EXHIBIT Z

Exhibit A

U.S. Patent No. 7,305,245

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"a simple signal strength weighted average model"	6	An algorithm that includes averaging the calculated locations of identified Wi-Fi access points weighted according to their received signal strengths.	**'245 Patent:** *See, e.g.*, 4:46–48, 6:65–7:10 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): signal strength; Webster's Third New International Dictionary Unabridged (2002): weighted average; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): weighted average; Van Nostrand's Scientific Encyclopedia Vol. 2 (7th ed., 1989): weighting.
"a triangulation technique"	8	An algorithm that includes (1) estimating the distances from the user device to at least two identified Wi-Fi access points using their received signal strengths and (2) determining a location based on the estimated distances.	**'245 Patent:** *See, e.g.*, 1:61–63, 2:7–9, 4:51–53, 6:65–7:10 **Extrinsic Evidence:** *See, e.g.*, Ultra Wideband Wireless Communication 49 (Hüseyin Arslan, Zhi Ning Chen & Maria-Gabriella Di Benedetto eds., 2006); The American Heritage Science Dictionary (2005): triangulation; UWB Theory and Applications 176 (Ian Oppermann,

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
			Matti Hämäläinen & Jari Iinatti eds., 2004); John R. Vacca, Wireless Data Demystified 73 (McGraw-Hill Cos. 2003).
"Wi-Fi access points"	1, 2	Does not need to be construed. But if construed: Devices utilizing the IEEE 802.11 standard and that can be configured to provide wireless devices with network connectivity.	**'245 Patent:** *See, e.g.*, Fig. 1; 4:21–23, 4:64–65, 5:28–29, 5:52–55
"target area"	1	A targeted geographic area.	**'245 Patent:** *See, e.g.*, Abstract; 4:21–23, 5:29–31, 7:36–42
"a user-device having a Wi-Fi radio"	1	Does not need to be construed. But if construed: A user device having a Wi-Fi radio.	**'245 Patent:** *See, e.g.*, Fig. 1; 4:20–21, 4:64–65, 5:55–61, 6:14–29

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"providing a reference database of calculated locations of Wi-Fi access points in a target area"	1	Does not need to be construed. But if construed: Providing a database of calculated locations of Wi-Fi access points in a target area. The database is used to locate a user device having a Wi-Fi radio. *See* "calculated locations," "Wi-Fi access points," and "target area."	**'245 Patent:** *See, e.g.*, Abstract; Fig. 9; 4:21–23, 5:15–17, 6:29–36, 8:58–64 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database.
"calculated locations"	1, 2	Estimated physical locations of Wi-Fi access points calculated using characteristics of signals transmitted by such Wi-Fi access points.	**'245 Patent:** *See, e.g.*, Abstract; Figs. 3–6, 9; 4:21–23, 5:1–10, 5:15–17, 5:66–6:1, 7:41–49, 8:58–64, 12:3–14, 12:22–13:28
"in response to a user application request to determine a location of a user-device having a Wi-Fi radio"	1	In response to a request made by an application running on a user-device having a Wi-Fi radio to determine the location of the user-device. *See* "a user-device having a Wi-Fi radio."	**'245 Patent:** *See, e.g.*, Fig. 9; 4:23–24, 5:15–17, 6:12–29
"said chosen algorithm being suited for the number of identified Wi-Fi access points"	1	Does not need to be construed. But if construed: The chosen location-determination algorithm is suited for the number of Wi-Fi access points that are identified. *See* "Wi-Fi access points."	**'245 Patent:** *See, e.g.*, 4:33–40, 5:45–48, 7:10–12

Exhibit B

U.S. Patent No. 7,433,694

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"for substantially all Wi-Fi access points in the target area"	1	For substantially all observed Wi-Fi access points in the target area. *See* "Wi-Fi access points" and "target area."	**'694 Patent:** *See, e.g.*, Abstract; 4:2–10, 4:47–54, 5:19–21, 5:54–56, 6:55–7:5, 7:63–66, 9:41–43, 10:57–67
"avoid arterial bias"	1	Reduce the effects of arterial bias. *See* "arterial bias."	**'694 Patent:** *See, e.g.*, Abstract; Figs. 3, 4, 11; 2:52–57, 4:2–10, 4:19–23, 4:38–40, 7:7–8:12, 8:22–41, 9:3–23 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): avoid.
"a database of Wi-Fi access points for at least one target area"	1	A database of Wi-Fi access points for at least one "target area" where "target area" is defined as provided below. *See* "Wi-Fi access points" and "target area."	**'694 Patent:** *See, e.g.*, Abstract; Figs. 1, 8–10; 3:66–4:2, 4:15–16, 4:31–37, 5:19–21, 6:55–63, 8:16–22 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"Wi-Fi access points"	1	Does not need to be construed. But if construed: Devices utilizing the IEEE 802.11 standard and that can be configured to provide wireless devices with network connectivity.	**'694 Patent:** *See, e.g.*, Fig. 1; 3:66–4:2, 4:15–16, 4:46–47, 5:4–6
"target area"	1, 2	A targeted geographic area.	**'694 Patent:** *See, e.g.*, Abstract; 3:66–4:2, 4:47–49, 6:58–63
"database records"	1	Does not need to be construed. But if construed: Data records stored in a database.	**'694 Patent:** *See, e.g.*, Abstract; 4:2–10, 5:19–21 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database, record; The IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed., 1996): database record; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): record.
"substantially all Wi-Fi access points"	1	Substantially all observed Wi-Fi access points. *See* "Wi-Fi access points."	**'694 Patent:** *See, e.g.*, Abstract; 4:2–10, 4:47–54, 5:19–21, 5:54–56, 6:55–7:5, 7:63–66, 9:41–43, 10:57–67

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"calculated position information"	1	Estimated physical position of the observed Wi-Fi access point calculated using characteristics of its transmitted signal.	**'694 Patent:** *See, e.g.*, Abstract; Fig. 9; 4:2–10, 4:34–35, 5:6–26, 6:58–7:4, 8:16–22, 11:18–42, 11:51–12:54
"reference symmetry"	1	From the perspective of a user whose location is being calculated, the calculated positions of observed Wi-Fi access points in range of the user tend to be distributed around the user with reduced arterial bias.	**'694 Patent:** *See, e.g.*, Abstract; Figs. 5, 6, 11; 4:2–10, 4:24–28, 4:38–40, 9:3–23 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): symmetry.
"arterial bias"	1	The deviation of the calculated position information for a Wi-Fi access point towards heavily trafficked roads and away from the actual geographic location of the access point.	**'694 Patent:** *See, e.g.*, Abstract; Figs. 3, 4, 11; 2:52–57, 4:2–10, 4:19–23, 4:38–40, 7:7–8:12, 8:22–41, 9:3–23
"recording multiple readings of the Wi-Fi access point at different locations around the Wi-Fi access point so that the multiple readings avoid arterial bias in the calculated position information of the Wi-Fi access point"	1	Multiple scans of a Wi-Fi access point are recorded. The scans are taken at different locations around the Wi-Fi access point. The multiple readings avoid arterial bias in the calculated position information of the Wi-Fi access point. *See* "Wi-Fi access points," "avoid arterial bias," and "calculated position information."	**'694 Patent:** *See, e.g.*, Abstract; Figs. 3–6, 11; 4:2–10, 4:19–28, 4:38–40, 7:47–8:12, 8:22–41, 9:3–23 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): avoid.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"wherein the database records for substantially all Wi-Fi access points in the target area provide reference symmetry within the target area"	1	Wherein the database records for substantially all Wi-Fi access points in the target area are distributed such that when the database records are used to calculate a user's location, the calculated positions of the observed Wi-Fi access points in range of the user tend to be distributed around the user with reduced levels of arterial bias. *See* "database records," "substantially all Wi-Fi access points," "target area," "Wi-Fi access points," and "reference symmetry."	**'694 Patent:** *See, e.g.*, Abstract; Figs. 3–6, 11; 4:2–10, 4:19–28, 4:38–40, 7:47–8:12, 9:3–23 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database, record; The IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed., 1996): database record; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): record, symmetry.

Exhibit C

U.S. Patent No. 7,414,988

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"for substantially all Wi-Fi access points in the target area"	1	For substantially all observed Wi-Fi access points in the target area. *See* "Wi-Fi access points" and "target area."	**'988 Patent:** *See, e.g.*, Abstract; 4:31–40, 5:27–34, 5:66–6:1, 6:35–37, 7:35–55, 8:44–47, 10:21–23, 11:35–45
"avoids arterial bias"	1	Reduces the effects of arterial bias. *See* "arterial bias."	**'988 Patent:** *See, e.g.*, Abstract; Figs. 3, 4, 11; 3:12–18, 4:31–40, 4:66–5:3, 5:17–20, 7:55–8:59, 9:2–21, 9:51–10:4 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001212–1222 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): avoid.
"a weighted centroid position"	3	A weighted average position.	**'988 Patent:** *See, e.g.*, 4:50–57, 11:64–13:31 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001306–1320 **Extrinsic Evidence:** *See, e.g.*, SKYFED000128–145; Webster's Third New International Dictionary Unabridged (2002): weighted

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
			average; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): weighted average; Van Nostrand's Scientific Encyclopedia Vol. 2 (7th ed., 1989): weighting.
"a database of Wi-Fi access points for at least one target area"	1	A database of Wi-Fi access points for at least one "target area" where "target area" is defined as provided below. *See* "Wi-Fi access points" and "target area."	**'988 Patent:** *See, e.g.*, Abstract; Figs. 1, 8–10; 4:28–31, 4:62–63, 5:11–20, 5:66–61, 7:36–44, 8:63–9:2 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database.
"Wi-Fi access points"	1, 3	Does not need to be construed. But if construed: Devices utilizing the IEEE 802.11 standard and that can be configured to provide wireless devices with network connectivity.	**'988 Patent:** *See, e.g.*, Fig. 1; 4:28–31, 4:62–63, 5:26–27, 5:51–53
"target area"	1	A targeted geographic area.	**'988 Patent:** *See, e.g.*, Abstract; 4:28–31, 5:27–29, 7:39–44

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"database records"	1	Does not need to be construed. But if construed: Data records stored in a database.	**'988 Patent:** *See, e.g.*, Abstract; 4:31–40, 5:66–6:1 **Extrinsic Evidence:** *See, e.g.*, Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database, record; The IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed., 1996): database record; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): record.
"substantially all Wi-Fi access points"	1	Substantially all observed Wi-Fi access points. *See* "Wi-Fi access points."	**'988 Patent:** *See, e.g.*, Abstract; 4:31–40, 5:27–34, 5:66–6:1, 6:35–37, 7:35–55, 8:44–47, 10:21–23, 11:35–45
"calculated position information"	1	Estimated physical position of the observed Wi-Fi access point calculated using characteristics of its transmitted signal.	**'988 Patent:** *See, e.g.*, Abstract; Fig. 9; 4:31–40, 5:14–15, 5:53–6:7, 7:39–52, 8:63–9:2, 11:64–12:20, 12:29–13:31

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"reference symmetry"	1	From the perspective of a user whose location is being calculated, the calculated positions of observed Wi-Fi access points in range of the user tend to be distributed around the user with reduced arterial bias.	**'988 Patent:** *See, e.g.*, Abstract; Figs. 5, 6, 11; 4:31–40, 5:4–8, 5:17–20, 9:51–10:4 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001212–1222 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): symmetry.
"arterial bias"	1	The deviation of the calculated position information for a Wi-Fi access point towards heavily trafficked roads and away from the actual geographic location of the access point.	**'988 Patent:** *See, e.g.*, Abstract; Figs. 3, 4, 11; 3:12–18, 4:31–40, 4:66–5:3, 5:17–20, 7:55–8:59, 9:2–21, 9:51–10:4 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001212–1222

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"recording multiple readings of the Wi-Fi access point at different locations around the Wi-Fi access point so that the multiple readings have reference symmetry relative to other Wi-Fi access points in the target area and so that the calculation of the position of the Wi-Fi access point avoids arterial bias in the calculated position information"	1	Multiple scans of a Wi-Fi access point are recorded. The scans are taken at different locations around the Wi-Fi access point. This results in the following: (1) the multiple readings produce reference symmetry relative to other Wi-Fi access points in the target area and (2) the calculated position of the Wi-Fi access point reduces the effects of arterial bias. *See* "Wi-Fi access points," "reference symmetry," "avoids arterial bias," and "calculated position information."	**'988 Patent:** *See, e.g.*, Abstract; Figs. 3–6, 11; 4:31–40, 4:66–5:8, 5:17–20, 8:28–59, 9:2–21, 9:51–10:4 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001212–1222 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): avoid, symmetry.
"logic to recalculate position information for Wi-Fi access points previously stored in the database to utilize position information for the newly-discovered readings of previously stored Wi-Fi access points"	1	Software and/or hardware to recalculate position information for Wi-Fi access points previously stored in the database. This recalculation utilizes new position information for such Wi-Fi access points calculated using scans taken after the previously stored Wi-Fi access points were stored. *See* "Wi-Fi access points." This is not a means plus function claim element. If the Court were to construe this claim element as a	**'988 Patent:** *See, e.g.*, Figs. 8, 9; 4:40–46, 5:11–13, 5:37–41, 12:29–38 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): logic; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database; The American Heritage College Dictionary (3rd ed., 1997):

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		means plus function claim element, then Skyhook identifies the following corresponding structure: *12:24–38* "An additional enhancement to the algorithm would include a weighting value based on the age of the records such that new records represent a more significant indication of the present location for a given access point. Once the parsing process has been completed the central network system . . . begins processing the new data. . . . 2) existing access points are repositioned based on any new data recorded by the scanners. The . . . algorithm factors in the number of records and their associated signal strengths to weight stronger signal readings more than weaker signals with a quasi weighted average model."	logic; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): logic.
"computer-implemented logic to add records to the database for newly-discovered Wi-Fi access points"	1	Computer-implemented software and/or hardware to add data records to the database for newly-discovered Wi-Fi access points. *See* "Wi-Fi access points" and "database records." This is not a means plus function claim element. If the Court were to construe this claim element as a means plus function claim element, then Skyhook	**'988 Patent:** *See, e.g.*, Figs. 8, 9; 4:40–46, 5:11–13, 5:37–41, 12:29–38 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): logic; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000):

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		identifies the following corresponding structure: *12:29–38* "Once the parsing process has been completed the central network system . . . begins processing the new data. During this process 1) new access points are added to the database and their physical location is calculated . . . . The . . . algorithm factors in the number of records and their associated signal strengths to weight stronger signal readings more than weaker signals with a quasi weighted average model."	database, record; The American Heritage College Dictionary (3rd ed., 1997): logic; The IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed., 1996): database record; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): record; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): logic.
"computer-implemented clustering logic to identify position information based on error prone GPS information"	2	Computer-implemented software and/or hardware to identify when position information for a Wi-Fi access point based on GPS readings is likely to be erroneous. The software and/or hardware identifies position information that is not located within a certain threshold distance of other position information for the Wi-Fi access point. This is not a means plus function claim element. If the Court were to construe this claim element as a means plus function claim element, then Skyhook identifies the following corresponding structure: *12:1-12:10* "In some cases the GPS receiver may record erroneous or	**'988 Patent:** *See, e.g.*, Figs. 8, 9; 4:47–49, 5:11–13, 11:64-12:20 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): logic; The American Heritage College Dictionary (3rd ed., 1997): logic; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): logic.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		error records for some period of time, which could negatively affect the final access point location calculation. The parser and filter process identifies these bad records and either corrects them or removes them from the system. The filtering process users clustering techniques to weed out error prone GPS readings. For example, if 90% of the readings are within 200 meters of each other but the remaining 10% of the readings are 5 kilometers away then those outliers are removed by the filter . . . ."	
"logic to determine a weighted centroid position for all position information reported for an access point"	3	Software and/or hardware to determine a weighted centroid position for a Wi-Fi access point. The weighted centroid position is determined using all position information reported for that Wi-Fi access point. *See* "weighted centroid position" and "Wi-Fi access points." This is not a means plus function claim element. If the Court were to construe this claim element as a means plus function claim element, then Skyhook identifies the following corresponding structure: *12:11–13* "In particular, the system first calculates the weighted centroid for the access point using all reported data."	**'988 Patent:** *See, e.g.*, Figs. 8, 9; 4:50–57, 5:11–13, 11:64–13:31 **'988 Patent Prosecution History:** *See, e.g.*, SKYFED001306–1320 **Extrinsic Evidence:** *See, e.g.*, SKYFED000128–145; Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): logic; Webster's Third New International Dictionary Unabridged (2002): weighted average; The American Heritage College Dictionary (3rd ed., 1997): logic; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989):

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		12:34–44 "The . . . algorithm factors in the number of records and their associated signal strengths to weight stronger signal readings more than weaker signals with a quasi weighted average model. During data gathering, a WPS user is equipped with a Wi-Fi receiver device which measures Received Signal Strength (RSS) from all the available Wi-Fi access points, and then extracts location information of corresponding access points."	logic, weighted average; Van Nostrand's Scientific Encyclopedia Vol. 2 (7th ed., 1989): weighting.
"logic to identify position information that exceeds a statistically-based deviation threshold amount away from the centroid position"	3	Software and/or hardware to identify position information whose distance from the centroid position exceeds a certain threshold distance. This threshold distance is based on the distribution of the position information used to calculate the centroid position. *See* "weighted centroid position." This is not a means plus function claim element. If the Court were to construe this claim element as a means plus function claim element, then Skyhook identifies the following corresponding structure: *12:11–17* "In particular, the system first calculates the weighted	**'988 Patent:** *See, e.g.*, Figs. 8, 9; 4:50–57, 5:11–13, 12:11–17 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): deviation, logic; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): threshold; The American Heritage College Dictionary (3rd ed., 1997): deviation, logic; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): deviation, threshold; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		centroid for the access point using all reported data. It then determines the standard deviation based on the distribution of the reported locations. The system uses a definable threshold based on the sigma of this distribution to filter out access points that are in error."	Dictionary of Scientific and Technical Terms (4th ed., 1989): logic, threshold.
"calculated positions of the Wi-Fi access points"	3	Estimated physical positions of the observed Wi-Fi access points calculated using characteristics of their transmitted signals. *See* "Wi-Fi access points."	'**988 Patent:** *See, e.g.*, Abstract; Fig. 9; 4:50–57, 5:14–15, 5:66–6:1, 7:39–52, 8:63–9:2, 11:64–12:20, 12:29–13:31
"the clustering logic . . . excludes such deviating position information from the database and from influencing the calculated positions of the Wi-Fi access points"	3	The software and/or hardware excludes such deviating position information from being stored in the database of WiFi access points. Such deviating position information is not used to determine the calculated positions of the Wi-Fi access points. *See* "computer-implemented clustering logic . . . " and "Wi-Fi access points." This is not a means plus function claim element. If the Court were to construe this claim element as a means plus function claim element, then Skyhook identifies the following corresponding structure: *12:1–12:19* "In some cases the GPS receiver may record erroneous or error records for some period of time, which could negatively affect the final access point location	'**988 Patent:** *See, e.g.*, Figs. 8, 9; 4:50–57, 5:11–15, 5:37–41, 11:64–12:38 **Extrinsic Evidence:** *See, e.g.*, Steven M. Kaplan, Wiley Electrical and Electronics Engineering Dictionary (2004): deviation, logic; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): database; The American Heritage College Dictionary (3rd ed., 1997): deviation, logic; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): deviation; IBM Dictionary of Computing (10th ed., 1994): logic; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989):

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		calculation. The parser and filter process identifies these bad records and either corrects them or removes them from the system. The filtering process users clustering techniques to weed out error prone GPS readings. For example, if 90% of the readings are within 200 meters of each other but the remaining 10% of the readings are 5 kilometers away then those outliers are removed by the filter . . . . In particular, the system first calculates the weighted centroid for the access point using all reported data. It then determines the standard deviation based on the distribution of the reported locations. The system uses a definable threshold based on the sigma of this distribution to filter out access points that are in error. Once these error records are marked, the centroid is recalculated with the remaining location records to determine the final centroid . . . ."	logic.

Exhibit D

U.S. Patent No. 7,474,897

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"WiFi access points"	1, 3, 4	Does not need to be construed. But if construed: Devices utilizing the IEEE 802.11 standard and that can be configured to provide wireless devices with network connectivity.	**'897 Patent:** *See, e.g.*, Fig. 1; 4:36–39, 5:12–13, 5:30, 6:50–53
"a WiFi-enabled device communicating with WiFi access points within range of the WiFi-enabled device so that observed WiFi access points identify themselves"	1	A user device having a Wi-Fi radio communicates with Wi-Fi access points within range of the user device. Communications received by the user device include an identifier (*e.g.*, a MAC address) for observed Wi-Fi access points. *See* "WiFi access points."	**'897 Patent:** *See, e.g.*, Figs. 1, 3; 4:43–47, 5:12–13, 5:16–17, 5:65–67, 6:13–16, 6:53–60, 7:4–8, 7:13–26 **Extrinsic Evidence:** *See, e.g.*, The American Heritage College Dictionary (3rd ed., 1997): communicate; The IEEE Standard Dictionary of Electrical and Electronics Terms (6th ed., 1996): communication; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): communicate; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): communication.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"using the recorded location information for each of the observed WiFi access points in conjunction with predefined rules to determine whether an observed WiFi access point should be included or excluded from a set of WiFi access points"	1	Does not need to be construed. But if construed: Predefined rules are used to determine whether each observed WiFi access point should be included or excluded from a set of WiFi access points that is to be used to calculate location. The predefined rules consider recorded location information for each of the observed WiFi access points. *See* "recorded location information" and "WiFi access points."	**'897 Patent:** *See, e.g.*, Figs. 5, 6; 4:35–42, 4:50–52, 5:20–23, 5:37–43, 5:65–6:12, 7:34–52, 9:11–16, 10:6–23 **Extrinsic Evidence:** *See, e.g.*, Webster's Third New International Dictionary Unabridged (2002): predefine; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): rule.
"recorded location information"	1, 3	Estimated physical location of Wi-Fi access points calculated using characteristics of signals transmitted by such Wi-Fi access points.	**'897 Patent:** *See, e.g.*, Abstract; Fig. 1; 4:50–58, 4:63–5:4, 5:12–13, 7:30–34
"rules to determine a reference point and to compare the recorded location information for each of the observed WiFi access points to the reference point"	3	Does not need to be construed. But if construed: Rules that (1) first determine a reference point and (2) then compare the recorded location information for each of the observed WiFi access points to the reference point. *See* "recorded location information" and "WiFi access points." This is not a step plus function claim element.	**'897 Patent:** *See, e.g.*, Fig. 6; 4:63–5:4, 5:22–23, 5:65–6:12, 8:52–10:3 **Extrinsic Evidence:** *See, e.g.*, Merriam-Webster's Collegiate Dictionary (10th ed., 1995): reference, rule.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		If the Court were to construe this claim element as a means plus function claim element, then Skyhook identifies the following corresponding structure: *8:58–64* "The process for identifying suspect access points for a no-history location estimation is based on the location of the biggest cluster of the access points stored in the database. The location of all the observed access points that are recorded in the Access Point Reference Database is considered and the average location of the biggest cluster of access points is used as the reference point." *9:10–26* "If the distance of any individual access point to the reference point is calculated to be more than a given distance, it is ruled as a suspect access point and recorded in the Feedback File to be sent back to the Access Point Reference Database. Those suspect access points are then removed from the list of access points used to calculate the location of the user device. Identifying suspect access points for a client device when there is a history of user movement is based on the previous location of the client device. An exemplary implementation of this determination is shown in FIG. 6. In an embodiment where there is location history, the client device location calculation is calculated	

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
		continuously every period of time, usually once every second. If the distance of any individual observed access point [602] to that historical reference point (the prior location calculation) is more than a given distance [603], then it is ruled as a suspect access point, added to the Feedback File and removed from calculation."	
"WiFi access points having a recorded location within a predefined threshold distance of the reference point"	3	WiFi access points having a recorded location that is within a certain distance of the reference point. That distance was previously defined. *See* "WiFi access points."	**'897 Patent:** *See, e.g.*, Fig. 6; 4:63–5:4, 5:22–23, 8:52–10:3 **Extrinsic Evidence:** *See, e.g.*, Webster's Third New International Dictionary Unabridged (2002): predefine; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): threshold; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): reference, threshold; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): threshold.

Term or Phrase for Construction	Claims	Proposed Construction	Preliminary Identification of Intrinsic and Extrinsic Evidence
"WiFi access points having a recorded location in excess of the predefined threshold distance of the reference point"	3	WiFi access points having a recorded location that exceeds a certain distance from the reference point. That distance was previously defined. *See* "WiFi access points."	'**897 Patent:** *See, e.g.*, Fig. 6; 4:63–5:4, 5:22–23, 8:52–10:3 **Extrinsic Evidence:** *See, e.g.*, Webster's Third New International Dictionary Unabridged (2002): predefine; Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking and the Internet (16th ed., 2000): threshold; Merriam-Webster's Collegiate Dictionary (10th ed., 1995): reference, threshold; McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989): threshold.

Exhibit E

Agreed Constructions

Term or Phrase for Construction	Claims	Agreed Construction
"triggering the Wi-Fi device to transmit a request to all Wi-Fi access points within range of the Wi-Fi device"	'245/1	Causing the Wi-Fi device to actively search for Wi-Fi access points. The Wi-Fi device transmits a request to all Wi-Fi access points within range of the Wi-Fi device to identify themselves.
"a radius on the order of tens of miles"	'694/1 '988/1	A radius of ten miles or more but fewer than a hundred miles.
"identification information for a corresponding Wi-Fi access point"	'694/1 '988/1	An identifier (*e.g.*, a MAC address) for a corresponding Wi-Fi access point.