**UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF MASSACHUSETTS**

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| SKYHOOK WIRELESS, INC. and SKYHOOK HOLDING, INC.<br><br>Plaintiffs,<br>v.<br><br>COMBAIN MOBILE AB,<br><br>Defendant. | Civil Action No.: 1:19-cv-11230-RGS<br><br>**DEMAND FOR JURY TRIAL** |

**AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiffs Skyhook Wireless, Inc. and Skyhook Holding, Inc. (together "Skyhook") complain of Defendant Combain Mobile AB 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 Combain Mobile AB ("Combain") that relates to six U.S. patents owned by Skyhook: 7,397,424; 9,402,154; 8,909,245; 8,031,657; 8,155,673; and 8,837,363 (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. Skyhook is the named assignee of, owns all right title and interest in, and has standing to sue for patent infringement of the Patents-in-Suit.

5. Defendant Combain Mobile AB ("Combain") is a Swedish corporation, with its principal place of business at Scheelevägen 27, 223 63 Lund, Sweden.

6. Defendant Combain 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. Combain is subject to this Court's general and specific personal jurisdiction because Combain 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) Combain 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 the Combain Positioning Service and Combain Location API, 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. Alternatively, this Court has personal jurisdiction over Combain pursuant to Federal Rule of Civil Procedure 4(k)(2) based on Combain's contacts with the United States as a whole.

10. Combain, 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 website, https://combain.com/) its products and services in the United States, the State of Massachusetts, and the District of Massachusetts.

11. Combain, 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. Combain 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 Combain 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 Combain, which is organized under the laws of Sweden, 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 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 smartphones were in early stages of development.

15. Skyhook Wireless filed its first patent in 2004 and has spent significant time and revenue on research and development of its location positioning technology and development of its patent portfolio, which now comprises over 200 patent assets filed in 15 countries.

16. Skyhook Wireless 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 and processes over 5.5 billion location requests daily and over a trillion location requests each year. The company provides location services in over 220 countries.

17. Skyhook Wireless' technology has attracted the biggest tech giants of this generation. For example, Apple introduced the integration of Skyhook's Wi-Fi positioning system to provide location services on January 15, 2008 at Macworld. 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.

18. As of the date of this Complaint, Skyhook Wireless has licensed its patent portfolio to five of Defendant Combain's competitors in the location services space. One of those licensees is Google, Inc., who settled a patent litigation lawsuit with a $90 million payment to Skyhook after litigating in this Court for over four years. 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.

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

20. Skyhook has the exclusive right to sue and the exclusive right to recover damages for infringement of the Patents-in-Suit during all relevant time periods.

21. On July 8, 2008, US 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.

22. On July 26, 2016, US 9,402,154 (the "'154 Patent") entitled "Methods for providing location of wireless devices using Wi-Fi" was duly and legally issued by the USPTO.

23. On December 9, 2014, US 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.

24. On October 4, 2011, U.S. Patent No. 8,031,657 (the "'657 Patent) entitled "Server for updating location beacon database" was duly and legally issued by the USPTO.

25. On April 10, 2012, U.S. Patent No. 8,155,673 (the "'673 Patent") entitled "Estimation of position using WLAN access point radio propagation characteristics in a WLAN positioning system" was duly and legally issued by the USPTO.

26. 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.

**COMBAIN'S INFRINGING PRODUCTS AND SERVICES**

27. Skyhook asserts that Combain 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:

- Claim 15 of the '424 Patent
- Claim 1 of the '154 Patent
- Claim 1 of the '245 Patent
- Claim 1 of the '657 Patent
- Claim 1 of the '673 Patent
- Claim 18 of the '363 Patent

28. Combain 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 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. Combain has built and maintains a database of Wi-Fi access points, which it uses to provide Combain Positioning Service to its customers throughout the world.

29. Combain 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.

30. Despite Combain's awareness of the Patents-in-Suit, Combain 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. Combain'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 Combain, a remedy in equity is warranted, and the public interest would not be disserved by a permanent injunction.

## COMBAIN'S KNOWLEDGE OF THE PATENTS-IN-SUIT AND CONTINUED INFRINGEMENT OF THE PATENTS-IN-SUIT WITH SUCH KNOWLEDGE

32. Prior to this litigation, Skyhook and Combain have had several conversations that involve the Patents-in-Suit. Skyhook attempted to resolve the issues now in this litigation over a period of two years through several meetings and discussions among the parties and their counsel.

33. Skyhook notified Defendant of its patent claims on December 7, 2016 and offered Combain a license to its patent portfolio in this initial communication. Defendant responded in January 2017 asserting it did not infringe, but with little to substantiate its position.

34. Over the next year Skyhook pursued licensing discussions with third parties and attempted to engage Defendant in licensing negotiations. These attempts were largely ignored.

35. In April of 2018, after Skyhook had concluded patent licenses negotiations with several other counterparties, it made another effort to engage with Combain.

36. On September 4, 2018, the parties met to discuss Skyhook's claims and to update Defendant on Skyhook's success in licensing several parties.

37. Skyhook has made reasonable requests for Combain to enter into a license agreement.

38. This Complaint serves as additional notice to Combain of the Patents-in-Suit and the manner in which it is infringed.

39. 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, Combain has continued to infringe, and induce the infringement of, the Patents-in-Suit.

**COUNT I: INFRINGEMENT OF THE '424 PATENT, CLAIM 15**

40. Skyhook reasserts and realleges paragraphs 1 through 39 of this Complaint as though set forth fully here.

41. Claim 15 of the '424 Patent provides:

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| 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. |

42. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system—Combain Positioning Service—that meets each and every element of claim 15 of the '424 Patent. Combain also induces its users to use its Combain Positioning Service to infringe claim 15 above.

43. The Combain Positioning Service comprises a central database of Wi-Fi access points and Combain administers its database in order to provide location-positioning services.

44. Combain maintains its central database on its servers. In order to maintain its database, Combain collects data from Wi-Fi access points.

45. Combain Positioning Service communicates with surrounding wireless devices in order to collect Wi-Fi access point data. For example, Combain surveys available Wi-Fi access points when users are using location aware applications on their mobile devices.

46. The mobile devices, in communication with Combain Positioning Service, determine identification and positional information of Wi-Fi access points in range of the mobile devices. For example, the mobile devices determine MAC addresses and longitude/latitude coordinates of wireless access points.

47. Combain collects the identification and positional information about new Wi-Fi access points.

48. Combain updates its central database with new location information.

49. Users of Combain Positioning Service are able to utilize its most recently updated database when requesting their position estimate.

50. 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.

51. Direct infringement of claim 15 occurs when Combain makes, imports, uses, sells and offers for sale Combain Positioning Service, which meets claim 15 of the ’424 Patent. Combain also actively induces the infringement of claim 15 of the ’424 Patent.

52. Combain had knowledge of the ’424 Patent and the specifics of how Combain Positioning Service infringes claims of the ’424 Patent since at least December 7, 2016.

53. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 15 of the ’424 Patent.

**COUNT II: INFRINGEMENT OF THE ’154 PATENT, CLAIM 1**

54. Skyhook reasserts and realleges paragraphs 1 through 53 of this Complaint as though set forth fully here.

55. Claim 1 of the ’154 Patent provides:

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| Preamble to Claim 1 | A method, comprising: |
| Element A | maintaining on a database server, a collaborative database containing geographic location information pertaining to Wi-Fi access points received from a plurality of Wi-Fi- and GPS-enabled mobile devices operated by a plurality of different users, the collaborative database including database records for each of a plurality of Wi-Fi access points including a MAC address and geographic location of the Wi-Fi access point, wherein at least a first portion of the database records are based on Wi-Fi identification and geographic location data received from a first Wi-Fi- and GPS-enabled mobile device of the plurality of Wi-Fi- and GPS-enabled mobile devices operated by a first user of the plurality of different users and at least a second portion of the database records different than the first portion are based on Wi-Fi identification and geographic location data received from a second Wi-Fi- and GPS-enabled mobile device of the plurality of Wi-Fi- and GPS-enabled mobile devices operated by a second user of the plurality of different users such that the collaborative database is built in a collaborative manner by at least the first and second Wi-Fi- and GPS-enabled devices operated by the first and second users, each of the first and second Wi-Fi- and GPS-enabled mobile devices comprising a Wi-Fi scanner and a GPS device, the first and second Wi-Fi- and GPS-enabled mobile devices each comprising a personal digital assistant (PDA) or a cell phone; |
| Element B | receiving, at a server, a location request from the first Wi-Fi- and GPS-enabled mobile device, the location request including a respective MAC address of at least one Wi-Fi access point for which a wireless signal is detected by the first Wi-Fi- and GPS-enabled mobile device; |
| Element C | retrieving, via a query issued to the database server using at least one MAC address included in the location request, geographic location data for at least one of the Wi-Fi access points from the collaborative database; |
| Element D | determining, via a processor, a geographic location of the first Wi-Fi- and GPS-enabled mobile device based at least on the geographic location data retrieved from the collaborative database; and |
| Element E | returning, via the server, the determined geographic location to the first Wi-Fi- and GPS-enabled mobile device. |

56. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system—Combain Positioning Service—that meets each and every element of claim 1 of the

’154 Patent. Combain also induces its users to use its Combain Positioning Service to infringe claim 1 above.

57. Combain Positioning Service is wireless LAN positioning system that utilizes a database server comprising geographic location information of Wi-Fi access points.

58. Combain maintains its database of Wi-Fi access points in order to provide location services.

59. Combain collects Wi-Fi access point information from Wi-Fi and GPS-enabled mobile devices operated by a plurality of users.

60. Combain’s database includes database records for each of a plurality of Wi-Fi access points. Each of the records includes a MAC address and a geographic location of the Wi-Fi access point.

61. Combain’s database comprises at least a first portion of records based on Wi-Fi identification and geographic information received from a first mobile device operated by a first user, of many different users. The database comprises at least a second portion of database records that are different from the first portion. These records are based on Wi-Fi identification and geographic information received from a second mobile device operated by a second user, of many different users.

62. The Combain database is built in a collaborative manner by at least the first and second mobile devices operated by the first and second users.

63. Each of the first and second mobile devices comprise a Wi-Fi scanner and a GPS device, and a PDA or a cell phone.

64. Combain receives, at its server, a location request from a first mobile. The request location includes a MAC address of at least one nearby Wi-Fi access point that the first mobile

device can detect.

65. Combain retrieves, via a query sent to its database server using the MAC address included in the location request, geographic location data for at least one of the Wi-Fi access points from the database.

66. Combain determines, via a processor, the geographic location of the first mobile device based at least on the geographic location data retrieved from its database.

67. Combain returns, via its server, the determined geographic location to the first mobile.

68. 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.

69. Direct infringement of claim 1 occurs when Combain makes, imports, uses, sells and offers for sale Combain Positioning Service, which meets claim 1 of the ’154 Patent. Combain also actively induces the infringement of claim 1 of the ’154 Patent.

70. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 1 of the ’154 Patent.

**COUNT III: INFRINGEMENT OF THE ’245 PATENT, CLAIM 1**

71. Skyhook reasserts and realleges paragraphs 1 through 70 of this Complaint as though set forth fully here.

72. Claim 1 of the ’245 Patent provides:

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| 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. |

73. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system—Combain Positioning Service—that meets each and every element of claim 1 of the ’245 Patent. Combain also induces its users to use its Combain Positioning Service to infringe claim 1 above.

74. Combain Positioning Service is a wireless LAN positioning system for estimating the position of WLAN-enabled devices.

75. For example, Combain Positing Service provides position estimated to mobile phones. The position estimate includes an expected error of the estimate.

76. In order to provide a position estimate with expected error, Combain receives information from nearby WLAN access points. The information includes identification information about the surrounding WLAN access points.

77. Combain estimates expected error of the position estimate of the WLAN-enabled

device based on the locations of the surrounding WLAN access points.

78. Combain provides expected error of the position estimate in terms of distance—meters. And the expected error is based on a spatial spread of the surrounding WLAN access points.

79. Combain uses the spatial spread of the surrounding WLAN access points—or the distance between the locations of the surrounding WLAN access points, to provide expected error of the position estimate.

80. Combain provides expected error as an accuracy measurement of the position estimate.

81. 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.

82. Direct infringement of claim 1 occurs when Combain makes, imports, uses, sells and offers for sale Combain Positioning Service, which meets claim 1 of the ’245 Patent. Combain also actively induces the infringement of claim 1 of the ’245 Patent.

83. Combain had knowledge of the ’245 Patent and the specifics of how Combain Positioning Service infringes claims of the ’245 Patent since at least December 7, 2016.

84. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 1 of the ’245 Patent.

**COUNT IV: INFRINGEMENT OF THE ’657 PATENT, CLAIM 1**

85. Skyhook reasserts and realleges paragraphs 1 through 84 of this Complaint as though set forth fully here.

86. Claim 1 of the ’657 Patent provides:

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| Preamble to Claim 1 | A Wi-Fi location server system, comprising: |
| Element A | a collection of information in a non-transitory computer-readable medium describing Wi-Fi access points for at least one target area, the collection including information for a plurality of Wi-Fi access points in the target area, the information including identification information for a corresponding Wi-Fi access point and calculated position information for the corresponding Wi-Fi access point, wherein the calculated position information is obtained from recording multiple readings of the Wi-Fi access point at different locations around the Wi-Fi access point so that the calculation of the position of the Wi-Fi access point reduces arterial bias in the calculated position information; |
| Element B | computer-implemented logic for receiving sets of newly-discovered readings for Wi-Fi access points in the target area and location information representing one or more locations at which any of the newly-discovered readings were detected; |
| Element C | computer-implemented logic for identifying potential error in the location information including grouping readings into subsets, assigning one or more attributes to each subset, comparing attributes of at least two subsets, and identifying the potential error in the location information based on results of the comparing; and |
| Element D | computer-implemented logic to determine position information for Wi-Fi access points based on the multiple readings of the Wi-Fi access point at different locations around the Wi-Fi access point and the location information representing one or more locations at which any of the multiple readings were detected, wherein the location information with potential error is excluded. |

87. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system —Combain Positioning Service—that meets each and every element of claim 1 of the ’657 Patent.

88. Combain’s positioning system is a Wi-Fi location positioning server system.

89. Combain collects and maintains Wi-Fi access point information in its crowd-sourced location database.

90. Combain's positioning system database describes Wi-Fi access point information for at least one target area.

91. Combain's collection of information includes observations for a plurality of Wi-Fi access points in the target area including identification and calculated position information of the Wi-Fi access points.

92. Combain obtains calculated position information by recording multiple readings of Wi-Fi access points at different locations around the access point so that the calculation reduces arterial bias.

93. Combain uses computer-implemented logic to receive reports, which include sets of newly discovered readings for Wi-Fi access points in the target area and location information that represents the locations at which any of the newly-discovered readings were detected.

94. Combain uses computer-implemented logic to identify potential error in the location information.

95. Combain groups readings into subsets and assigns one or more attributes to each subset, compares the attributes of at least two subsets, and identifies the potential error in the location information based on results of the comparison.

96. Combain's readings also include position fields which provide information about where each W-Fi access point observation was made. These fields are used to compare and discard certain reports based on potential error in the location information.

97. Combain uses computer-implemented logic to determine position information for Wi-Fi access points.

98. The position information is based on multiple readings of the Wi-Fi access point at different locations around the Wi-Fi access point and the location information represents one or more locations at which any of the multiple readings were detected.

99. Combain excludes the location information with potential error.

100. 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.

101. Direct infringement of claim 1 occurs when Combain makes, imports, uses, sells and/or offers for sale its Combain positioning system which meets claim 1 of the ’657 Patent. In the alternative, Combain actively induces the infringement of claim 1 of the ’657 Patent.

102. Combain had knowledge of the ’657 Patent and the specifics of how Combain Positioning Service infringes claims of the ’657 Patent since at least December 7, 2016.

103. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 1 of the ’657 Patent.

**COUNT V: INFRINGEMENT OF THE ’673 PATENT, CLAIM 1**

104. Skyhook reasserts and realleges paragraphs 1 through 103 of this Complaint as though set forth fully here.

105. Claim 1 of the ’673 Patent provides:

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| Preamble to Claim 1 | A method of characterizing a WLAN access point, so that the characterization may be used later to effectively weigh signals transmitted by said WLAN access point when performing a location estimation, the method of characterization comprising: |
| Element A | measuring a plurality of power values for signals transmitted by at least one WLAN access point, each power value being measured at a position relative to the WLAN access point; |

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| Element B | estimating a signal coverage area of the WLAN access point based on the measured plurality of power values; |
| Element C | dividing the signal coverage area of the WLAN access point into at least one section; and |
| Element D | assigning a weight to each section of the WLAN access point based on at least one of the estimated signal coverage areas and the plurality of power values. |

106. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system—Combain Positioning Service —that meets each and every element of claim 1 of the ’673 Patent.

107. Combain Positioning Service is a location positing service that performs a method of characterizing a WLAN access point.

108. For example, Combain Positioning Service characterizes Wi-Fi access points. The characterization is used later to effectively weigh signals transmitted by the Wi-Fi access point when performing location estimation.

109. Combain measures a plurality of power values for signals transmitted by Wi-Fi access points at a position relative to the Wi-Fi access point.

110. For example, Combain measures signal strength of Wi-Fi access points.

111. Combain estimates a signal coverage area of the Wi-Fi access point based on the measured plurality of power values.

112. Combain divides the signal coverage area of the Wi-Fi access point into at least one section.

113. Combain assigns a weight to the section of the Wi-Fi access point based on the estimated signal coverage area or the plurality of power values.

114. 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.

115. Direct infringement of claim 1 occurs when Combain makes, imports, uses, sells and offers for sale the Combain Positioning Service, which meets claim 1 of the ’673 Patent. In the alternative, Combain actively induces the infringement of claim 1 of the ’673 Patent.

116. Combain had knowledge of the ’673 Patent and the specifics of how Combain Positioning Service infringes claims of the ’673 Patent since at least December 7, 2016.

117. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 1 of the ’673 Patent.

**COUNT VI: INFRINGEMENT OF THE ’363 PATENT, CLAIM 18**

118. Skyhook reasserts and realleges paragraphs 1 through 117 of this Complaint as though set forth fully here.

119. Claim 18 of the ’363 Patent provides:

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| 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, 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 B | 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 C | storing the derived position information in a non-transitory computer-readable medium. |

120. Combain makes, uses, sells, offers for sale, and/or imports a location positioning system that meets each and every element of claim 18 of the ’363 Patent.

121. Combain builds and maintains its database of location information in order to provide location-positioning services.

122. Combain gathers location information from Wi-Fi access points within geographical regions having a radius on the order of miles.

123. For example, Combain gathers location information from Wi-Fi access points throughout the United States.

124. Combain 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.

125. Combain collects signal data and related characteristics of a signal received from an observed Wi-Fi access point.

126. For example, Combain collects information about an observed signal’s strength.

127. Combain also collects the MAC address of the observed access point, which is a unique identifier for the observed point.

128. Combain also collects location information of the access point (“observations”).

129. Combain stores the derived new locations in its database.

130. 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.

131. Direct infringement of claim 18 occurs when Combain makes, imports, uses, sells and offers for sale the Combain Positioning Service, which meets claim 18 of the ’363 Patent. In the alternative, Combain actively induces the infringement of claim 18 of the ’363 Patent.

132. Combain had knowledge of the ’363 Patent and the specifics of how Combain’s Positioning Service infringes claims of the ’363 Patent since at least December 7, 2018.

133. Combain makes, uses, offers to sell, sells, and/or imports Combain Positioning Service knowing that it infringes claim 18 of the ’363 Patent.

**WILLFUL INFRINGEMENT**

134. Combain has infringed and continues to infringe the above identified claims of the Patents-in-Suit despite its knowledge of the ’154 Patent at least as early as June 3, 2019 and of the other five Patents-in-Suit at least as early as December 7, 2016 and the objectively high likelihood that its actions constitute patent infringement.

135. Combain’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 paragraphs 28-35 above). This willful misconduct by Combain 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 Combain as follows:

A. Adjudging, finding, and declaring that Combain has infringed the Patents-in-Suit under 35 U.S.C. § 271;

B. Issuing an order permanently enjoining Combain from continuing to infringe the Patents-in-Suit; and

B. Awarding past and future damages arising out of Combain'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 Combain'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;

F. Granting Skyhook such other further relief as is just and proper, or as the Court deems appropriate.

Respectfully submitted,

Dated: November 29, 2019

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