabad, Telangana, India 500033.
- 6. Defendant Unwired makes, uses, sells, and/or offers for sale a location positioning product and service that infringes one or more of the claims of the Patents-in-Suit.

JURISDICTION AND VENUE

- 7. This is a civil action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1, et seq., and more particularly 35 U.S.C. § 271.
- 8. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a).
- 9. Unwired is subject to this Court's general and specific personal jurisdiction because Unwired has sufficient minimum contacts within the State of Massachusetts and this District, pursuant to due process and/or the Massachusetts Transactions or Conduct for Personal Jurisdiction Statute, Mass. Gen. Laws ch. 223A § 3, due at least to its substantial business conducted in this District, including: (i) Unwired regularly conducts and solicits business within the State of Massachusetts and within this District; (ii) having transacted business within the State of Massachusetts and attempted to derive financial benefit from residents of the State of

Massachusetts in this District, including benefits directly related to the instant patent infringement causes of action set forth herein; (iii) having placed its products and services, including at least its LocationAPI and LocationIQ products, into the stream of commerce throughout the United States and having been actively engaged in transacting business in Massachusetts and in this District, and (iv) having committed the complained of tortious acts in Massachusetts and in this District.

- 10. Unwired, directly and/or through subsidiaries and agents (including distributors, retailers, and others), makes, imports, ships, distributes, offers for sale, sells, uses, and advertises (including offering products and services through its websites, https://unwiredlabs.com and https://locationiq.com) its products and services in the United States, the State of Massachusetts, and the District of Massachusetts.
- 11. Unwired, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products and/or services, as described below, into the stream of commerce with the expectation that they will be purchased and used by consumers in the District of Massachusetts. These infringing products and/or services have been and continue to be purchased and used by consumers in the District of Massachusetts. Unwired has committed acts of patent infringement within the State of Massachusetts and, more particularly, within the District of Massachusetts.
- 12. This Court's exercise of personal jurisdiction over Unwired is consistent with the Massachusetts Long Arm Statute, Mass. Gen. Laws ch. 223A § 3, and traditional notions of fair play and substantial justice.
- 13. Venue is proper in this District under §1400(b), which provides that "Any civil action for patent infringement may be brought in the judicial district where the defendant resides,

or where the defendant has committed acts of infringement and has a regular and established place of business." Venue is proper as to Defendant Unwired, which is organized under the laws of India, under 28 U.S.C. § 1391(c)(3) that provides that "a defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants."

BACKGROUND FACTS REGARDING SKYHOOK AND ITS INNOVATION

- 14. Skyhook Wireless is a pioneer in the space of location technology and Wi-Fi positioning services. Skyhook Wireless was founded in 2003 by two entrepreneurs, Ted Morgan and Michael Shean, on the idea that mobile devices could be located by reference to nearby wireless access points. At the time, wireless access points such as routers were just becoming ubiquitous and the smartphone did not yet exist.
- 15. Skyhook Wireless recognized the importance of protecting its innovation with patents from the earliest days of the company. It filed its first patent in 2004.
- 16. Skyhook Wireless has spent significant time and revenue on research and development of its location positioning technology and development of its patent portfolio over almost the past 15 years. Skyhook's patent portfolio now comprises over 200 patents and patent applications filed in the United States and 14 other countries.
- 17. Skyhook Wireless has built its business from a start-up to a global provider of Wi-Fi location services. It currently maintains a network of over 4 billion active wireless access points, processes over 5.5 billion location requests daily, and over a trillion location requests each year. The company observes more than 22 new access points around the world every second and provides location services in over 220 countries.

- 18. Skyhook Wireless' technology has attracted the biggest tech giants of this generation. For example, Apple introduced its Wi-Fi positioning system on January 15, 2008 at Macworld (https://www.youtube.com/watch?v=F624yzZ0Ysc). Skyhook Wireless' technology was then integrated into the iPhone and used to provide location services to Apple's many customers around the world for several years.
- 19. As of the date of this Complaint, Skyhook Wireless has licensed its patent portfolio to three of Defendant Unwired's competitors in the location services space. One of those licensees is Google, Inc., which settled a four-plus year patent litigation lawsuit with a \$90 million payment to Skyhook. Details of the public disclosure of Google's license can be found in the following SEC filing:

https://www.sec.gov/Archives/edgar/data/1611983/000155837015000929/lbrd-20150331x10q.htm. The identity of the other licensees is confidential pursuant to the terms of the agreements.

20. Before filing this Complaint, Skyhook diligently attempted to resolve its claims against Defendant without litigation.

THE PATENTS-IN-SUIT AND CLAIMS-IN-SUIT

- 21. Plaintiffs have the exclusive right to sue and the exclusive right to recover damages for infringement of the Patents-in-Suit during all relevant time periods.
- 22. On July 8, 2008, U.S. Patent No. 7,397,424 (the "'424 Patent") entitled "System and method for enabling continuous geographic location estimation for wireless computing devices" was duly and legally issued by the USPTO.

- 23. On April 13, 2010, U.S. Patent No. 7,696,923 (the "'923 Patent") entitled "System and method for determining geographic location of wireless computing devices" was duly and legally issued by the USPTO.
- 24. On December 21, 2010, U.S. Patent No. 7,856,234 (the "'234 Patent") entitled "System and method for estimating positioning error within a WLAN-based positioning system" was duly and legally issued by the USPTO.
- 25. On September 16, 2014, U.S. Patent No. 8,837,363 (the "'363 Patent") entitled "Server for updating location beacon database" was duly and legally issued by the USPTO.
- 26. On December 9, 2014, U.S. Patent No. 8,909,245 (the "'245 Patent") entitled "System and method for estimating positioning error within a WLAN-based positioning system" was duly and legally issued by the USPTO.

UNWIRED'S INFRINGING PRODUCTS AND SERVICES

- 27. Skyhook asserts that Unwired has been and now is infringing, directly and by inducement, at least the following claims of the Patents-in-Suit in this District and elsewhere in the United States:
 - The '424 Patent—Claims 15, 16;
 - The '923 Patent—Claims 1, 2, 12-17, 20;
 - The '234 Patent—Claims 1-3, 11;
 - The '363 Patent—Claims 18-20, 23, 24; and
 - The '245 Patent—Claims 1, 2, 5-7.
- 28. Unwired has been, and now is, directly infringing claims of the Patents-in-Suit under 35 U.S.C. § 271(a) by making, using, offering for sale, selling, and/or importing the below accused products and services, including its LocationAPI product, in this District and elsewhere

in the United States that include the systems claimed in the Patents-in-Suit and/or by using the methods claimed in the Patents-in-Suit. Unwired has built and maintains a database of Wi-Fi access points, which it uses to provide location-positioning services to its customers throughout the world, as described on its website (https://unwiredlabs.com/faqs):

- ▼ What products do you offer?
 - LocationAPI Get a connected device's location based on cell towers, WiFi and IP address
 - · LocationIQ Transform location data with Maps, Street addresses & more
- 29. Unwired has been and currently is inducing the direct infringement of method claims of the Patents-in-Suit pursuant to U.S.C. § 271(b) by at least one or more of making, using, offering for sale, selling and/or importing the below accused products and services in this District and elsewhere in the United States that were designed and intended to be used and/or practiced in the methods covered by the Patents-in-Suit. Unwired has induced infringement by, for example, providing user guides and other support materials and services to its users and by advertising features that are used in Unwired's location services as well as benefits that are achieved through use of the Patents-in-Suit.
- 30. Despite Unwired's awareness of the Patents-in-Suit, Unwired has continued these acts of inducement with specific intent to cause and encourage direct infringement of the Patents-in-Suit with willful blindness that such activities occurred, are still occurring, and constitute direct infringement of the Patents-in-Suit.
- 31. Unwired's infringement of the Patents-in-Suit have caused Skyhook to suffer an irreparable injury and remedies available at law are inadequate to compensate for that injury. Considering the balance of hardships between the Skyhook and Unwired, a remedy in equity is warranted, and the public interest would not be disserved by a permanent injunction.

SKYHOOK ATTEMPTED TO RESOLVE THIS MATTER WITHOUT LITIGATION

- 32. Prior to this litigation, Skyhook and Unwired have had several conversations that involve the Patents-in-Suit. Skyhook attempted to resolve the issues now in this litigation over a period of more than a year through numerous emails and phone calls between Skyhook and Unwired's CEO.
- 33. Skyhook has made reasonable demands for Unwired to enter into a license agreement.
- 34. This Complaint serves as additional notice to Unwired of the Patents-in-Suit and the manner in which they are infringed.
- 35. Despite knowledge of the Patents-in-Suit and knowledge of the manner in which the Patents-in-Suit are infringed as demonstrated in the provided claim charts, Unwired has continued to infringe, and induce the infringement of, the Patents-in-Suit.

COUNT 1: INFRINGEMENT OF THE '424 PATENT, CLAIM 15

- 36. Skyhook reasserts and realleges paragraphs 1 through 35 of this Complaint as though set forth fully here.
 - 37. Claim 15 of the '424 Patent provides:

Preamble to Claim 15	A method for administering a database of wireless beacons, comprising:
Element A	maintaining a central database of wireless beacons;
Element B	wirelessly coupling the central database to a plurality of wireless computing devices;
Element C	enabling each wireless computing device to determine identification and positional information about wireless beacons not contained in the central database without communicating with the central database;
Element D	periodically forwarding the identification and positional information about wireless beacons not contained in the central database from the wireless computing devices to the central database;
Element E	updating the central database to include the forwarded identification and positional information; and
Element F	periodically directing the updates of the central database to the plurality of wireless computing devices.

- 38. Unwired administers a database of wireless beacons and uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 15 of the '424 Patent.
- 39. Unwired administers a database of Wi-Fi access points in order to provide location-positioning services.
- 40. Unwired maintains a central database of wireless beacons on its servers and at least in part on the cloud.
 - 41. In order to maintain its database, Unwired collects data from Wi-Fi access points.
- 42. Unwired wirelessly couples its central database to a plurality of surrounding wireless computing devices.
 - 43. For example, Unwired surveys available Wi-Fi access points when users are using

location aware applications on their mobile devices and also returns the location of the mobile device based on calculation from and reference to the central database.

- 44. Unwired enables the mobile devices to determine identification and positional information of surrounding Wi-Fi access points.
- 45. For example, the mobile devices determine MAC addresses and longitude/latitude coordinates of wireless access points.
- 46. Unwired collects the identification and positional information about new Wi-Fi access points.
- 47. Unwired updates its database with new location information when it periodically forwards the identification and positional information about wireless beacons not contained in the central database from the wireless computing devices to the central database.
- 48. Unwired periodically directs the updates of the central database to the plurality of contributing devices (for example, when the location response is based on a single measurement or to provide an offline location library).
- 49. Users of Unwired's location service are able to utilize its most recently updated central database when requesting their position estimate.
- 50. Direct infringement of claim 15 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 15 of the '424 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 15 of the '424 Patent.
- 51. Unwired had knowledge of the '424 Patent and the specifics of how its location positioning system and/or service infringes claims of the '424 Patent since at least July 2018.

- 52. The technology claimed in claim 15 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 53. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 15 of the '424 Patent.

COUNT 2: INFRINGEMENT OF THE '424 PATENT, CLAIM 16

- 54. Skyhook reasserts and realleges paragraphs 1 through 53 of this Complaint as though set forth fully here.
 - 55. Claim 16 of the '424 Patent provides:

Element A	The method of claim 15, wherein the step of enabling each wireless computing device to determine identification and positional information about wireless beacons comprises:
Element A	obtaining identification and signal strength data about each wireless beacon at a plurality of locations at which a signal from that wireless beacon is being received;
Element B	applying an algorithm to determine positional information about the wireless beacons based on the signal strength data; and
Element C	storing the positional information in association with the identification data.

- 56. Unwired administers a database of wireless beacons and uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 16 of the '424 Patent.
- 57. Unwired enables each wireless computing device to determine identification and positional information about wireless beacons.
- 58. Unwired obtains identification and signal strength data about each wireless beacon at a plurality of locations at which a signal from that wireless beacon is being received.

- 59. Unwired applies an algorithm to determine positional information about the wireless beacons based on the signal strength data.
- 60. Unwired stores the positional information in association with the identification data.
- 61. Direct infringement of claim 16 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 16 of the '424 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 16 of the '424 Patent.
- 62. Unwired had knowledge of the '424 Patent and the specifics of how its location positioning system and/or service infringes claims of the '424 Patent since at least July 2018.
- 63. The technology claimed in claim 16 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 64. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 16 of the '424 Patent.

COUNT 3: INFRINGEMENT OF THE '923 PATENT, CLAIM 1

- 65. Skyhook reasserts and realleges paragraphs 1 through 64 of this Complaint as though set forth fully here.
 - 66. Claim 1 of the '923 Patent provides:

Preamble	A system for enabling a wireless computing device to determine its
to Claim 1	position when communicating with one or more wireless beacons having fixed physical locations, comprising:
Element A	a server comprising a database of identification and positional information about wireless beacons having fixed physical locations; and
Element B	a wireless computing device arranged to wirelessly communicate using the Internet with said server,
Element C	said wireless computing device being arranged to directly receive a transmission from at least one wireless beacon and generate identification information about said at least one wireless beacon, the identification information being generated by said wireless computing device based on the transmission from said at least one wireless beacon which is received by said wireless computing device,
Element D	said wireless computing device being arranged to generate a request for a determination of its position and send the position determination request with the generated identification information about said at least one wireless beacon to said server, the generated and sent identification information being the information previously generated by said wireless computing device based on an earlier transmission from said at least one wireless beacon which is received by said wireless computing device,
Element E	said server being arranged to receive the position determination request and the generated information about said at least one wireless beacon sent by said wireless computing device and determine the geographic position of said wireless computing device from the identification information generated and sent by said wireless computing device and the identification and positional information about wireless beacons contained in said database of said server,
Element F	said server being arranged to undertake an action based on the determined geographic position of said wireless computing device.

67. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 1 of the '923 Patent.

- 68. Unwired provides a system for enabling a wireless computing device to determine its position when communicating with one or more wireless beacons having fixed physical locations.
- 69. Unwired's system includes a server comprising a database of identification and positional information about wireless beacons having fixed physical locations.
- 70. Unwired's system includes a wireless computing device arranged to wirelessly communicate using the Internet with said server.
- 71. The wireless computing device in Unwired's system is arranged to directly receive a transmission from at least one wireless beacon and generate identification information about said at least one wireless beacon.
- 72. The identification information is generated by said wireless computing device based on the transmission from said at least one wireless beacon which is received by said wireless computing device.
- 73. The wireless computing device in Unwired's system is arranged to generate a request for a determination of its position and send the position determination request with the generated identification information about said at least one wireless beacon to Unwired's server.
- 74. The generated and sent identification information is the information previously generated by said wireless computing device based on an earlier transmission from said at least one wireless beacon which is received by said wireless computing device.
- 75. Unwired's server is arranged to receive the position determination request and the generated information about said at least one wireless beacon sent by said wireless computing device and determine the geographic position of said wireless computing device from the identification information generated and sent by said wireless computing device and the

identification and positional information about wireless beacons contained in said database of said server.

- 76. Unwired's server is arranged to undertake an action based on the determined geographic position of said wireless computing device.
- 77. Direct infringement of claim 1 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 1 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 1 of the '923 Patent.
- 78. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 79. The technology claimed in claim 1 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 80. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 1 of the '923 Patent.

COUNT 4: INFRINGEMENT OF THE '923 PATENT, CLAIM 2

- 81. Skyhook reasserts and realleges paragraphs 1 through 80 of this Complaint as though set forth fully here.
 - 82. Claim 2 of the '923 Patent provides:

The system of claim 1, wherein said wireless computing device is non-GPS enabled.
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- 83. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 2 of the '923 Patent.
- 84. Unwired provides a system for enabling a non-GPS enabled wireless computing device to determine its position.
- 85. Direct infringement of claim 2 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 2 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 2 of the '923 Patent.
- 86. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 87. The technology claimed in claim 2 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 88. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 2 of the '923 Patent.

COUNT 5: INFRINGEMENT OF THE '923 PATENT, CLAIM 12

- 89. Skyhook reasserts and realleges paragraphs 1 through 88 of this Complaint as though set forth fully here.
 - 90. Claim 12 of the '923 Patent provides:

Element A	The system of claim 1, wherein said at least one wireless beacon comprises a plurality of wireless beacons and the information about said wireless beacons that said wireless computing device is arranged to generate from the transmission from said wireless beacons is identification information about said wireless beacons,
Element B	said wireless computing device being arranged to send the generate identification information about said wireless beacons to said server,
Element C	said server being arranged to determine the geographic position of said wireless computing device from the identification information generated and sent by said wireless computing device and identification and positional information about wireless beacons contained in said database of said server.

- 91. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 12 of the '923 Patent.
- 92. Unwired provides a system for enabling a wireless computing device to determine its position when communicating with a plurality of wireless beacons.
- 93. The information about said wireless beacons that said wireless computing device is arranged to generate from the transmission from said wireless beacons is identification information about said wireless beacons.
- 94. The wireless computing device is arranged to send the generated identification information about said wireless beacons to Unwired's server.
- 95. Unwired's server is arranged to determine the geographic position of said wireless computing device from the identification information generated and sent by said wireless computing device and identification and positional information about wireless beacons contained in said database of said server.

- 96. Direct infringement of claim 12 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 12 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 12 of the '923 Patent.
- 97. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 98. The technology claimed in claim 12 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 99. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 12 of the '923 Patent.

COUNT 6: INFRINGEMENT OF THE '923 PATENT, CLAIM 13

- 100. Skyhook reasserts and realleges paragraphs 1 through 99 of this Complaint as though set forth fully here.
 - 101. Claim 13 of the '923 Patent provides:

Element A	The system of claim 1, wherein said at least one wireless beacon comprises a plurality of wireless beacons and the information about said wireless beacons that said wireless computing device is arranged to generate from the transmission from said wireless beacons is identification information about said wireless beacons and signal strength information about the strength of a signal being transmitted by said wireless beacons and received by said wireless computing device,
Element B	said wireless computing device being arranged to send the generated identification information about said wireless beacons and signal strength information to said server,
Element C	said server being arranged to determine the geographic position of said wireless computing device from the identification and signal strength

information generated and sent by said wireless computing device and identification and positional information about wireless beacons contained in said database of said server.

- 102. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 13 of the '923 Patent.
- 103. Unwired provides a system for enabling a wireless computing device to determine its position when communicating with a plurality of wireless beacons.
- 104. The information about said wireless beacons that said wireless computing device is arranged to generate from the transmission from said wireless beacons is identification information about said wireless beacons and signal strength information about the strength of a signal being transmitted by said wireless beacons and received by said wireless computing device.
- 105. The wireless computing device is arranged to send the generated identification information about said wireless beacons and signal strength information to Unwired's server.
- 106. Unwired's server is arranged to determine the geographic position of said wireless computing device from the identification and signal strength information generated and sent by said wireless computing device and identification and positional information about wireless beacons contained in said database of said server.
- 107. Direct infringement of claim 13 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 13 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its

LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 13 of the '923 Patent.

- 108. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 109. The technology claimed in claim 13 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 110. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 13 of the '923 Patent.

COUNT 7: INFRINGEMENT OF THE '923 PATENT, CLAIM 14

- 111. Skyhook reasserts and realleges paragraphs 1 through 110 of this Complaint as though set forth fully here.
 - 112. Claim 14 of the '923 Patent provides:

Element A	The system of claim 13, wherein said server is arranged to apply a calculation algorithm which determines the geographic position of said
	wireless computing device upon input of the identification and signal strength information sent by said wireless computing device.

- 113. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 14 of the '923 Patent.
- 114. Unwired's server is arranged to apply a calculation algorithm which determines the geographic position of said wireless computing device upon input of the identification and signal strength information sent by said wireless computing device.

- 115. Direct infringement of claim 14 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 14 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 14 of the '923 Patent.
- 116. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 117. The technology claimed in claim 14 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 118. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 14 of the '923 Patent.

COUNT 8: INFRINGEMENT OF THE '923 PATENT, CLAIM 15

- 119. Skyhook reasserts and realleges paragraphs 1 through 118 of this Complaint as though set forth fully here.
 - 120. Claim 15 of the '923 Patent provides:

Element A	The system of claim 1, wherein the action undertaken by the server based
	on the determined geographic position of said wireless computing device is
	to direct a transmission of the determined geographic position of said
	wireless computing device to said wireless computing device which
	generated and sent the information.

121. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 15 of the '923 Patent.

- 122. Unwired's server directs a transmission of the determined geographic position of said wireless computing device to said wireless computing device which generated and sent the information based on the determined geographic position of said wireless computing device.
- 123. Direct infringement of claim 15 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 15 of the '923 Patent. Unwired uses the claimed system at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 15 of the '923 Patent.
- 124. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 125. The technology claimed in claim 15 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 126. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 15 of the '923 Patent.

COUNT 9: INFRINGEMENT OF THE '923 PATENT, CLAIM 16

- 127. Skyhook reasserts and realleges paragraphs 1 through 126 of this Complaint as though set forth fully here.
 - 128. Claim 16 of the '923 Patent provides:

Preamble to Claim 16	A method for determining a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations, comprising:
Element A	providing a server containing a database of identification and positional information about wireless beacons having fixed physical locations;
Element B	generating at the wireless computing device, identification information about at least one wireless beacon transmitting directly to the wireless computing device, the identification information being generated by the wireless computing device based on the transmission from the at least one wireless beacon which is received by the wireless computing device;
Element C	generating a request at the wireless computing device for a determination of the position of the wireless computing device;
Element D	directing a transmission from the wireless computing device to the server, the transmission containing the position determination request and the generated identification information about the at least one wireless beacon, the generated identification information being the information previously generated by the wireless computing device based on an earlier transmission from the at least one wireless beacon which is received by the wireless computing device;
Element E	receiving at the server the position determination request and the generated identification information about the at least one wireless beacon sent from the wireless computing device; and then
Element F	determining at the server the geographic position of the wireless computing device from the identification information generated and sent by the wireless computing device and the database of identification and positional information about wireless beacons contained in the server.

- 129. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 16 of the '923 Patent.
- 130. Unwired provides a location-based service that calculates the positions of Wi-Fi enabled devices.

- 131. Unwired provides a server containing a database of identification and positional information about Wi-Fi access points having fixed physical locations.
- 132. Unwired generates, at the mobile device, identification information (e.g., bssid, MAC address) about at least one wireless beacon transmitting directly to the mobile device.
- 133. The identification information is generated at the mobile device based on the transmission from the Wi-Fi access point, which is received by the mobile device.
- 134. Unwired generates a request, at the mobile device, for a determination of the position of the mobile device.
- 135. Unwired directs a transmission from the mobile device to the server, which contains the position determination request and the generated identification information (e.g., bssid, MAC address) about the Wi-Fi access point.
- 136. The Wi-Fi access point information is the information previously generated by the mobile device based on an earlier transmission from the Wi-Fi access point, which is received by the mobile device.
- 137. Unwired receives, at the server, the position determination request and the generated access point identification information sent from the mobile device.
- 138. Unwired determines, at the server, the geographic position of the device from the Wi-Fi access point information generated and sent by the mobile device and the database of identification and positional information about Wi-Fi access points contained in the server.
- 139. Unwired uses the Wi-Fi access point information transmitted to its servers to calculate and return the mobile device's location.
- 140. Direct infringement of claim 16 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 16 of the

- '923 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 16 of the '923 Patent.
- 141. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 142. The technology claimed in claim 16 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 143. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 16 of the '923 Patent.

COUNT 10: INFRINGEMENT OF THE '923 PATENT, CLAIM 17

- 144. Skyhook reasserts and realleges paragraphs 1 through 143 of this Complaint as though set forth fully here.
 - 145. Claim 17 of the '923 Patent provides:

	The method of claim 16, wherein identification information about a plurality of wireless beacons, each directly communicating with the wireless computing device, is generated at the wireless computing device from a transmission from each of the wireless beacons, respectively,
Element B	the transmission directed from the wireless computing device to the server contains the generated identification information about each of the wireless beacons.

146. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 17 of the '923 Patent.

- 147. Unwired provides a location-based service that calculates the positions of Wi-Fi enabled devices.
- 148. Unwired provides a server containing a database of identification and positional information about Wi-Fi access points having fixed physical locations.
- 149. Unwired generates identification information about a plurality of wireless beacons, each directly communicating with the wireless computing device, at the wireless computing device from a transmission from each of the wireless beacons, respectively.
- 150. The transmission directed from the wireless computing device to the server contains the generated identification information about each of the wireless beacons.
- 151. Direct infringement of claim 17 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 17 of the '923 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 17 of the '923 Patent.
- 152. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 153. The technology claimed in claim 17 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 154. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 17 of the '923 Patent.

COUNT 11: INFRINGEMENT OF THE '923 PATENT, CLAIM 20

- 155. Skyhook reasserts and realleges paragraphs 1 through 154 of this Complaint as though set forth fully here.
 - 156. Claim 20 of the '923 Patent provides:

Element A	The method of claim 16, further comprising building a database at the
	server for use in determining the geographic position of the wireless
	computing device based on the information generated and sent by the
	wireless computing device, by using the wireless computing device to
	generate identification and signal strength information about wireless
	beacons at a plurality of locations at which a signal from each wireless
	beacon is being received, applying an algorithm to determine positional
	information about the wireless beacons based on the signal strength
	information generated by the wireless computing device, and including in
	the database, the determined positional information about wireless beacons
	not already included in the database along with identification information
	about the wireless beacons.

- 157. Unwired determines a position of a wireless computing device when communicating with one or more wireless beacons having fixed physical locations and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 20 of the '923 Patent.
- 158. Unwired builds a database at its server for use in determining the geographic position of the wireless computing device based on the information generated and sent by the wireless computing device.
- 159. Unwired uses the wireless computing device to generate identification and signal strength information about wireless beacons at a plurality of locations at which a signal from each wireless beacon is being received, applies an algorithm to determine positional information about the wireless beacons based on the signal strength information generated by the wireless computing device, and includes in the database, the determined positional information about

wireless beacons not already included in the database along with identification information about the wireless beacons.

- 160. Direct infringement of claim 20 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 20 of the '923 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 20 of the '923 Patent.
- 161. Unwired had knowledge of the '923 Patent and the specifics of how its location positioning system and/or service infringes claims of the '923 Patent since at least July 2018.
- 162. The technology claimed in claim 20 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 163. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 17 of the '923 Patent.

COUNT 12: INFRINGEMENT OF THE '234 PATENT, CLAIM 1

- 164. Skyhook reasserts and realleges paragraphs 1 through 163 of this Complaint as though set forth fully here.
 - 165. Claim 1 of the '234 Patent provides:

Preamble to Claim 1	In a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device, a method of estimating an expected error of a position estimate, a method comprising:
Element A	the WLAN-enabled device receiving signals transmitted by at least one WLAN access point in range of the WLAN-enabled device;
Element B	estimating the position of the WLAN-enabled device based on the received signals from the at least one WLAN access point in range of the WLAN enabled device; and
Element C	estimating an expected error, in terms of distance, of the position estimate based on characteristics of the at least one WLAN access point used for estimating the position of the WLAN-enabled device, wherein the expected error predicts a relative accuracy of the position estimate in terms of distance.

- 166. Unwired estimates an expected error of a position estimate in a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 1 of the '234 Patent.
- 167. Unwired provides a Wi-Fi positioning system that estimates positions for WLAN-enabled devices.
- 168. For example, Unwired provides location estimation for cell phones and other devices with Wi-Fi capabilities.
- 169. Unwired enables devices using its services to receive signals from Wi-Fi access points that the user's device can detect.
- 170. Unwired estimates the position of the user's device based on the received signals from the access points in range of the device.
- 171. Unwired also estimates an expected error of the position estimate based on characteristics of the access points (e.g., MAC address, channel, signal strength).

- 172. The expected error predicts a relative accuracy of the position estimate in terms of distance (e.g., meters).
- 173. For example, Unwired provides an "accuracy" field in its position request responses, which it describes as "[t]he accuracy of the position [] returned in meters."
- 174. Direct infringement of claim 1 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 1 of the '234 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 1 of the '234 Patent.
- 175. Unwired had knowledge of the '234 Patent and the specifics of how its location positioning system and/or service infringes claims of the '234 Patent since at least July 2018.
- 176. The technology claimed in claim 1 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 177. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 1 of the '234 Patent.

COUNT 13: INFRINGEMENT OF THE '234 PATENT, CLAIM 2

- 178. Skyhook reasserts and realleges paragraphs 1 through 177 of this Complaint as though set forth fully here.
 - 179. Claim 2 of the '234 Patent provides:

Element A	The method of claim 1, wherein estimating the position of the WLAN-
	enabled device is based on signals from more than one WLAN access point
	in range of the WLAN-enabled device.

- 180. Unwired estimates an expected error of a position estimate in a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 2 of the '234 Patent.
- 181. Unwired estimates the position of the WLAN-enabled device based on signals from more than one WLAN access point in range of the WLAN-enabled device.
- 182. Direct infringement of claim 2 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 2 of the '234 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 2 of the '234 Patent.
- 183. Unwired had knowledge of the '234 Patent and the specifics of how its location positioning system and/or service infringes claims of the '234 Patent since at least July 2018.
- 184. The technology claimed in claim 2 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 185. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 2 of the '234 Patent.

COUNT 14: INFRINGEMENT OF THE '234 PATENT, CLAIM 3

- 186. Skyhook reasserts and realleges paragraphs 1 through 185 of this Complaint as though set forth fully here.
 - 187. Claim 3 of the '234 Patent provides:

Element A	The method of claim 1, wherein estimating the expected error of the
	position estimate is based on characteristics from more than one WLAN
	access point in range of the WLAN-enabled device.

- 188. Unwired estimates an expected error of a position estimate in a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 3 of the '234 Patent.
- 189. Unwired estimates the expected error of the position estimate based on characteristics from more than one WLAN access point in range of the WLAN-enabled device.
- 190. Direct infringement of claim 3 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 3 of the '234 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 3 of the '234 Patent.
- 191. Unwired had knowledge of the '234 Patent and the specifics of how its location positioning system and/or service infringes claims of the '234 Patent since at least July 2018.
- 192. The technology claimed in claim 3 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 193. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 3 of the '234 Patent.

COUNT 15: INFRINGEMENT OF THE '234 PATENT, CLAIM 11

- 194. Skyhook reasserts and realleges paragraphs 1 through 193 of this Complaint as though set forth fully here.
 - 195. Claim 11 of the '234 Patent provides:

Element A	The method of claim 1, wherein a server system estimates the expected
	error of the position estimate.

- 196. Unwired estimates an expected error of a position estimate in a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 11 of the '234 Patent.
 - 197. Unwired's server system estimates the expected error of the position estimate.
- 198. Direct infringement of claim 11 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 11 of the '234 Patent. Unwired performs the claimed method at least during testing and demonstration of its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 11 of the '234 Patent.
- 199. Unwired had knowledge of the '234 Patent and the specifics of how its location positioning system and/or service infringes claims of the '234 Patent since at least July 2018.
- 200. The technology claimed in claim 11 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 201. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 11 of the '234 Patent.

COUNT 16: INFRINGEMENT OF THE '363 PATENT, CLAIM 18

- 202. Skyhook reasserts and realleges paragraphs 1 through 201 of this Complaint as though set forth fully here.
 - 203. Claim 18 of the '363 Patent provides:

Preamble to Claim 18	A computer-implemented method comprising:
Element A	deriving position information for each of a plurality of Wi-Fi access points in a geographic area having a radius on the order of miles,
Element B	wherein the position information is derived at least in part by application of a reverse triangulation algorithm to sets of data collected during a comprehensive traversal of the geographic area,
Element C	each set of data including signal data describing observed characteristics of a signal received from the Wi-Fi access point, the observed characteristics including at least a unique identifier of the Wi-Fi access point and a received signal strength of the signal received from the Wi-Fi access point, and location data characterizing a location at which the signal received from the Wi-Fi access point was observed; and
Element D	storing the derived position information in a non-transitory computer- readable medium.

- 204. Unwired performs the computer-implemented method of claim 18 and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 18 of the '363 Patent.
- 205. Unwired derives position information for WiFi access points in a geographic area having a radius on the order of miles (e.g., the United States).
- 206. Unwired derives the position information of Wi-Fi access points by applying a reverse triangulation algorithm to sets of data collected during a comprehensive traversal of the geographic area.

- 207. Each set of data collected by Unwired includes signal data describing observed characteristics of a signal received from the Wi-Fi access point and location data characterizing a location at which the signal received from the Wi-Fi access point was observed.
- 208. The observed characteristics include at least a unique identifier of the Wi-Fi access point (e.g., bssid, MAC address) and a received signal strength of the signal received from the Wi-Fi access point.
- 209. Unwired stores the derived position information of Wi-Fi access points in a non-transitory computer-readable medium (e.g., its database).
- 210. Direct infringement of claim 18 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 18 of the '363 Patent. Unwired performs the claimed method at least when building and updating its database for its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 18 of the '363 Patent.
- 211. Unwired had knowledge of the '363 Patent and the specifics of how its location positioning system and/or service infringes claims of the '363 Patent since at least July 2018.
- 212. The technology claimed in claim 18 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 213. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 18 of the '363 Patent.

COUNT 17: INFRINGEMENT OF THE '363 PATENT, CLAIM 19

- 214. Skyhook reasserts and realleges paragraphs 1 through 213 of this Complaint as though set forth fully here.
 - 215. Claim 19 of the '363 Patent provides:

Element A	The method of claim 18, wherein the geographical area has a radius on the order of at least tens of miles.

- 216. Unwired performs the computer-implemented method of claim 19 and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 19 of the '363 Patent.
- 217. Unwired derives position information for each of a plurality of Wi-Fi access points in a geographic area having a radius on the order of at least tens of miles.
- 218. Direct infringement of claim 19 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 19 of the '363 Patent. Unwired performs the claimed method at least when building and updating its database for its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 19 of the '363 Patent.
- 219. Unwired had knowledge of the '363 Patent and the specifics of how its location positioning system and/or service infringes claims of the '363 Patent since at least July 2018.
- 220. The technology claimed in claim 19 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 221. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 19 of the '363 Patent.

COUNT 18: INFRINGEMENT OF THE '363 PATENT, CLAIM 20

- 222. Skyhook reasserts and realleges paragraphs 1 through 221 of this Complaint as though set forth fully here.
 - 223. Claim 20 of the '363 Patent provides:

Element A	The method of claim 18, wherein storing the derived position information includes storing the derived position information for a particular Wi-Fi access point in association with data representative of an identifier of that
	Wi-Fi access point.

- 224. Unwired performs the computer-implemented method of claim 20 and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 20 of the '363 Patent.
- 225. Unwired stores the derived position information for a particular Wi-Fi access point in association with data representative of an identifier of that Wi-Fi access point.
- 226. Direct infringement of claim 20 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 20 of the '363 Patent. Unwired performs the claimed method at least when building and updating its database for its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 20 of the '363 Patent.
- 227. Unwired had knowledge of the '363 Patent and the specifics of how its location positioning system and/or service infringes claims of the '363 Patent since at least July 2018.
- 228. The technology claimed in claim 20 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
 - 229. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning

system and/or service knowing that it infringes claim 20 of the '363 Patent.

COUNT 19: INFRINGEMENT OF THE '363 PATENT, CLAIM 23

- 230. Skyhook reasserts and realleges paragraphs 1 through 229 of this Complaint as though set forth fully here.
 - 231. Claim 23 of the '363 Patent provides:

Element A	The method of claim 18, wherein deriving the position information
	includes deriving position information from a combination of newly-
	collected sets of data and previously-collected sets of data.

- 232. Unwired performs the computer-implemented method of claim 23 and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 23 of the '363 Patent.
- 233. Unwired derives position information from a combination of newly-collected sets of data and previously-collected sets of data.
- 234. Direct infringement of claim 23 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 23 of the '363 Patent. Unwired performs the claimed method at least when building and updating its database for its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 23 of the '363 Patent.
- 235. Unwired had knowledge of the '363 Patent and the specifics of how its location positioning system and/or service infringes claims of the '363 Patent since at least July 2018.
- 236. The technology claimed in claim 23 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.

237. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 23 of the '363 Patent.

COUNT 20: INFRINGEMENT OF THE '363 PATENT, CLAIM 24

- 238. Skyhook reasserts and realleges paragraphs 1 through 237 of this Complaint as though set forth fully here.
 - 239. Claim 24 of the '363 Patent provides:

Element A	The method of claim 18, further comprising: identifying sets of data with
	potential error.

- 240. Unwired performs the computer-implemented method of claim 24 and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 24 of the '363 Patent.
 - 241. Unwired identifies sets of data with potential error.
- 242. Direct infringement of claim 24 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 24 of the '363 Patent. Unwired performs the claimed method at least when building and updating its database for its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 24 of the '363 Patent.
- 243. Unwired had knowledge of the '363 Patent and the specifics of how its location positioning system and/or service infringes claims of the '363 Patent since at least July 2018.
- 244. The technology claimed in claim 24 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
 - 245. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning

system and/or service knowing that it infringes claim 24 of the '363 Patent.

COUNT 21: INFRINGEMENT OF THE '245 PATENT, CLAIM 1

- 246. Skyhook reasserts and realleges paragraphs 1 through 245 of this Complaint as though set forth fully here.
 - 247. Claim 1 of the '245 Patent provides:

Preamble to Claim 1	In a Wireless Local Area Network (WLAN) positioning system for estimating the position of a WLAN-enabled device, a method of estimating an expected error of a position estimate of the WLAN-enabled device, the method comprising:
Element A	receiving an identity of a plurality of WLAN access points in range of the WLAN-enabled device, the plurality of WLAN access points each having an estimated geographic location; and
Element B	estimating an expected error, in terms of distance, of a position estimate of the WLAN-enabled device that would result from using the estimated geographic locations of the plurality of WLAN access points in a position estimation determination, based on a spatial spread of WLAN access points in range of the WLAN enabled device,
Element C	wherein the spatial spread is a measure of distances between the estimated geographic locations of the plurality of WLAN access points in range of the WLAN enabled device, and the expected error of the position estimate predicts a relative accuracy of the position estimate.

- 248. Unwired estimates the position of a WLAN-enabled device and an expected error of a position estimate of the WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 1 of the '245 Patent.
- 249. Unwired provides location estimation for cell phones and other devices with Wi-Fi capabilities.
- 250. Unwired enables devices using its services to receive an identity of WLAN access points within the range of the user's device.

- 251. For example, Unwired location requests include bssid parameters for Wi-Fi access points.
- 252. Unwired's database includes an estimated geographic location of each Wi-Fi access point.
- 253. Unwired estimates an expected error, in terms of distance (e.g., meters), of position estimates of Wi-Fi-enabled devices.
- 254. The expected error of the position estimate predicts a relative accuracy of the position estimate.
- 255. The expected error estimation is a result of using the estimated locations of the access points to determine the position estimate of the device and is based on a spatial spread of access points in range of the device.
- 256. The spatial spread is a measure of distances between the estimated geographic locations of the plurality of Wi-Fi access points in range of the Wi-Fi enabled device.
- 257. Direct infringement of claim 1 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location system and/or service, which meets claim 1 of the '245 Patent. Unwired performs the claimed method at least when providing, demonstrating, or testing its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 1 of the '245 Patent.
- 258. Unwired had knowledge of the '245 Patent and the specifics of how its location positioning system and/or service infringes claims of the '245 Patent since at least July 2018.
- 259. The technology claimed in claim 1 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.

260. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 1 of the '245 Patent.

COUNT 22: INFRINGEMENT OF THE '245 PATENT, CLAIM 2

- 261. Skyhook reasserts and realleges paragraphs 1 through 260 of this Complaint as though set forth fully here.
 - 262. Claim 2 of the '245 Patent provides:

Element A	The method of claim 1, the estimating the expected error of the position
	estimate that would result from using the estimated geographic location of
	the plurality of WLAN access points in a position estimation determination
	being further based on the estimated geographic locations of the plurality
	of WLAN access points.

- 263. Unwired estimates the position of a WLAN-enabled device and an expected error of a position estimate of the WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 2 of the '245 Patent.
- 264. Unwired estimates the expected error of the position estimate that results from using the estimated geographic location of the plurality of WLAN access points in a position estimation determination based on the estimated geographic locations of the plurality of WLAN access points.
- 265. Direct infringement of claim 2 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets of claim 2 of the '245 Patent. Unwired performs the claimed method at least when providing, demonstrating, or testing its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 2 of the '245 Patent.

- 266. Unwired had knowledge of the '245 Patent and the specifics of how its location positioning system and/or service infringes claims of the '245 Patent since at least July 2018.
- 267. The technology claimed in claim 2 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 268. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 2 of the '245 Patent.

COUNT 23: INFRINGEMENT OF THE '245 PATENT, CLAIM 5

- 269. Skyhook reasserts and realleges paragraphs 1 through 268 of this Complaint as though set forth fully here.
 - 270. Claim 5 of the '245 Patent provides:

Element A	The method of claim 1, further comprising estimating the position of the
	WLAN-enabled device based on the estimated geographic locations of the
	plurality of WLAN access points in range of the WLAN enabled device
	only when the expected error of the position estimate is lower than a
	predetermined threshold.

- 271. Unwired estimates the position of a WLAN-enabled device and an expected error of a position estimate of the WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 5 of the '245 Patent.
- 272. Unwired estimates the position of the WLAN-enabled device based on the estimated geographic locations of the plurality of WLAN access points in range of the WLAN enabled device only when the expected error of the position estimate is lower than a predetermined threshold.

- 273. Direct infringement of claim 5 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 5 of the '245 Patent. Unwired performs the claimed method at least when providing, demonstrating, or testing its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 5 of the '245 Patent.
- 274. Unwired had knowledge of the '245 Patent and the specifics of how its location positioning system and/or service infringes claims of the '245 Patent since at least July 2018.
- 275. The technology claimed in claim 5 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 276. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 5 of the '245 Patent.

COUNT 24: INFRINGEMENT OF THE '245 PATENT, CLAIM 6

- 277. Skyhook reasserts and realleges paragraphs 1 through 276 of this Complaint as though set forth fully here.
 - 278. Claim 6 of the '245 Patent provides:

Element A	The method of claim 1, the WLAN positioning system using public and private WLAN access points for estimating the position of the WLAN-enabled device.
	charica device.

- 279. Unwired estimates the position of a WLAN-enabled device and an expected error of a position estimate of the WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 6 of the '245 Patent.
 - 280. Unwired's WLAN positioning system uses public and private WLAN access

points for estimating the position of the WLAN-enabled device.

- 281. Direct infringement of claim 6 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 6 of the '245 Patent. Unwired performs the claimed method at least when providing, demonstrating, or testing its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 6 of the '245 Patent.
- 282. Unwired had knowledge of the '245 Patent and the specifics of how its location positioning system and/or service infringes claims of the '245 Patent since at least July 2018.
- 283. The technology claimed in claim 6 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 284. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 6 of the '245 Patent.

COUNT 25: INFRINGEMENT OF THE '245 PATENT, CLAIM 7

- 285. Skyhook reasserts and realleges paragraphs 1 through 284 of this Complaint as though set forth fully here.
 - 286. Claim 7 of the '245 Patent provides:

	The method of claim 1, the WLAN positioning system using public and private WLAN access points that are deployed over a metropolitan area.

287. Unwired estimates the position of a WLAN-enabled device and an expected error of a position estimate of the WLAN-enabled device and makes, uses, sells, offers for sale, and/or imports a location positioning system and/or service that meets each and every element of claim 7 of the '245 Patent.

- 288. Unwired's WLAN positioning system uses public and private WLAN access points that are deployed over a metropolitan area.
- 289. Direct infringement of claim 7 occurs when Unwired makes, imports, uses, sells and/or offers for sale its location positioning system and/or service, which meets claim 7 of the '424 Patent. Unwired performs the claimed method at least when providing, demonstrating, or testing its LocationAPI product. In the alternative, Unwired actively induces the infringement of claim 7 of the '245 Patent.
- 290. Unwired had knowledge of the '245 Patent and the specifics of how its location positioning system and/or service infringes claims of the '245 Patent since at least July 2018.
- 291. The technology claimed in claim 7 was not well understood, routine, or conventional at the time that the application was filed and provided a technological solution to a technological problem rooted in computer technology.
- 292. Unwired makes, uses, offers to sell, sells, and/or imports its location positioning system and/or service knowing that it infringes claim 7 of the '245 Patent.

WILLFUL INFRINGEMENT

- 293. Unwired has infringed and continues to infringe the above identified claims of each of the Patents-in-Suit despite its knowledge of each at least as early as July 2018 and the objectively high likelihood that its actions constitute patent infringement.
- 294. Unwired's infringement of the Patents-in-Suit is willful and deliberate and its actions constitute egregious misconduct, including refusing to take a license, refusing to negotiate in good faith, and having knowledge of the Patents-in-Suit and notice of the infringement but having no reasonable factual basis for non-infringement or invalidity (e.g., as alleged in the preceding numbered paragraphs). This willful misconduct by Unwired entitles

Skyhook to enhanced damages under 35 U.S.C. §284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. §285.

JURY DEMAND

Skyhook demands a trial by jury on all issues that may be so tried.

REQUEST FOR RELIEF

WHEREFORE, Plaintiff Skyhook requests that this Court enter judgment in its favor and against Defendant Unwired as follows:

- A. Adjudging, finding, and declaring that Unwired has infringed the above-identified claims of each of the Patents-in-Suit under 35 U.S.C. § 271;
- B. Awarding past and future damages arising out of Unwired's infringement of the Patents-in-Suit to Skyhook in an amount no less than a reasonable royalty, together with prejudgment and post-judgment interest, in an amount according to proof;
- C. Adjudging, finding, and declaring that Unwired's infringement is willful and awarding enhanced damages and fees as a result of that willfulness under 35 U.S.C. § 284;
- D. Adjudging, finding, and declaring that the Patents-in-Suit are valid and enforceable;
- E. Awarding attorney's fees, costs, or other damages pursuant to 35 U.S.C. §§ 284 or 285 or as otherwise permitted by law;
- E. Issuing an order permanently enjoining Unwired from continuing to infringe the Patents-in-Suit; and
- F. Granting Skyhook such other further relief as is just and proper, or as the Court deems appropriate.

Dated: August 6, 2020 Respectfully submitted,

/s/ Alison Aubry Richards
Alison Aubry Richards
MA Bar #657298
arichards@giplg.com
Global IP Law Group, LLC
55 West Monroe Street, Suite 3400
Chicago, IL 60603
Telephone: (312) 241-1500

Attorney for Plaintiffs Skyhook Wireless, Inc. and Skyhook Holding, Inc.