

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

<b>TRAXCELL TECHNOLOGIES, LLC.,</b>	)	
<b>Plaintiff,</b>	)	
	)	<b>Civil Action No. 2:17-cv-721</b>
<b>v.</b>	)	
	)	
<b>VERIZON COMMUNICATIONS, INC.</b>	)	
<b>AND VERIZON WIRELESS</b>	)	
<b>PERSONAL COMMUNICATIONS, LP,</b>	)	<b>JURY TRIAL DEMANDED</b>
<b>Defendants.</b>	)	

**PLAINTIFF’S FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Traxcell Technologies, LLC. (“Traxcell”) files this First Amended Complaint and demand for jury trial seeking relief from patent infringement by Verizon Communications, Inc. and Verizon Wireless Personal Communications, LP (collectively “Defendants”), alleging infringement of the claims of U.S. Pat. No. 8,977,284; U.S. Pat. No. 9,510,320; U.S. Pat. No. 9,642,024; and, U.S. Pat. No. 9,549,388 (collectively referred to as “Patents-in-Suit”), as follows:

**I. THE PARTIES**

1. Plaintiff Traxcell is a Texas Limited Liability Company, with its principal place of business located 1405 Municipal Ave., Suite 2305, Plano, Texas 75074.

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

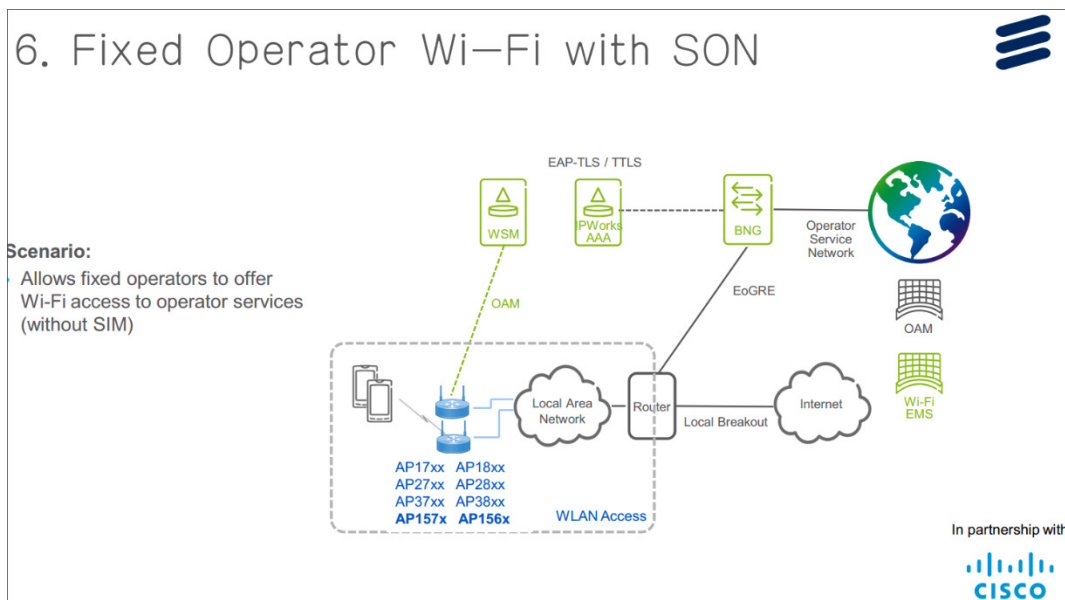
## II. JURISDICTION AND VENUE

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

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

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

## III. OVERVIEW OF EXEMPLARY ACCUSED INFRINGING TECHNOLOGY



**Source:**<https://www.cisco.com/c/dam/en/us/solutions/strategic-partners/assets/pdf/clus-ewn-presentation.pdf>

#### **IV. INFRINGEMENT ('320 Patent (attached as Exhibit A))**

6. On November 29, 2016, U.S. Patent No. 9,510,320 (“the ’320 patent”), attached as Exhibit A, entitled “Machine for Providing a Dynamic Database of Geographic Location Information for a Plurality of Wireless Devices and Process for Making Same” was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the ’320 patent by assignment.

7. The ’320 Patent’s Abstract states, “For a wireless network, a tuning system in which mobile phones using the network are routinely located. With the location of the mobile phones identified, load adjustments for the system are easily accomplished so that the wireless network is not subject to an overload situation. Ideally the location of the mobile phones is accomplished whether the mobile phones are transmitting voice data or not.”

8. The following general elements will be used to explain Plaintiff’s allegations of infringement of the Claims of the ‘320 patent.

**Element 1:** A system including at least one radio-frequency transceiver and an associated at least one antenna to which the radio-frequency transceiver is coupled, wherein the at least one radio-frequency transceiver is configured for radio-frequency communication with at least one mobile wireless communication device.

**Element 2:** The said system further including a first computer coupled to the at least one radio-frequency transceiver programmed to locate the at least one mobile wireless device and generate an indication of a location of the at least one mobile wireless device.

**Element 3:** The said first computer receives and stores performance data of connections between the at least one mobile wireless device and the radio frequency transceiver along with the indication of location.

**Element 4:** The said first computer references the performance data to expected performance data.

**Element 5:** The said first computer determines at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location.

**Element 6:** The said first computer routinely stores updated performance data and an updated indication of location of the at least one mobile wireless device while the mobile wireless device is communicating with the at least one radio-frequency transceiver.

**Element 7:** The said system further including a second computer coupled in communication with the first computer, wherein the first computer, responsive to a communication from the at least one mobile wireless communication device, sets a no access flag within a memory of the first computer.

**Element 8:** The said first computer provides access to the indication of location to the second computer if the no access flag is reset.

**Element 9:** The said first computer denies access to the indication of location to the second computer if the no access flag is set.

9. Defendants make, use, offer to sell, or sell within or imports into the U.S. wireless networks, wireless-network components, and related services that use identified locations of wireless devices to perform adjustments such that Defendants infringe claims 1–6 of the '320 patent, literally or under the doctrine of equivalents.

Preliminary charts illustrating Plaintiff's claims for infringement of the claim of the '320 patent is as follows:<sup>1</sup>

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<sup>1</sup> Plaintiff's infringement claims are not limited to the components provided herein.

Element 1 of Claim #1	Corresponding aspects
<p>A system including at least one radio-frequency transceiver and an associated at least one antenna to which the radio-frequency transceiver is coupled, wherein the at least one radio-frequency transceiver is configured for radio-frequency communication with at least one mobile wireless communication device.</p>	<p>Each Base station includes radio-frequency transceivers which are communicatively connected with at least one antenna. When base-station transceivers and antennas are in communication, they are coupled. Further, in addition to being so coupled, the transceivers and antenna of each Exhibit-A item are also, by placement within a base station, physically coupled.</p> <p>As mentioned previously, <b>Ericsson’s Centralized SON solution</b> is used to optimize performance of <b>Verizon Wireless’</b> wireless telecommunications network. The said wireless telecommunications network being any or any combination of <b>GSM, UMTS, WCDMA and LTE (2G, 3G, 4G and LTE)</b> wireless networks. For this purpose, <b>Ericsson’s Centralized SON solution</b> is integrated with <b>Verizon Wireless’</b> wireless telecommunications network. When integrated with the said wireless telecommunications network, <b>Ericsson’s Centralized SON solution</b> imparts Self-Optimizing or Self-Organizing Network capabilities to the said wireless telecommunications network. The said wireless network includes a Radio Access Network (RAN) portion, which basically consists of base stations (BTS, RBS, NodeBs, eNodeBs, small cells, micro cells, macro cells, femto cells etc.)</p>

Element 2 of Claim #1	Corresponding aspects
<p>The said system further including a first computer coupled to the at least one radio-frequency</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager, SON Policy Manager, SON Visualization</b> and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which</p>

<p>transceiver programmed to locate the at least one mobile wireless device and generate an indication of a location of the at least one mobile wireless device.</p>	<p>include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, as <b>Ericsson’s centralized SON solution’s SON Optimization Manager (SON OM)</b> is connected in communication with the base stations in the RAN of the wireless network through a <b>Data Gateway or SON Data Gateway (SDG), OSS (or OSS-RC), SON Implementation Server (SIS) and SON MBOX</b> (optional), and as it ascertains UE geolocation information from the MDT reports, UE measurement reports and Trace data (CTR and UETR) received or collected in the form of PM (Performance Measurements) and Trace data.</p>
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<p><b>Element 3 of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said first computer receives and stores performance data of connections between the at least one mobile wireless device and the radio frequency transceiver along with the indication of location.</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because it includes <b>SON Optimization Manager (SON OM)</b> that routinely receives or collects PM (Performance Measurements) and Trace data [which include CTR, UETR, UE Measurement reports and MDT (Minimization of Drive Tests) reports that include UE-referenced (measured at and by the UE) network performance measurements and the corresponding UE location information] from the OSS (OSS-RC) of the wireless network through a <b>“Data Gateway” or “SON Data Gateway”</b>, and stores the said data in a <b>Database (Database Server)</b>. “Performance data of connections” include QoS and throughput measurements, which are received as part of MDT (Minimization of Drive Tests) reports.</p>

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Element 4 of Claim #1	Corresponding aspects
<p>The said first computer references the performance data to expected performance data.</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, as <b>Ericsson’s centralized SON solution’s SON Optimization Manager (SON OM)</b> references (or compares) the observed network performance data collected or received in the form of PM (Performance Measurements) and Trace data against the corresponding ‘standard’ or ‘expected’ values for taking decisions regarding implementation of SON use cases for network optimization.</p>

Element 5 of Claim #1	Corresponding aspects
<p>The said first computer determines at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location.</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because <b>Ericsson’s centralized SON solution</b> includes <b>SON Optimization Manager (SON OM)</b>, which, based on a comparative analysis of the observed network performance measurements against the corresponding standards or thresholds, and the UE geolocation information corresponding to the said observed network performance measurements obtained from the collected PM (Performance Measurements) and Trace data [which include CTR, UETR, UE measurement reports and MDT reports], identifies and</p>

	locates poorly performing base stations in the RAN of the wireless network, determines and implements appropriate SON use cases to optimize the relevant operational parameters of the said identified poorly performing base stations to improve network performance.
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Element 6 of Claim #1	Corresponding aspects
<p>The said first computer routinely stores updated performance data and an updated indication of location of the at least one mobile wireless device while the mobile wireless device is communicating with the at least one radio-frequency transceiver.</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because the <b>SON Optimization Manager (SON OM)</b> routinely receives alarms, alerts, notifications (i.e., notifications of events) and PM counters indicating problems in network performance through FM (Fault Management) and PM (Performance Measurement or Performance Management) inputs from base stations in the RAN, through the OSS (or OSS-RC), through a <b>“Data Gateway”</b>, and which through <b>route cause analysis</b> involving correlation of the collected alarms, alerts, indications and PM counters, determines whether a said alarm, alert or indication indicates “a performance issue with respect to the connection between one or more mobile wireless communications devices and a radio-frequency transceiver”.</p>

Element 7 of Claim #1	Corresponding aspects
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<p>The said system further including a second computer coupled in communication with the first computer, wherein the first computer, responsive to a communication from the at least one mobile wireless communication device, sets a no access flag within a memory of the first computer.</p>	<p>A computer or server belonging to an application that provides Location Based Services (such as advertising, navigation, weather, mapping and child safety etc.) or to an application that provides business or marketing insights coupled in communication with a network of computers including Operations Support System (OSS or OSS-RC) of Verizon Wireless' wireless telecommunications network, <b>Ericsson's centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson's centralized SON solution</b> in Verizon Wireless' said wireless telecommunications network.</p>
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<p><b>Element 8 of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said first computer <b>provides access</b> to the indication of location to the second computer if the no access flag is reset.</p>	<p>UE user does not register (or withdraws) with the first computer (OSS or OSS-RC of Verizon's wireless network coupled or integrated or interfaced with Ericsson's centralized SON solution) his/her refusal to allow the use of his/her UE location information for said LBS services or business and marketing insights by not opting-out of or opting-in to the MNO's (Verizon Wireless') proposal to use his/her UE location information for said LBS services or business and marketing insights, the first computer (OSS or OSS-RC of Verizon's wireless network coupled or integrated or interfaced with Ericsson's centralized SON solution) shall provide access to the said UE user's UE location information to the said LBS services server or said business and marketing insights server.</p>

<p><b>Element 9 of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said first computer <b>denies access</b> to the indication of location to the second computer if the no access flag is set.</p>	<p>A UE (user equipment) user registers with the first computer (OSS or OSS-RC of Verizon's wireless network coupled or integrated or interfaced with Ericsson's centralized SON solution) his/her refusal to allow the use of his/her UE location information for said LBS services or business and marketing insights by opting-out of the MNO's (Verizon Wireless') proposal to use his/her UE location</p>

	information for said LBS services or business and marketing insights, the first computer (OSS or OSS-RC of Verizon's wireless network coupled or integrated or interfaced with Ericsson's centralized SON solution) shall not provide (shall deny access to) the said UE user's UE location information to the said LBS services server or said business and marketing insights server.
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10. Defendants put the inventions claimed by the '320 Patent into service (i.e., used them); but for Defendants' actions, the claimed-inventions embodiments involving Defendants' products and services would never have been put into service. Defendants' acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendants obtaining monetary and commercial benefit from it.

11. Defendants have and continues to induce infringement. Defendants have actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (e.g., U.S. wireless networks, wireless-network components [see charts in paragraph 9) that use identified locations of wireless devices to perform adjustments such to cause infringement claims 1-6 of the '320 patent, literally or under the doctrine of equivalents. Moreover, Defendants have known and should have known of the '320 patent, by at least by the date of the patent's issuance, or from the issuance of the '284 patent, which followed the date that the patent's underlying application was cited to Defendants by the U.S. Patent and Trademark Office during prosecution of one of Defendants' patent applications, such that Defendants knew and should have known that it was and would be inducing infringement.

12. Defendants have caused and will continue to cause Traxcell damage by infringing (including inducing infringement of) the '320 patent.

**V. INFRINGEMENT ('284 Patent (attached as Exhibit B))**

13. On March 10, 2015, U.S. Patent No. 8,977,284 (“the ’284 patent”), attached as Exhibit B, entitled “Machine for Providing a Dynamic Database of Geographic Location Information for a Plurality of Wireless Devices and Process for Making Same” was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the ’284 patent by assignment.

14. The ’284 Patent’s Abstract states, “For a wireless network, a tuning system in which mobile phones using the network are routinely located. With the location of the mobile phones identified, load adjustments for the system are easily accomplished so that the wireless network is not subject to an overload situation. Ideally the location of the mobile phones is accomplished whether the mobile phones are transmitting voice data or not.”

15. The following general elements will be used to explain Plaintiff’s allegations of infringement of the Claims of the ’284 patent.

**Element 1:** A wireless network comprising at least two wireless devices, each said wireless device communicating via radio frequency signals;

**Element 2:** The said wireless network further comprises a first computer programmed to perform the steps of:

1) locating at least one said wireless device on said wireless network and referencing performance of said at least one wireless device with wireless network known parameters,

2) routinely storing performance data and a corresponding location for said at least one wireless device in a memory;

**Element 3:** The said wireless network further comprises a radio tower adapted to receive radio frequency signals from, and transmit radio frequency signals to said at least one wireless device

**Element 4:** The said first computer further includes means for receiving said performance data and suggest corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device.

**Element 5:** The said radio tower generates an error code based upon operation of said at least one wireless device

**Element 6:** The said first computer further programmed to,

- 1) receive said error code from said radio tower, and,
- 2) selectively suggest a corrective action of said radio frequency signals of said radio tower in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices based upon said error code, and, whereby said first computer suggests said corrective action in order to improve communication with at least one said wireless device.

16. Defendants make, use, offer to sell, or sell within or import into the U.S. wireless networks, wireless-network components, and related services that use identified locations of wireless devices to perform adjustments such that Defendants infringes one or more claims of the '284 patent, including—for example—Claims 1 - 12, literally or under the doctrine of equivalents.

A preliminary chart illustrating Plaintiff's claims for infringement of the claim of the '284 patent is as follows:<sup>2</sup>

Element 1 of Claim #1	Corresponding aspects
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<sup>2</sup> Plaintiff's infringement claims are not limited to the components provided herein.

<p>A wireless network comprising:</p> <ul style="list-style-type: none"> <li>at least two wireless devices, each said wireless device communicating via radio frequency signals;</li> <li>a radio tower adapted to receive radio frequency signals from, and transmit radio frequency signals to said wireless devices.</li> </ul>	<p>The mobile wireless communications devices or User Equipments or UEs communicate through reception and transmission of radio frequency (RF) signals from and to (respectively) the base stations (BTS, eNodeBs, small cells, micro cells, macro cells, RBS etc.) in the Radio Access Network (RAN) portion of the said wireless network. The said mobile wireless communications devices or User Equipments or UEs being any devices capable of communicating wirelessly through transmission and reception of RF signals, and are compatible with (and can communicate in) one or more of <b>GSM, UMTS, WCDMA</b> and <b>LTE (2G, 3G, 4G and LTE)</b> wireless networks, and which communicate in and with <b>Verizon Wireless'</b> wireless telecommunications network.</p>
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Element 2 of Claim #1	Corresponding aspects
<p>The said wireless network further comprising a first computer, which includes means for receiving performance data of said RF-based interactions between the said radio tower and said wireless devices.</p>	<p><b>Ericsson's centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson's centralized SON solution</b> in Verizon Wireless' said wireless telecommunications network corresponds to this claim limitation, as the <b>SON Optimization Manager</b> ascertains the location information of UEs from MDT (Minimization of Drive Tests) reports, UE Measurement Reports, CTR (Cell Traffic Recordings) and UETR (UE Traffic Recording), received or collected in the form of PM and Trace data.</p>

Element 3 of Claim #1	Corresponding aspects
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<p>wherein the said first computer is further programmed to perform the steps of:</p> <p>locating at least one said wireless device on said wireless network and referencing performance of said at least one wireless device with wireless network known parameters; and routinely storing performance data and a corresponding location for said at least one wireless device in a memory.</p>	<p>The <b>first computer</b> locates UEs on the client MNO's (<b>Verizon Wireless</b>) wireless telecommunications network through a variety of ways or features –</p> <ul style="list-style-type: none"> <li>a) CTR (Cell Traffic Recording) – enables tracing of some or all of the UEs camped on a given cell.</li> <li>b) UETR (UE Traffic Recording) – enables tracking of selected individual UEs.</li> <li>c) UE Measurement Reports</li> <li>d) Minimization of Drive Tests (MDT)</li> </ul> <p>The CTR and UETR features or processes mentioned above are broadly termed as “Trace” or “Call Trace”.</p> <p>In illustrations in Attachment 10 (Ericsson - SON WORKSHOP - Lisbon, 17.Dec.2012) at 7 &amp; 41, it is clearly depicted that <b>SON OM</b> architecture includes a <b>“Data Gateway” for receiving CM/PM/FM/Traces</b> from the RAN (base stations) through the OSS (or OSS-RC) [and a Trace Processing Server (TPS)]. <b>SON OM</b> receives <b>CTR, UETR, MDT reports</b> and <b>UE Measurement Reports</b> in the form of <b>PM (Performance Measurements)</b> and <b>Trace data</b>.</p>
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Element 4 of Claim #1	Corresponding aspects
<p>wherein said first computer further includes means for suggesting corrective actions obtained from a list of possible causes for said radio tower based upon the performance data and the corresponding location associated with said at least one wireless device.</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because <b>Ericsson’s centralized SON solution</b> includes <b>SON Optimization Manager (SON OM)</b> that receives performance data through a <b>“Data Gateway”</b> or <b>“SON Data Gateway”</b>, and can determine and implement SON use cases (corrective actions) in the relevant base stations in the RAN of the wireless network through</p>

	<b>SON Implementation Servers (SIS), SON Application Server (SAS) and SON MBOX (optional).</b>
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Element 5 of Claim #1	Corresponding aspects
wherein said radio tower generates an error code based upon operation of said at least one wireless device, and wherein said first computer is further programmed to receive said error code from said radio tower.	<p>Each base station) causes generation of an alarm, alert, indication or notification (i.e., notification of an event) when it gets congested or overloaded by having to service more than an optimum number of UEs (i.e., wireless device) and/or due to excessive voice or data traffic between the said base station and UEs connected to said base station; each such alarm<sup>3</sup>, alert, indication or notification is an error code.</p> <p><b>Ericsson’s centralized SON solution</b> includes <b>SON Optimization Manager (SON OM)</b> that routinely receives alarms, alerts, notifications (i.e., notifications of events) and PM counters indicating problems in network performance through FM (Fault Management) and PM (Performance Measurement or Performance Management) inputs from base stations in the RAN, through the OSS (or OSS-RC), through a <b>“Data Gateway”</b>.</p>

Element 6 of Claim #1	Corresponding aspects
wherein said first computer is further programmed to, selectively suggest a corrective action of said radio frequency signals of said radio tower in order to restrict processing of radio frequency signals from at least one of said at least two wireless devices based upon said error code, and, whereby said first computer	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because <b>Ericsson’s centralized SON solution</b> includes <b>SON Optimization Manager (SON OM)</b> that routinely receives alarms, alerts, notifications (i.e., notifications of events) and PM counters indicating problems in network performance through FM (Fault Management) and PM (Performance Measurement or Performance Management) inputs from base</p>

<sup>3</sup> Hereafter, “alarm” is used to refer to an alarm, alert, or notification (i.e., notification of an event).

<p>suggests said corrective action in order to improve communication with at least one said wireless device.</p>	<p>stations in the RAN, through the OSS (or OSS-RC), through a <b>“Data Gateway”</b>.</p>
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17. Defendants put the inventions claimed by the '284 Patent into service (i.e., used them); but for Defendants' actions, the claimed-inventions embodiments involving Defendants' products and services would never have been put into service. Defendants' acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendants obtaining monetary and commercial benefit from it.

18. Defendants have and continues to induce infringement. Defendants have actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (see charts in paragraph 16, and related products and services) that use identified locations of wireless devices to perform adjustments such to cause infringement one or more claims of the '284 patent, including—for example—Claims 1 - 12, literally or under the doctrine of equivalents. Moreover, Defendants have known and should have known of the '284 patent, by at least by the date of the patent's issuance, which followed the date that the patent's underlying application was cited to Defendants by the U.S. Patent and Trademark Office during prosecution of one of Defendants' patent applications, such that Defendants knew and should have known that it was and would be inducing infringement.

19. Defendants have caused and will continue to cause Traxcell damage by infringing (including inducing infringement of) the '284 patent.

**VI. INFRINGEMENT ('024 Patent (Attached as exhibit C))**



20. On May 2, 2017, U.S. Patent No. 9,642,024 (“the ’024 patent”) entitled “Machine for Providing a Dynamic Database of Geographic Location Information for a Plurality of Wireless Devices and Process for Making Same” was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the ’024 patent by assignment.

21. The ’024 Patent’s Abstract states, “For a wireless network, a tuning system in which mobile phones using the network are routinely located. With the location of the mobile phones identified, load adjustments for the system are easily accomplished so that the wireless network is not subject to an overload situation. Ideally the location of the mobile phones is accomplished whether the mobile phones are transmitting voice data or not.”

22. The following general elements will be used to explain Plaintiff’s allegations of infringement of the Claims of the ’024 patent.

**Element 1:** A system including one or more radio-frequency transceivers and an associated one or more antennas to which the radio-frequency transceiver is coupled, wherein the one or more radio-frequency transceivers configured for radio-frequency communication with at least one mobile wireless communications device.

**Element 2:** The said system further including a computer coupled to the one or more radio-frequency transceivers programmed to locate the one or more mobile wireless communications devices and generate an indication of a location of the one or more mobile wireless communications devices.

**Element 3:** The said first computer receives and stores performance data of connections between the one or more mobile wireless communications devices and the radio-frequency transceiver along with the indication of location.

**Element 4:** The said first computer references the performance data to expected performance data.

**Element 5:** The said first computer determines at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location.

**Element 6:** The said first computer receives an error code from the radio-frequency transceiver, determines whether the error code indicates a performance issue with respect to the connection between the one or more mobile wireless communications devices and the radio-frequency transceiver.

**Element 7:** The said first computer determines the at least one suggested corrective action in response to the error code.

23. Defendants make, use, offer to sell, or sell within or import into the U.S. wireless networks, wireless-network components, and related services that use identified locations of wireless devices to perform adjustments such that Defendants infringe one or more claims of the '024 patent, including—for example, but not by way of limitation—Claims 1-22, literally or under the doctrine of equivalents.

Preliminary charts illustrating Plaintiff’s claims for infringement of the claims of the ‘024 patent is as follows:<sup>4</sup>

Element 1 of Claim #1	Corresponding aspects
A system including one or more radio-frequency transceivers and an associated one or more antennas to which the radio-frequency	<b>Ericsson’s Centralized SON solution</b> is used to optimize performance of <b>Verizon Wireless’</b> wireless telecommunications network. The said wireless telecommunications network being any or any combination of <b>GSM, UMTS, WCDMA and LTE (2G, 3G, 4G and LTE)</b> wireless networks. For this purpose, <b>Ericsson’s Centralized SON solution</b> is

<sup>4</sup> Plaintiff’s infringement claims are not limited to the components provided herein.

<p>transceiver is coupled, wherein the one or more radio-frequency transceivers configured for radio-frequency communication with at least one mobile wireless communications device</p>	<p>integrated with <b>Verizon Wireless'</b> wireless telecommunications network.                  When integrated with the said wireless telecommunications network, <b>Ericsson's Centralized SON solution</b> imparts Self-Optimizing or Self-Organizing Network capabilities to the said wireless telecommunications network. The said wireless network includes a Radio Access Network (RAN) portion, which basically consists of base stations (BTS, RBS, NodeBs, eNodeBs, small cells, micro cells, macro cells, femto cells etc.) (exhibit A).                  The said base stations (BTS, RBS, NodeBs, eNodeBs, small cells, micro cells, macro cells, femto cells etc.) (exhibit A) being RF transceivers, which are compatible with one or more of <b>GSM, UMTS, WCDMA</b> and <b>LTE</b> wireless communication technologies, and that support communications in one or more of <b>GSM, UMTS, WCDMA</b> and <b>LTE (2G, 3G, 4G and LTE)</b> wireless communications networks, and are part of <b>Verizon Wireless'</b> wireless telecommunications network.</p>
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<p><b>Element 2 of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said system further including a computer coupled to the one or more radio-frequency transceivers programmed to locate the one or more mobile wireless communications devices and generate an indication of a location of the one or more mobile wireless communications devices</p>	<p><b>Ericsson's centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson's centralized SON solution</b> in Verizon Wireless' said wireless telecommunications network corresponds to this claim limitation, as <b>Ericsson's centralized SON solution's SON Optimization Manager (SON OM)</b> is connected in communication with the base stations in the RAN of the wireless network through a <b>Data Gateway</b> or <b>SON Data Gateway (SDG)</b>, <b>OSS (or OSS-RC)</b>, <b>SON Implementation Server (SIS)</b> and <b>SON MBOX</b> (optional), and as it ascertains UE geolocation information from the MDT reports, UE measurement reports and Trace data (CTR and UETR) received or collected in the form of PM (Performance Measurements) and Trace data.</p> <p>A network of computers including Operations Support System (OSS or OSS-RC) of Verizon Wireless' wireless telecommunications network, <b>Ericsson's centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of</p>

	computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network, constitutes the <b>“Computer”</b> .
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Element 3 of Claim #1	Corresponding aspects
The said first computer receives and stores performance data of connections between the one or more mobile wireless communications devices and the radio-frequency transceiver along with the indication of location	<b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because it includes <b>SON Optimization Manager (SON OM)</b> that routinely receives or collects PM (Performance Measurements) and Trace data [which include CTR, UETR, UE Measurement reports and MDT (Minimization of Drive Tests) reports that include UE-referenced (measured at and by the UE) network performance measurements and the corresponding UE location information] from the OSS (OSS-RC) of the wireless network through a <b>“Data Gateway”</b> or <b>“SON Data Gateway”</b> , and stores the said data in a <b>Database (Database Server)</b> . “Performance data of connections” include QoS and throughput measurements, which are received as part of MDT (Minimization of Drive Tests) reports.

Element 4 of Claim #1	Corresponding aspects
The said first computer references the performance data to expected performance data	<b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b> , SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, as <b>Ericsson’s centralized SON solution’s SON Optimization Manager (SON OM)</b> references (or compares) the observed network performance data collected or received in the form of PM (Performance Measurements) and Trace data against the corresponding ‘standard’ or ‘expected’ values for taking decisions regarding implementation of SON use cases for network optimization.

	<p><b>Ericsson SON Optimization Manager 14.0 provides for</b> “SON OM use cases take optimization decisions based on input CM and PM (including traces). Input PM is averaged over a period of time; the minimum averaging period is one ROP (i.e. 15 minutes); this is typically the case for adaptive use cases.”</p>
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Element 5 of Claim #1	Corresponding aspects
<p>The said first computer determines at least one suggested corrective action in conformity with differences between the performance data and expected performance data in conjunction with the indication of location</p>	<p><b>Ericsson’s centralized SON solution</b> [which includes <b>SON Optimization Manager</b>, SON Policy Manager, SON Visualization and the software programs that run them] interfaced or integrated with said Operations Support System (OSS or OSS-RC), and a set or network of computers [which include Trace Processing Server (TPS), OSS Data Gateway, RAN Analyzer, RAN Configuration Manager, Frequency Optimizer, Cell Optimizer, Network Capacity Planner and Implementation Server] operating, implementing and supporting the <b>Ericsson’s centralized SON solution</b> in Verizon Wireless’ said wireless telecommunications network corresponds to this claim limitation, because <b>Ericsson’s centralized SON solution</b> includes <b>SON Optimization Manager (SON OM)</b>, which, based on a comparative analysis of the observed network performance measurements against the corresponding standards or thresholds, and the UE geolocation information corresponding to the said observed network performance measurements obtained from the collected PM (Performance Measurements) and Trace data [which include CTR, UETR, UE measurement reports and MDT reports], identifies and locates poorly performing base stations in the RAN of the wireless network, determines and implements appropriate SON use cases to optimize the relevant operational parameters of the said identified poorly performing base stations to improve network performance.</p>

Element 6 of Claim #1	Corresponding aspects
<p>The said first computer receives an error code from the radio-frequency transceiver, determines whether the error code indicates a performance issue with respect to the connection between the one or</p>	<p>When the <b>SON Optimization Manager (SON OM)</b> receives an alarm, alert, notification or performance measurement counter (“<b>the error code</b>”) indicating that a base station is overloaded or congested, the <b>SON Optimization Manager (SON OM)</b>, through <b>correlation</b> of the collected input data (CM/PM/FM/Traces) and through <b>root cause analysis</b>, determines whether and in what manner <b>the said base station overloading is affecting</b> the other KPIs related to performance parameters (For example, Quality and Mobility) pertaining to</p>

<p>more mobile wireless communications devices and the radio-frequency transceiver</p>	<p>communications between the UEs and the said overloaded or congested base station.</p>
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<p><b>Element 7 of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said first computer determines the at least one suggested corrective action in response to the error code</p>	<p><b>CCLB (Coverage Capacity and Mobility Load Balancing) and A-MLB (Adaptive Mobility Load Balancing)</b> are amongst the SON use cases (“corrective actions”) implemented by <b>Ericsson’s centralized SON solution’s SON Optimization Manager (SON OM)</b> in the RAN of <b>Verizon Wireless’</b> wireless telecommunications network.</p>

24. Defendants put the inventions claimed by the '024 Patent into service (i.e., used them); but for Defendants’ actions, the claimed-inventions embodiments involving Defendants’ products and services would never have been put into service. Defendants’ acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendants obtaining monetary and commercial benefit from it.

25. Defendants have and continues to induce infringement. Defendants have actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (see charts in paragraph 23), and related services) that use identified locations of wireless devices to perform adjustments such to cause infringement one or more claims of the '024 patent, including—for example—Claims 1-22, literally or under the doctrine of equivalents. Moreover, Defendants have known and should have known of the '024 patent, if not by the issuance of the '284 patent, by at least by the date of the patent’s issuance, which followed the date that the patent’s underlying application was cited to Defendants by the U.S. Patent and

Trademark Office during prosecution of one of Defendants' patent applications, such that Defendants knew and should have known that it was and would be inducing infringement.

26. Defendants have caused and will continue to cause Traxcell damage by infringing (including inducing infringement of) the '024 patent.

## **VII. INFRINGEMENT ('388 Patent (Attached as exhibit D))**

27. On January 17, 2017, U.S. Patent No. 9,549,388 ("the '388 patent") entitled "Mobile wireless device providing off-line and on-line geographic navigation information" (attached as Exhibit D) was duly and legally issued by the U.S. Patent and Trademark Office. Traxcell owns the '388 patent by assignment.

28. The '388 Patent's Abstract states, "A mobile device, wireless network and their method of operation provide both on-line (connected) navigation operation, as well as off-line navigation from a local database within the mobile device. Routing according to the navigation system can be controlled by traffic congestion measurements made by the wireless network that allow the navigation system to select the optimum route based on expected trip duration."

29. The following general elements will be used to explain Plaintiff's allegations of infringement of the Claims of the '388 patent.

**Element 1:** A wireless communications system including a first radio-frequency transceiver within a wireless mobile communications device and an associated first antenna to which the first radio-frequency transceiver is coupled, wherein the first radio-frequency transceiver is configured for radio-frequency communication with a wireless communications network.

**Element 2:** The said system further including a first processor within the wireless mobile communications device coupled to the at least one first radio-frequency transceiver programmed

to receive a location of the wireless mobile communications device from the wireless communications network and generate an indication of a location of the wireless mobile communications device with respect to geographic features according to mapping information stored within the wireless mobile communications device.

**Element 3:** The said first processor displays to the user navigation information according to the location of the wireless mobile communications device with respect to the geographic features and a destination specified by the user at the wireless mobile communications device.

**Element 4:** The said system further comprising, at least one second radio-frequency transceiver and an associated at least one second antenna of the wireless communications network to which the second radio-frequency transceiver is coupled.

**Element 5:** The said system further comprising, a second processor coupled to the at least one second radio-frequency transceiver programmed to determine the location of the wireless mobile communications device.

**Element 6:** The said second processor selectively determines the location of the wireless mobile communications device dependent on the setting of preference flags.

**Element 7:** The said second processor determines the location of the wireless mobile communications device if the preference flags are set to a state that permits tracking of the user of the wireless mobile communications device and communicates the location of the wireless mobile communications device to the first processor via the second radio-frequency transmitter.

**Element 8:** The said second processor does not determine and communicate the location of the wireless mobile communications device if the preference flags are set to a state that prohibits tracking of the wireless mobile communications device.



30. Defendants make, use, offer to sell, or sell within or import into the U.S. wireless networks, wireless-network components, and related services that use online and/or off-line navigation such that Defendants infringe one or more claims of the '388 patent, including—for example, but not by way of limitation—Claims 1-30, literally or under the doctrine of equivalents.

Preliminary charts illustrating Plaintiff's claims for infringement of the claims of the '388 patent is as follows:<sup>5</sup>

### **The Verizon Ellipsis 10**


The Verizon Ellipsis 10 combines a vibrant 10.1-inch Full HD display and a battery that lasts up to 25 hours\* at 9,100 mAh, it's the highest capacity battery of any 10-inch tablet on Verizon's 4G LTE network. Play your music loud and clear with a smart amplifier. America's largest most reliable 4G LTE network Available only from Verizon.

### **The Pre-Loaded Applications in the Verizon Ellipsis 10**



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<sup>5</sup> Plaintiff's infringement claims are not limited to the components provided herein.



You can use Google Maps to find your current location, get directions, and other location-based information.

For more information, refer to the “Using Maps” section.

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 **NOTE!**

You must enable location services to use Maps and some features require Standalone or Google location services.

**Potential Infringing Product(s) and Service(s):**

- Verizon**

  - **The Verizon Ellipsis Tablet**
  - **Google Maps**

Element of Claim #1	Corresponding aspects
<p>A wireless communications system including a first radio-frequency transceiver within a wireless mobile communications device and an associated first antenna to which the first radio-frequency transceiver is coupled, wherein the first radio-frequency transceiver is configured for radio-frequency communication with a wireless communications network.</p>	<p>A wireless mobile communication device is the Smart phone/ Tablets that has Wi-Fi, Internet and GPS capabilities. A smart phone can be Android or iOS. These Devices has radio-frequency transceivers to communicate wireless with conventional Cellular telecommunication network, Wi-Fi, WLAN or Wireless Mesh networks. The wireless mobile Communication devices examples of compatible devices are Verizon Ellipsis 10 Tablet, and Samsung Galaxy S8, containing RF transceivers in their hardware and are therefore capable of receiving and transmitting RF signals through antenna’s. Verizon Ellipsis 10 is android based Tablet that supports Verizon 4G Cellular connection for Navigation. Verizon Ellipsis 10 Tablet comes with pre-loaded apps that contain Google Maps app for Maps and Navigation support. Google Maps can be used to view and find places around the globe.</p>

	<p>Google Maps can also show your current location and provide direction from your location/Source to any destination.</p>
<p><b>Element of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said system further including a first processor within the wireless mobile communications device coupled to the at least one first radio-frequency transceiver programmed to receive a location of the wireless mobile communications device from the wireless communications network and generate an indication of a location of the wireless mobile communications device with respect to geographic features according to mapping information stored within the wireless mobile communications device.</p>	<p>The wireless mobile Communication devices examples of compatible devices are Verizon Ellipsis 10 Tablet, and Samsung Galaxy S8, containing RF transceivers in their hardware and are therefore capable of receiving and transmitting RF signals through antenna's. These RF signals are processed by a processor present on the mother board of Verizon Ellipsis 10. Google Maps can be used to view and find places around the globe. Google Maps can also show your current location and provide direction from your location/Source to any destination. In Google Maps App a blue dot is shown, which shows the current location of wireless mobile communication device examples of compatible devices are Verizon Ellipsis 10 Tablet, and Samsung Galaxy S8. The Google map app estimates the location of the wireless mobile Communication devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, from 3 sources i.e. GPS, Wi-Fi and Cell Towers. GPS uses satellites and knows your location within a few meters, Wi-Fi: The location of nearby Wi-Fi networks helps Maps know where you are and Cell tower can be accurate up to a few thousand meters.</p>
<p><b>Element of Claim #1</b></p>	<p><b>Corresponding aspects</b></p>
<p>The said first processor displays to the user navigation information according to the location of the wireless mobile communications device with respect to the geographic features and a destination specified by the user at the wireless mobile communications device.</p>	<p>In Google Maps App - a blue dot is shown, which shows the current location of wireless mobile communication device. The Google map app estimates the location of the wireless mobile Communication devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, from 3 sources i.e. GPS, Wi-Fi and Cell Towers. The blue dot shows where you are on the map. When Google Maps isn't sure about your location, a light blue circle around the blue dot is shown. You might be anywhere within the light blue circle. The smaller the circle, the more certain the app is about your location.</p> <p>Google Maps App provides flexibility to download maps on SD card/internal memory of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8), and navigate offline. When internet is slow or mobile data is expensive, or communication device cannot</p>

	<p>connect to internet, an area can be saved to phone or tablet examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, from Google maps app and use it when offline. Communication device can Turn On ‘Wi-Fi Only’ mode from settings to use Offline maps for Navigation through the downloaded area without internet</p>
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Element of Claim #1	Corresponding aspects in use by/marketed by M/S AT&T
<p>The said system further comprising, at least one second radio-frequency transceiver and an associated at least one second antenna of the wireless communications network to which the second radio-frequency transceiver is coupled.</p>	<p>The wireless mobile communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can also navigate using Google Map. First, user of device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, locates its current location on Google map app and then provide details for destination on the options, provided in Google map app. The user of wireless mobile communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can then navigate in real time from its current location to destination. The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna are present within communication network. The user can use navigation in the Google Maps app to get turn-by-turn directions to place easily. Maps will show the directions and uses real-time traffic information to find the best route to specified destination.</p>

Element of Claim #1	Corresponding aspects
<p>The said system further comprising, a second processor coupled to the at least one second radio-frequency transceiver programmed to determine the location of the wireless mobile communications device.</p>	<p>The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is Verizon jetpack 4G LTE Mobile Hotspot, are present within communication network. The user can use navigation in the Google Maps app to get turn-by-turn directions to destination. Maps will show the directions and uses real-time traffic</p>

	<p>information to find the best route to specified destination. Based on the state of preference flag, user of Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can start navigation along with selected Traffic, Public transit, Bicycling, Satellite, or Terrain, options provided while navigating to destination.</p>
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Element of Claim #1	Corresponding aspects
<p>The said second processor selectively determines the location of the wireless mobile communications device dependent on the setting of preference flags</p>	<p>The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is Verizon jetpack 4G LTE Mobile Hotspot) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can decide whether, navigation is required or not required. If the preference is set to "START" then processor at Google server can permit tracking of Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and if the preference is set to "EXIT" then processor at Google server cannot locate device and Could not track the Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8</p>

Element of Claim #1	Corresponding aspects
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<p>The said second processor determines the location of the wireless mobile communications device if the preference flags are set to a state that permits tracking of the user of the wireless mobile communications device and communicates the location of the wireless mobile communications device to the first processor via the second radio-frequency transmitter.</p>	<p>The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is Verizon jetpack 4G LTE Mobile Hotspot) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can decide whether, navigation is required or not required. If the preference is set to “START” then processor at Google server can permit tracking of Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and if the preference is set to “EXIT” then processor at Google server cannot locate device and Could not track the Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8</p>
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Element of Claim #1	Corresponding aspects
<p>The said second processor does not determine and communicate the location of the wireless mobile communications device if the preference flags are set to a state that prohibits tracking of the wireless mobile communications device</p>	<p>The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is Verizon jetpack 4G LTE Mobile Hotspot) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, can decide whether, navigation is required or not required. If the preference is set to “START” then processor at Google server can permit tracking of Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8, and if the preference is set to “EXIT” then processor at Google server cannot locate device and Could not track the Communication device examples of compatible devices are Verizon Ellipsis 10 Tablet and Samsung Galaxy S8</p>

31. Defendants put the inventions claimed by the '388 Patent into service (i.e., used them); but for Defendants' actions, the claimed-inventions embodiments involving Defendants' products and services would never have been put into service. Defendants' acts complained of herein caused those claimed-invention embodiments to perform, and Defendants obtaining monetary and commercial benefit from it.

32. Defendants have and continue to induce infringement. Defendants have actively encouraged or instructed others (e.g., its customers), and continues to do so, on how to use its products and services (see charts in paragraph 30), and related services) that use identified U.S. wireless networks, wireless-network components, and related services that use online and/or off-line navigation such to cause infringement one or more claims of the '388 patent, including—for example—Claims 1-30, literally or under the doctrine of equivalents. Moreover, Defendants have known and should have known of the '388 patent, if not by the issuance of the '284 patent, by at least by the date of the patent's issuance, which followed the date that the patent's underlying application was cited to Defendants by the U.S. Patent and Trademark Office during prosecution of one of Defendants' patent applications, such that Defendants knew and should have known that it was and would be inducing infringement.

Defendants have caused and will continue to cause Traxcell damage by infringing (including inducing infringement of) the '388 patent.

#### **VIII. PRAYER FOR RELIEF**

WHEREFORE, Traxcell respectfully requests that this Court:

- i. enter judgment that Defendants have infringed the '284, '320, '024, and '388 patents;

- ii. award Traxcell damages in an amount sufficient to compensate it for Defendants' infringement of the '284, '320, '024, and '388 patents, in an amount no less than a reasonable royalty, together with prejudgment and post-judgment interest and costs under 35 U.S.C. § 284;
- iii. award Traxcell an accounting for acts of infringement not presented at trial and an award by the Court of additional damage for any such acts of infringement;
- iv. declare this case to be "exceptional" under 35 U.S.C. § 285 and award Traxcell its attorneys' fees, expenses, and costs incurred in this action;
- v. declare Defendants infringement to be willful and treble the damages, including attorneys' fees, expenses, and costs incurred in this action and an increase in the damage award pursuant to 35 U.S.C. §284;
- vi. a decree addressing future infringement that either (i) awards a permanent injunction enjoining Defendants and their agents, servants, employees, affiliates, divisions, and subsidiaries, and those in association with Defendants, from infringing the claims of the Patents-in-Suit or (ii) award damages for future infringement in lieu of an injunction, in an amount consistent with the fact that for future infringement the Defendants will be adjudicated infringers of a valid patent, and trebles that amount in view of the fact that the future infringement will be willful as a matter of law; and,
- vii. award Traxcell such other and further relief as this Court deems just and proper.

**JURY DEMAND**

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

Respectfully submitted,

**Ramey & Schwaller, LLP**



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