

Appendix E: Claim Chart for U.S. Patent No. 9,097,784

Claim No.	Claim Language	Accused Instrumentality ^{1,2}
1[a]	A method for generating a calibration database, comprising;	To the extent that the claim’s preamble is determined to be a limitation or otherwise limiting, the Accused Instrumentality performs a method for generating a calibration database, comprising the steps in the subsequent limitations. The calibration database includes, <i>inter alia</i>, information regarding the locations of Wi-Fi access points and cell towers as well as information regarding the strengths of signals associated with them. This calibration database is maintained by Google and the Accused Instrumentality uses information in this database in connection with determining the location of Google and Third Party Devices.³ On most Android devices, Google, as the network location provider, provides a location service called Google Location Services (GLS), known in Android 9 and above as Google Location Accuracy. This service aims to provide a more accurate device location and generally improve location accuracy. Most mobile phones are equipped with GPS, which uses signals from satellites to determine a device’s location – however, with Google Location Services, additional information from nearby Wi-Fi, mobile networks, and device sensors can be collected to determine your device’s location. It does this by periodically collecting location data from your device and using it in an anonymous way to improve location accuracy. (GEOSCOPE-G-013632 at 13634)

¹ Accused Instrumentality, as used herein, means Google Location Services, including the comprising hardware and software components and associated APIs and frameworks such as Fused Location Provider, Network Location Provider, and Geolocation API. As set forth in the cover document to Geoscope’s Preliminary Infringement Contentions, this is based on Geoscope’s present understanding without the benefit of discovery.

² The citations in this Claim Chart are exemplary and illustrative. Geoscope reserves the right to amend and/or supplement these Contentions, including this Claim Chart, in any manner and for any of the reasons set forth in the cover document to Geoscope’s Preliminary Infringement Contentions, including after a complete production of relevant source code and other non-public technical information and claim construction.

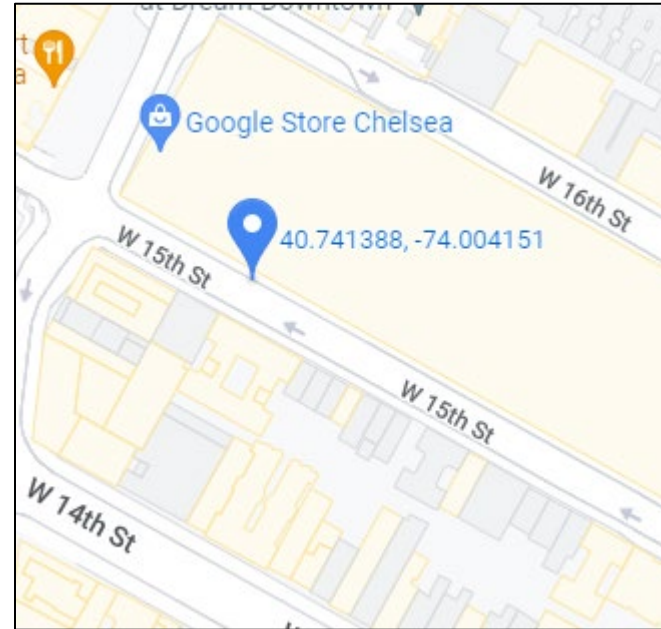
³ Google and Third Party Devices, as used herein, means all devices, whether or not manufactured, sold, offered for sale, or otherwise provided by Google, that incorporate, use, interact with, or allow access to or use of the Accused Instrumentality, including but not limited to Google Pixel phones and third party Android phones.

		These access points are stored and used to build models that estimate where each access point is located. This data is de-identified and only associated with a temporary, rotating device identifier, and no payload data/data packets are collected. As noted above, only publicly broadcast Wi-Fi information is used to estimate the location of a device. To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose.
		(GEOSCOPE-G-013637 at 13642)
1[b]	receiving at a wireless device an attribute of a signal transmitted by a wireless transmitter to a mobile station in a region;	The Accused Instrumentality receives at a wireless device an attribute (<i>e.g.</i>, signal strength) of a signal transmitted by a wireless transmitter (<i>e.g.</i>, a Wi-Fi access point or cell tower) to a mobile station in a region. For example, as part of the Accused Instrumentality, a wireless device (<i>e.g.</i>, a Google and Third Party Device) receives information regarding, <i>inter alia</i>, the locations of Wi-Fi access points and cell towers, and the strengths of signals transmitted by them.
		These access points are stored and used to build models that estimate where each access point is located. This data is de-identified and only associated with a temporary, rotating device identifier, and no payload data/data packets are collected. As noted above, only publicly broadcast Wi-Fi information is used to estimate the location of a device. To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose.
		(GEOSCOPE-G-013637 at 13642)

		(GEOSCOPE-G-013730 at 00:46-1:40) (GEOSCOPE-G-013797 at 6:45-7:45)
1[c]	wirelessly transmitting from said wireless device said attribute to a controller unit;	The Accused Instrumentality wirelessly transmits from the wireless device the attribute to a controller unit. For example, after information regarding the locations of Wi-Fi access points and cell towers, and the strengths of signals transmitted by the foregoing is received by the wireless device (<i>e.g.</i>, a Google and Third Party Device), it is wirelessly transmitted to Google servers or other backend infrastructure constituting a controller unit. These access points are stored and used to build models that estimate where each access point is located. This data is de-identified and only associated with a temporary, rotating device identifier, and no payload data/data packets are collected. As noted above, only publicly broadcast Wi-Fi information is used to estimate the location of a device. To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose. (GEOSCOPE-G-013637 at 13642) (GEOSCOPE-G-013730 at 00:46-1:40) (GEOSCOPE-G-013797 at 6:45-7:45)
1[d]	obtaining location data of a plurality of geographic locations situated within said region,	The Accused Instrumentality obtains location data of a plurality of geographic locations situated within the region, wherein the location data is determined using the wireless device (<i>e.g.</i>, a Google and Third Party Device), and wherein the region

	wherein said location data is determined using said wireless device, and wherein said region contains plural streets and intersections of said plural streets;	contains plural streets and intersections of the plural streets. For example, the Accused Instrumentality obtains information regarding, <i>inter alia</i>, the locations of Wi-Fi access points and cell towers, and the strengths of signals transmitted by the foregoing, as collected by Google and Third Party Devices, within an area that has multiple streets and intersections. With respect to your question on “nearby devices,” many connected devices, such as Wi-Fi routers and Bluetooth-enabled devices, are able to detect and connect with each other. Application developers, including Google, may be able to infer a user’s location through these connections. For example, if a user has opted into GLS, Google may use publicly broadcast Wi-Fi data from wireless access points in range of the device to help determine its location. As described in more detail below in response to question 5, only publicly broadcast Wi-Fi information is used to estimate the location of a device in this manner. These access points are stored and used to build models that estimate where each access point is located. This data is de-identified and only associated with a temporary, rotating device identifier, and no payload data/data packets are collected. As noted above, only publicly broadcast Wi-Fi information is used to estimate the location of a device. To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose. (GEOSCOPE-G-013637 at 13639, 13642)
1[e]	providing a location information database wherein said location database includes latitude and longitude information for each of a plurality of points within said region;	The Accused Instrumentality provides a location information database that includes latitude and longitude information for each of a plurality of points within the region. For example, in connection with the Accused Instrumentality, Google maintains a database with, <i>inter alia</i>, information regarding the locations of streets in a region, including the latitude and longitude of points along those streets, which is used with Google Maps. Google’s location information database is used as part of the Accused

Instrumentality to improve the accuracy of geolocation of Google and Third Party Devices.



(Snapshot of Google Maps showing longitude and latitude information for a point within a region with plural streets and intersections of said plural streets)

		 Operators can highlight a road (top left) and drag it into alignment with satellite imagery. GOOGLE MAPS One map showed road prioritization for a major thoroughway in San Francisco, with the width of the lines representing the volume of traffic. Google has been <u>using cellphone location signals to map traffic conditions</u> for years, and Gupta acknowledges that location signals could also be a good source of other information, about turn restrictions, say, or one way streets. But he declined to elaborate. "Google uses location in multiple ways, but there's nothing specific I can talk about beyond that," he said. (GEOSCOPE-G-013060 at 13065)
1[f]	determining a status of said wireless device;	The Accused Instrumentality determines a status of the wireless device (<i>e.g.</i> , a Google and Third Party Device) based on, <i>inter alia</i> , information from sensors on the

		device. For example, the Accused Instrumentality determines information about the device, such as its orientation, direction of travel, and/or speed of travel, from sensors on the Google and Third Party Device such as an accelerometer, barometer, compass, and magnetometer. On most Android devices, Google, as the network location provider, provides a location service called Google Location Services (GLS), known in Android 9 and above as Google Location Accuracy. This service aims to provide a more accurate device location and generally improve location accuracy. Most mobile phones are equipped with GPS, which uses signals from satellites to determine a device's location – however, with Google Location Services, additional information from nearby Wi-Fi, mobile networks, and device sensors can be collected to determine your device's location. It does this by periodically collecting location data from your device and using it in an anonymous way to improve location accuracy. (GEOSCOPE-G-013632 at 13634) When you have Google Location Accuracy turned on, your phone uses these sources to get the most accurate location: • GPS • Wi-Fi • Mobile networks • Sensors (such as accelerometer) Google may collect location data periodically and use this data in an anonymous way to improve location accuracy and location-based services. (GEOSCOPE-G-013647 at 13650)
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		Many Android devices have built-in sensors that measure motion, orientation, and various environmental conditions. The Android operating system supports a number of these different sensor types, which vary from device to device. These sensors are used to provide a variety of functionality to application developers, such as the ability to measure device movement or positioning to support motion-based games, or to report a compass bearing for a travel application. Android application developers, including Google, can use the accelerometer and barometer sensors, along with the gyrometer and magnetometer sensors, to more precisely determine a device's location. Google uses the accelerometer readings to help determining the device's orientation and direction, the gyrometer helps determine if a user is turning, and the barometer can help determine the user's elevation. (GEOSCOPE-G-013637 at 13643) (GEOSCOPE-G-013662 at 25:19-26:10, 30:06-31:05)
1[g]	determining from said status a most likely one of said plural streets upon which said wireless device is located;	The Accused Instrumentality determines from the wireless device's (<i>e.g.</i>, a Google and Third Party Device's) status the most likely one of the plural streets upon which the wireless device is located. For example, the Accused Instrumentality uses information regarding, <i>inter alia</i>, the Google and Third Party Device's direction and speed of travel, including in conjunction with other information and data, to determine whether the Device is located on a street and what street the Device is likely located on.

		Many Android devices have built-in sensors that measure motion, orientation, and various environmental conditions. The Android operating system supports a number of these different sensor types, which vary from device to device. These sensors are used to provide a variety of functionality to application developers, such as the ability to measure device movement or positioning to support motion-based games, or to report a compass bearing for a travel application. Android application developers, including Google, can use the accelerometer and barometer sensors, along with the gyrometer and magnetometer sensors, to more precisely determine a device's location. Google uses the accelerometer readings to help determining the device's orientation and direction, the gyrometer helps determine if a user is turning, and the barometer can help determine the user's elevation. (GEOSCOPE-G-013637 at 13643) (GEOSCOPE-G-013662 at 25:19-26:10, 30:06-31:05)
1[h]	determining said most likely street as a first one of said plural geographic locations;	The Accused Instrumentality determines a most likely street that corresponds to one of the geographic locations for which it obtained location data. For example, the Accused Instrumentality uses the wireless device's (<i>e.g.</i>, a Google and Third Party Device's) status along with the location data and location database (<i>see</i> Claim 1[e]) to determine the most likely street associated with a particular geographic location.

		Many Android devices have built-in sensors that measure motion, orientation, and various environmental conditions. The Android operating system supports a number of these different sensor types, which vary from device to device. These sensors are used to provide a variety of functionality to application developers, such as the ability to measure device movement or positioning to support motion-based games, or to report a compass bearing for a travel application. Android application developers, including Google, can use the accelerometer and barometer sensors, along with the gyrometer and magnetometer sensors, to more precisely determine a device's location. Google uses the accelerometer readings to help determining the device's orientation and direction, the gyrometer helps determine if a user is turning, and the barometer can help determine the user's elevation. (GEOSCOPE-G-013637 at 13643) (GEOSCOPE-G-013662 at 25:19-26:10, 30:06-31:05)
1[i]	determining a first point of said plural points that is in proximity to said first geographic location; and	The Accused Instrumentality determines a point for which it has latitude and longitude information that is in proximity to the first geographic location. For example, the Accused Instrumentality associates the geographic location of the wireless device (<i>e.g.</i>, a Google and Third Party Device) with a point derived from the location database (<i>e.g.</i>, Google's street information database). Information from the location database is used to improve the accuracy of the determination of a Google and Third Party Device's location so that information collected by the Google and Third Party Device regarding, <i>inter alia</i>, the locations of Wi-Fi access points and cell towers and the strengths of signals transmitted by the foregoing that is stored as, and/or processed to generate, calibration data in the database (<i>see</i> Claim 1[j]) is more accurate.

		Many Android devices have built-in sensors that measure motion, orientation, and various environmental conditions. The Android operating system supports a number of these different sensor types, which vary from device to device. These sensors are used to provide a variety of functionality to application developers, such as the ability to measure device movement or positioning to support motion-based games, or to report a compass bearing for a travel application. Android application developers, including Google, can use the accelerometer and barometer sensors, along with the gyrometer and magnetometer sensors, to more precisely determine a device's location. Google uses the accelerometer readings to help determining the device's orientation and direction, the gyrometer helps determine if a user is turning, and the barometer can help determine the user's elevation. (GEOSCOPE-G-013637 at 13643)
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Operators can highlight a road (top left) and drag it into alignment with satellite imagery. GOOGLE MAPS

One map showed road prioritization for a major thoroughway in San Francisco, with the width of the lines representing the volume of traffic. Google has been using cellphone location signals to map traffic conditions for years, and Gupta acknowledges that location signals could also be a good source of other information, about turn restrictions, say, or one way streets. But he declined to elaborate. "Google uses location in multiple ways, but there's nothing specific I can talk about beyond that," he said.

(GEOSCOPE-G-013060 at 13065)

1[j]	entering said first point in said calibration database and associating the location data for the first one of said plural geographic locations determined by said wireless device with the first point.	The Accused Instrumentality enters the point (<i>see</i> Claim 1[i]) in the calibration database and associates it with the location data for the geographic location (<i>see</i> Claim 1[h]) determined by the wireless device (<i>e.g.</i>, the Google and Third Party Device). For example, the Accused Instrumentality enters points into the calibration database after determining the correspondence and relationship between the location data obtained from a Google and Third Party Device (<i>see</i> Claim 1[d]) and the information from the location database (<i>e.g.</i>, latitude and longitude information) (<i>see</i> Claim 1[e]), and associates the obtained location data with those points. On most Android devices, Google, as the network location provider, provides a location service called Google Location Services (GLS), known in Android 9 and above as Google Location Accuracy. This service aims to provide a more accurate device location and generally improve location accuracy. Most mobile phones are equipped with GPS, which uses signals from satellites to determine a device's location – however, with Google Location Services, additional information from nearby Wi-Fi, mobile networks, and device sensors can be collected to determine your device's location. It does this by periodically collecting location data from your device and using it in an anonymous way to improve location accuracy. (GEOSCOPE-G-013632 at 13634) With respect to your question on “nearby devices,” many connected devices, such as Wi-Fi routers and Bluetooth-enabled devices, are able to detect and connect with each other. Application developers, including Google, may be able to infer a user’s location through these connections. For example, if a user has opted into GLS, Google may use publicly broadcast Wi-Fi data from wireless access points in range of the device to help determine its location. As described in more detail below in response to question 5, only publicly broadcast Wi-Fi information is used to estimate the location of a device in this manner.
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		These access points are stored and used to build models that estimate where each access point is located. This data is de-identified and only associated with a temporary, rotating device identifier, and no payload data/data packets are collected. As noted above, only publicly broadcast Wi-Fi information is used to estimate the location of a device. To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose.
		(GEOSCOPE-G-013637 at 13639, 13642)
2	The method of claim 1 wherein said attribute is selected from the group consisting of: signal strength, Cell global identity, broadcast control channel, base station identity code.	The Accused Instrumentality performs the method of claim 1 wherein the attribute is selected from the group consisting of: signal strength, Cell global identity, broadcast control channel, base station identity code. For example, the Accused Instrumentality receives signal strength information as an attribute of a signal transmitted by a wireless transmitter such as a Wi-Fi access point or cell tower.
		To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose.
		(GEOSCOPE-G-013637 at 13642)
10	The method of claim 1 wherein said location database is a street database.	The Accused Instrumentality performs the method of claim 1 wherein the location database is a street database (e.g., Google’s database of street locations used in connection with Google Maps).



Operators can highlight a road (top left) and drag it into alignment with satellite imagery. GOOGLE MAPS

One map showed road prioritization for a major thoroughway in San Francisco, with the width of the lines representing the volume of traffic. Google has been [using cellphone location signals to map traffic conditions](#) for years, and Gupta acknowledges that location signals could also be a good source of other information, about turn restrictions, say, or one way streets. But he declined to elaborate. "Google uses location in multiple ways, but there's nothing specific I can talk about beyond that," he said.

(GEOSCOPE-G-013060 at 13065)

11	The method of claim 1 wherein said status includes attributes selected from the group consisting of: direction of travel; speed of travel, and change in direction of travel.	The Accused Instrumentality performs the method of claim 1 wherein the status includes attributes selected from the group consisting of: direction of travel; speed of travel, and change in direction of travel. For example, the Accused Instrumentality determines information about the device, such as its direction of travel, speed of travel, and/or change in direction of travel, from sensors on the device such as an accelerometer, barometer, gyroscope, and magnetometer. Many Android devices have built-in sensors that measure motion, orientation, and various environmental conditions. The Android operating system supports a number of these different sensor types, which vary from device to device. These sensors are used to provide a variety of functionality to application developers, such as the ability to measure device movement or positioning to support motion-based games, or to report a compass bearing for a travel application. Android application developers, including Google, can use the accelerometer and barometer sensors, along with the gyrometer and magnetometer sensors, to more precisely determine a device's location. Google uses the accelerometer readings to help determining the device's orientation and direction, the gyrometer helps determine if a user is turning, and the barometer can help determine the user's elevation. (GEOSCOPE-G-013637 at 13643) (GEOSCOPE-G-013662 at 25:19-26:10, 30:06-31:05)
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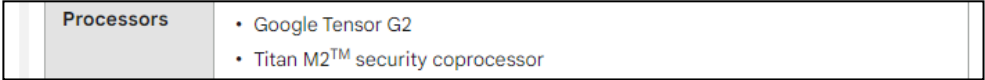
12[a]	A system for generating a calibration database, comprising:	To the extent that the claim’s preamble is determined to be a limitation or otherwise limiting, the Accused Instrumentality is a system for generating a calibration database comprising the components in the subsequent limitations. The calibration database includes, <i>inter alia</i>, information regarding the locations of Wi-Fi access points and cell towers as well as information regarding the strengths of signals associated with them. This calibration database is maintained by Google and the Accused Instrumentality uses information in this database in connection with determining the location of Google and Third Party Devices. On most Android devices, Google, as the network location provider, provides a location service called Google Location Services (GLS), known in Android 9 and above as Google Location Accuracy. This service aims to provide a more accurate device location and generally improve location accuracy. Most mobile phones are equipped with GPS, which uses signals from satellites to determine a device’s location – however, with Google Location Services, additional information from nearby Wi-Fi, mobile networks, and device sensors can be collected to determine your device’s location. It does this by periodically collecting location data from your device and using it in an anonymous way to improve location accuracy. (GEOSCOPE-G-013632 at 13634) To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose. (GEOSCOPE-G-013637 at 13642) (See also Claim 1[a])
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12[b]	a wireless device for determining location data at a plurality of geographic locations situated within a region, wherein said region contains plural streets and intersections of said plural streets, said wireless device receiving an attribute of a signal transmitted by a wireless transmitter to a mobile station in said region;	The Accused Instrumentality includes a wireless device for determining location data at a plurality of geographic locations situated within a region, wherein the region contains plural streets and intersections of the plural streets, and the wireless device receives an attribute of a signal transmitted by a wireless transmitter to a mobile station in the region. For example, the Accused Instrumentality obtains information regarding, <i>inter alia</i>, the locations of Wi-Fi access points and cell towers and the strengths of signals transmitted by the foregoing, as collected by Google and Third Party Devices, within an area that has multiple streets and intersections. Thus, the Google and Third Party Devices obtain location data and attributes of signals (<i>e.g.</i>, signal strength) transmitted by Wi-Fi access points and cell towers. On most Android devices, Google, as the network location provider, provides a location service called Google Location Services (GLS), known in Android 9 and above as Google Location Accuracy. This service aims to provide a more accurate device location and generally improve location accuracy. Most mobile phones are equipped with GPS, which uses signals from satellites to determine a device's location – however, with Google Location Services, additional information from nearby Wi-Fi, mobile networks, and device sensors can be collected to determine your device's location. It does this by periodically collecting location data from your device and using it in an anonymous way to improve location accuracy. (GEOSCOPE-G-013632 at 13634) With respect to your question on “nearby devices,” many connected devices, such as Wi-Fi routers and Bluetooth-enabled devices, are able to detect and connect with each other. Application developers, including Google, may be able to infer a user’s location through these connections. For example, if a user has opted into GLS, Google may use publicly broadcast Wi-Fi data from wireless access points in range of the device to help determine its location. As described in more detail below in response to question 5, only publicly broadcast Wi-Fi information is used to estimate the location of a device in this manner.
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		To provide this functionality, Google collects MAC addresses, signal strength information, and radio channel information from these access points. Google also collects the name (also referred to as a “service set identifier” or “SSID”) associated with these networks, in order to identify and remove access points that network administrators have chosen to opt out of this collection through instructions provided by Google. SSIDs are discarded after being processed for this purpose. (GEOSCOPE-G-013637 at 13639, 13642) (<i>See also</i> Claims 1[b] and 1[d])
12[c]	a wireless device transmitter for transmitting from said wireless device said attribute to a controller unit;	The Accused Instrumentality includes a wireless device transmitter (<i>e.g.</i>, a Google and Third Party Device) for transmitting the attribute of a signal to Google servers or other backend infrastructure constituting a controller unit. (<i>See</i> Claim 1[c])
12[d]	a location information database wherein said location database includes latitude and longitude information for each of a plurality of points within said region;	The Accused Instrumentality includes a location information database wherein the location database includes latitude and longitude information for each of a plurality of points within the region. (<i>See</i> Claim 1[e])

12[e]	circuitry for determining a status of said wireless device;	The Accused Instrumentality includes circuitry for determining a status of the wireless device such as its orientation, direction of travel, and/or speed of travel. For example, Google and Third Party Devices include processors and sensors such as an accelerometer, barometer, gyroscope, and magnetometer for determining such status. <table><tr><td>Processors</td><td> • Google Tensor G2 • Titan M2™ security coprocessor </td></tr></table> (See, e.g., GEOSCOPE-G-013798 at 13799) (See also Claim 1[f])	Processors	• Google Tensor G2 • Titan M2™ security coprocessor
Processors	• Google Tensor G2 • Titan M2™ security coprocessor			
12[f]	circuitry for determining from said status a most likely one of said plural streets upon which said wireless device is located;	The Accused Instrumentality includes circuitry for determining from the wireless device's (e.g., an Google and Third Party Device's) status the most likely one of the plural streets upon which the wireless device is located. For example, Google and Third Party Devices and/or Google's servers or other backend infrastructure include processors for determining this information. <table><tr><td>Processors</td><td> • Google Tensor G2 • Titan M2™ security coprocessor </td></tr></table> (See, e.g., GEOSCOPE-G-013798 at 13799) (See also Claim 1[g])	Processors	• Google Tensor G2 • Titan M2™ security coprocessor
Processors	• Google Tensor G2 • Titan M2™ security coprocessor			

12[g]	circuitry for determining said most likely street as a first one of said plural geographic locations;	The Accused Instrumentality includes circuitry for determining a most likely street that corresponds to one of the geographic locations for which it obtained location data. For example, Google and Third Party Devices and/or Google's servers or other backend infrastructure include processors for determining this information. <table><tr><td>Processors</td><td> • Google Tensor G2 • Titan M2™ security coprocessor </td></tr></table> (See also Claim 1[h])	Processors	• Google Tensor G2 • Titan M2™ security coprocessor
Processors	• Google Tensor G2 • Titan M2™ security coprocessor			
12[h]	circuitry for determining a first point of said plural points that is in proximity to said first geographic location; and	The Accused Instrumentality includes circuitry for determining a point for which it has latitude and longitude information that is in proximity to the first geographic location. For example, Google and Third Party Devices and/or Google's servers or other backend infrastructure include processors for determining this information. <table><tr><td>Processors</td><td> • Google Tensor G2 • Titan M2™ security coprocessor </td></tr></table> (See, e.g., GEOSCOPE-G-013798 at 13799) (See also Claim 1[i])	Processors	• Google Tensor G2 • Titan M2™ security coprocessor
Processors	• Google Tensor G2 • Titan M2™ security coprocessor			
12[i]	circuitry for entering said first point in said calibration database; and	The Accused Instrumentality includes circuitry for entering the point into the calibration database. For example, Google and Third Party Devices and/or Google's servers or other backend infrastructure include processors for performing this entry. <table><tr><td>Processors</td><td> • Google Tensor G2 • Titan M2™ security coprocessor </td></tr></table> (See, e.g., GEOSCOPE-G-013798 at 13799) (See also Claim 1[j])	Processors	• Google Tensor G2 • Titan M2™ security coprocessor
Processors	• Google Tensor G2 • Titan M2™ security coprocessor			

12[j]	associating the location data for the first one of said plural geographic locations determined by said wireless device with the first point.	The Accused Instrumentality includes circuitry for associating the location data for the plural geographic locations determined by the wireless device. For example, Google and Third Party Devices and/or Google's servers or other backend infrastructure include processors for performing this association.  (See, e.g., GEOSCOPE-G-013798 at 13799) (See also Claim 1[j])
13	The system of claim 12 wherein said attribute is selected from the group consisting of: signal strength, Cell Global identity, broadcast control channel, base station identity code.	The Accused Instrumentality is a system of claim 12 wherein the attribute is selected from the group consisting of: signal strength, Cell Global identity, broadcast control channel, base station identity code. (See Claim 2)
21	The system of claim 12 wherein said location database is a street database.	The Accused Instrumentality is a system of claim 12 wherein the location database is a street database (e.g., Google's database of street locations used in connection with Google Maps). (See Claim 10)
22	The system of claim 12, wherein said status includes attributes selected from the group consisting of: direction of travel; speed of travel, and change in direction of travel.	The Accused Instrumentality is a system of claim 12 wherein the status includes attributes selected from the group consisting of: direction of travel; speed of travel, and change in direction of travel. (See Claim 11)