UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

TRAXCELL TECHNOLOGIES, LLC., Plaintiff,	)	
	)	**Civil Action No. _____**
v.	)	
	)	
	)	
T-MOBILE USA, INC	)	**JURY TRIAL DEMANDED**
Defendant.	)	

PLAINTIFF'S ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Traxcell Technologies, LLC. ("Traxcell") files this Original Complaint and demand for jury trial seeking relief from patent infringement by T-Mobile USA, Inc. (collectively "Defendant"), 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, TX 75074.

2. T-Mobile USA, Inc. is a Delaware corporation with its principal place of business at 12920 SE 38th Street, Bellevue, Washington 98006 and a registered agent for service of process at Corporation Service Company, 211 E. 7th Street, Suite 620, Austin, Texas 78701-3218. On information and belief, T-Mobile USA, Inc. 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 Defendant because: Defendant is present within or has minimum contacts within the State of Texas and this judicial district; Defendant has purposefully availed itself of the privileges of conducting business in the State of Texas and in this judicial district; Defendant regularly conducts business within the State of Texas and within this judicial district; and Plaintiff's cause of action arises directly from Defendant's 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. §§ 1391(b) and 1400(b). Defendant has committed acts of infringement and have a regular and established place of business in this District. Further, venue is proper because Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in Texas and this District.

III. OVERVIEW OF EXEMPLARY ACCUSED INFRINGING TECHNOLOGY

T-Mobile to use Eden Rock's SON to reduce dropped calls, increase throughput

T-Mobile US (NYSE: TMUS) intends to deploy Eden Rock Communications' self-organizing network (SON) technology nationwide to improve network services. Founded in 2007, Eden Rock is based in Washington state, as is T-Mobile, Deutsche Telekom's U.S. wireless arm. The vendor's Eden-Net library of SON modules uses cloud-based software intelligence to enhance the performance of 2G, 3G and LTE networks. The SON product works with radio access networks

(RANs) provided by multiple vendors to automate the configuration, optimization and maintenance of large-scale modern networks.

Source: http://www.fiercewireless.com/tech/t-mobile-to-use-eden-rock-s-son-to-reduce-dropped-calls-increase-throughput

ommsMEA: Could you cite an example where SON has benefited a telco remarkably?

T-Mobile USA has been leveraging Nokia Eden-NET SON. During T-Mobile's SON evaluation process, Eden-NET SON solution simultaneously ensured dropped calls are only fewer, increased throughput, and reduced leakage – even as measured across entire markets, which had been previously well optimized. With Eden-NET SON solution T-Mobile has seen improvements in its network.

Source:http://www.commsmea.com/16143-enhanced-agility-for-evolving-networks/1/

Nokia Eden-NET combines the best Self Organizing Networks (SON) functionality from the now-completed Eden Rock acquisition and Nokia Networks iSON Manager in one solution. This initiative boosts Nokia Networks' unwavering focus on providing the best-in-class multivendor SON capabilities. It also responds to operators' need to simplify, improve agility and efficiency of rapidly changing networks operations.

The new solution is based on both Eden Rock's Eden-NET and Nokia Networks iSON Manager. It combines the best functionality of both solutions proven to offer substantial improvements to the performance and reliability of mobile networks through automated processes. Thanks to its unique open framework, the solution will allow operators to both customize and create new SON modules to remedy operator-specific pain points. Like no other solution before it, this will provide needed agility and boost industry-wide SON innovation.

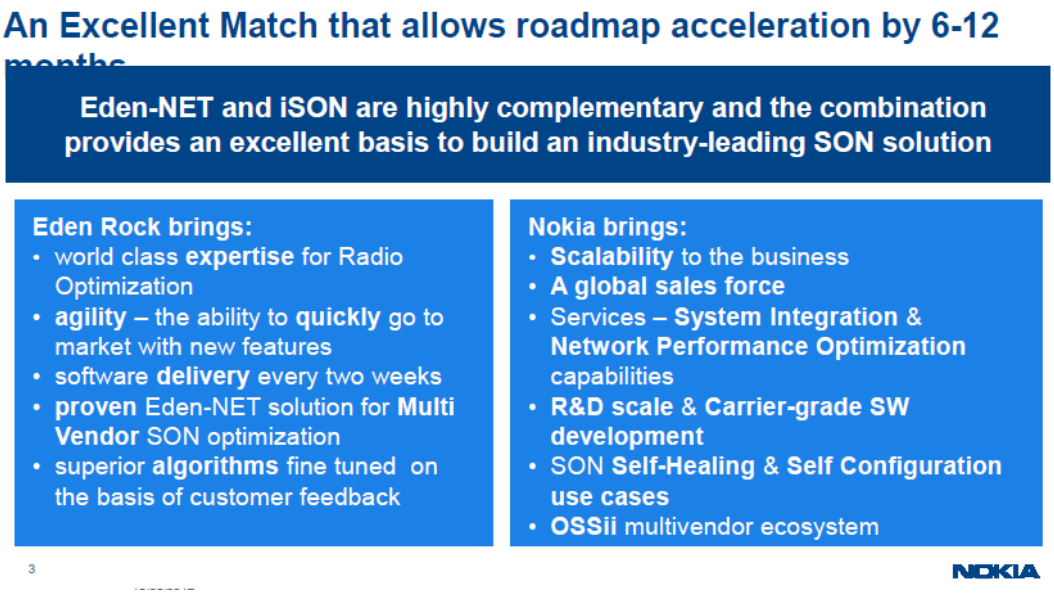
With the successful integration of both portfolios, Nokia Networks has accelerated feature availability by some 6 to12 months and provides the broadest portfolio of SON modules with superior proven algorithms. This is an important step towards its vision to enable self-aware networks for personalized experiences.

Source: http://company.nokia.com/en/news/press-releases/2015/07/13/nokia-networks-unveils-new-nokia-eden-net-product-for-self-organizing-mobile-networks

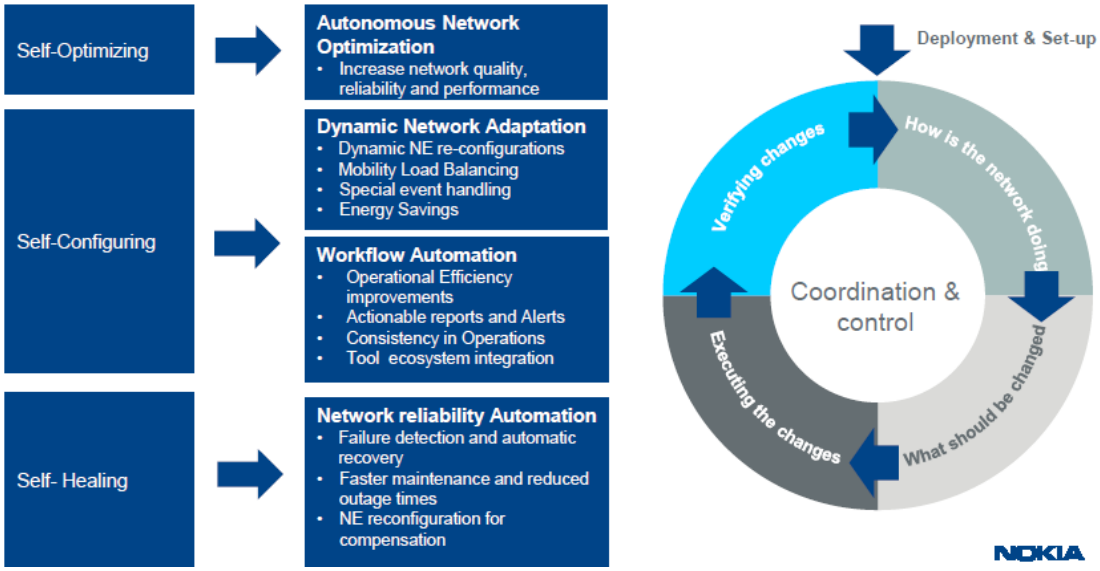
Eden-NET SON solution automates network operations

Eden-NET is an industry-leading SON solution that enables mobile operators to automate and efficiently realize the full potential of their existing networks, as well as drive transformation to 5G. As a centralized SON platform, Nokia Eden-NET automates operations across multiple domains, eliminating complexities from multi-vendor, multi-technology, and multi-layered networks. The multi-vendor capability is supported by the Operations Support Systems interoperability initiative (OSSii). Nokia Eden-NET offers the industry's widest range of SON modules, helping operators achieve self-configuration, self-healing and self-optimization.

Source: https://networks.nokia.com/solutions/eden-net



A new way of looking at Self-Organizing Networks (SON)



Snapshot of synergies : Roadmap benefits from Day-1

Eden-NET

SON Feature/Module	2G	3G	4G
Framework + SDK	✔	✔	✔
Automatic Performance Reports + Real-Time Alerts	✔	✔	✔
PCE	✔	✔	✔
ANR	✔	✔	✔
Reuse Code Optimization	Q4	✔	✔
CCO	Not planned	✔	✔
MLB		✔	✔
Crossed Antenna Detection		✔	✔
Special Event	Q3	Q3	Q3
Plug & Play	Q4	✔	✔
Sleeping Cell & Cell Outage Compensation	✔ KPI	✔ KPI	✔KPI
MRO		Q1'16	Q3
RACH Optimization		Q4	Q4
Green Networks	2016	2016	Q1'16

Enablers from iSON Manager

SON Feature/Module	2G	3G	4G
Framework + SDK	Q2'16		
Automatic Performance Reports + Real-Time Alerts	Not planned		
PCE	Q4	Q4	Q4
AAO	Q1'16	✔	✔
Reuse Code Optimization	Not planned	✔	✔
CCO		✔	Q1'16
MLB		Q1'16	Q1'16
Crossed Antenna Detection	Not planned		
Special Event			
Automatic Site Creation	✔	✔	✔
Cell Outage Resolution with FM Integration	✔	✔	✔
MRO		Not planned	✔
RACH Optimization		✔	✔
PUCCH Optimization			✔
Green Networks (Energy Savings)	Not planned	Q4	✔

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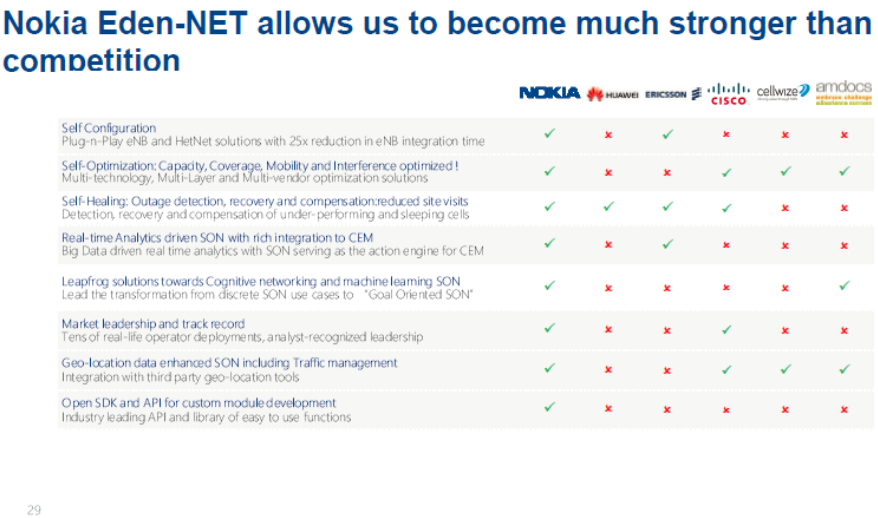
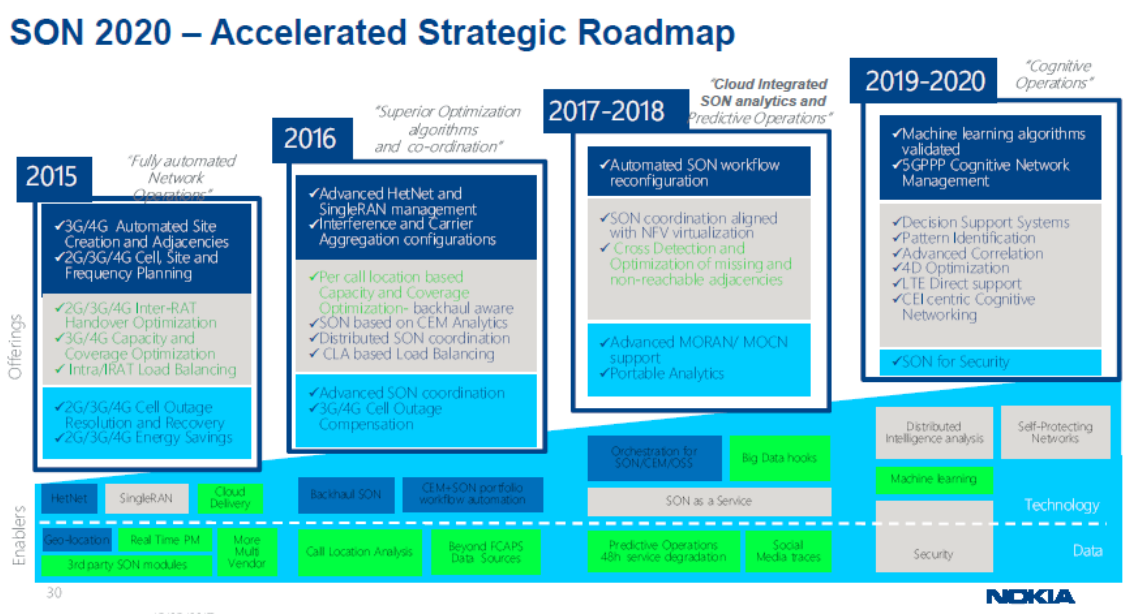
eden rock. NOKIA





Nokia Multi-Layer Optimization service

Operators started with GSM, but soon added GPRS, EDGE, WCDMA, HSPA, Wi-Fi, LTE and LTE-Advanced. With multiple frequencies and the onset of small cells, operators are managing a daunting 10 or more layers of network complexity. The risk is that costs rise while service quality and profits come tumbling down. Well, one simple answer for operators facing such complexity is the Nokia Multi-layer Optimization service. It uses Nokia expertise, and proprietary tools to detect interference and predict how the network will behave in the future as traffic grows.

The end-to-end service looks at issues affecting the network, the devices connected to it, applications and the users' experience. It also covers different technologies in multi-vendor networks.

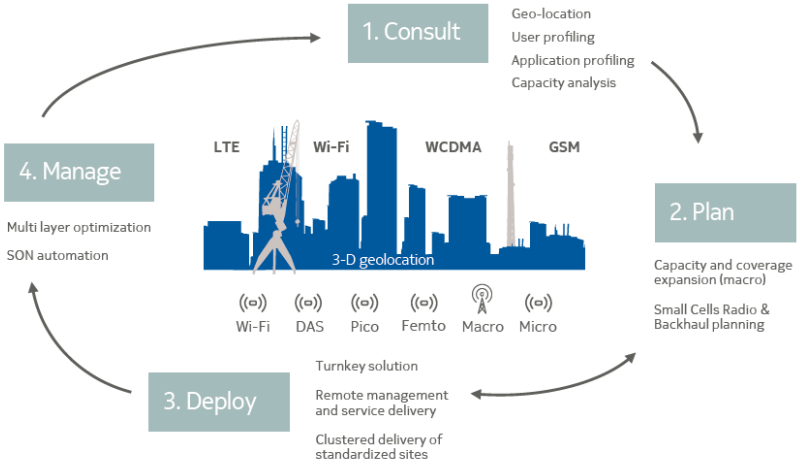
Since its launch in Barcelona earlier this year, the Multi-Layer Optimization service has been proving its value. In the Middle East, a mobile operator saw an 84% improvement in throughput after only two weeks. Nokia analysed the performance of this LTE network and used patented algorithms to help identify 'polluters' – that is, cells that were causing interference and degrading network quality. These problems could be quickly mitigated by adjusting antenna tilt and power tuning. In addition, load balancing/equalization features were used to move traffic from 800 MHz to the less congested 2600 MHz layer.

Another huge success was in the US, where a major operator asked us to improve the performance of ten different regions. Independent company RootMetrics measured and compared the performance of different operators for overall performance, reliability and speed. In less than six months our Multi-Layer Optimization service delivered significant improvements. All the areas optimized by Nokia Networks are now ranked number one or two on 'reliability' when compared with the other three major operators, with six of the areas achieving higher positions in the 'Overall Performance' ranking. Most significantly, two of the regions leaped up the charts from number four to number one positions.

Although networks continue to become ever more complex, this doesn't necessarily mean rising costs are

inevitable. **Nokia's Multi-Layer Optimization service** can cut through the complexity and find the path to better performance.

Source: https://blog.networks.nokia.com/global-services/2015/09/11/hetnets-answer-to-network-complexity/



SON automation principles used in **Nokia's Multi-Layer Optimization service.**

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. Defendant makes, uses, offers to sell, or sells 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 Defendant infringes 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: [1]

Element 1 of Claim #1	Corresponding aspects
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	**Nokia Eden-NET** combines Eden Rock’s **Eden-NET SON** with Nokia Networks’ **iSON Manager**, and provides a solution for optimizing performance of client wireless telecommunications networks. A typical wireless network that Nokia Networks’ **SON** solution is used in consists of a Core network and a Radio access network (RAN). The RAN basically consists of base stations (eNodeBs, small cells, micro cells, macro cells etc.),

[1] Plaintiff’s infringement claims are not limited to the components provided herein.

transceiver is configured for radio-frequency communication with at least one mobile wireless communication device.	which are primarily involved in two-way receipt and transmission of radio frequency (RF) signals. These base stations communicate (through receipt and transmission of RF signals) with a plurality of mobile wireless communication devices (like mobile phones, laptops, PDAs, tablets etc.). The said base stations typically include one or more antennae. Nokia Networks' **SON** solution helps optimize, troubleshoot and improve the quality of said RF-based communications between base stations and the mobile wireless communication devices.

Element 2 of Claim #1	**Corresponding aspects**
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.	Nokia Networks offers a centralized **Self-Optimizing Network (SON) solution**, **Nokia Eden-NET SON**, for optimizing a client's wireless telecommunication network. **Nokia Eden-NET SON** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager.** The software associated with the said **Nokia Eden-NET SON** is installed in the client wireless network's **Operations Support System (OSS)**. In a typical wireless network architecture, several RAN elements (base stations) are managed by an Element Management System (EMS). Several EMSs are connected to the NMS, which is connected to the OSS. A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON** is installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the correspondingbase stations (eNodeBs, small cells, micro cells, macro cells etc.), and UE. The corresponding geographic location of the UE at the time of the said measurement are stored in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs.

Element 3 of Claim #1	**Corresponding aspects**

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.	A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON** is installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the corresponding UE and the corresponding geographic location of the UE at the time of the said measurement, and stores the information of the mobile wireless communication devices and base stations in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs. **Nokia's SON solution** analyzes the collected network performance measurements pertaining to the quality of RF-based interactions between the base stations () and the UEs, by comparing real-time network performance defining KPIs (Key Performance Indicators) and measurements with the expected standard values or thresholds.

Element 4 of Claim #1	**Corresponding aspects**
The said first computer references the performance data to expected performance data.	The software associated with the said Nokia Eden-NET SON is installed in the client wireless network's Operations Support System (OSS). Nokia's centralized Eden-NET SON solution continuously monitors UE location and referenced network performance and QoE of mobile wireless communication devices through the real-time performance metrics (KPIs or KQIs) collected from the network elements. The **SON solution** analyzes the data in real-time, by comparing the observed measurements against the standard values or thresholds, and ascertains or diagnoses the root cause of service degradation.

Element 5 of Claim #1	**Corresponding aspects**

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.	The software associated with the said Nokia Eden-NET SON is installed in the client wireless network's Operations Support System (OSS). Nokia's centralized Eden-NET SON solution continuously monitors UE location and referenced network performance and QoE of mobile wireless communication devices through the real-time performance metrics (KPIs or KQIs) collected from the network elements. The **SON solution** analyzes the data in real-time, by comparing the observed measurements against the standard values or thresholds, and ascertains or diagnoses the root cause of service degradation. Once the root causes are identified, the SON solution initiates or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements in the problematic areas of the network, thereby alleviating the said issues/problems. These corrective actions basically include, increase network quality (Power adjustment), reliability and performance, Failure detection and automatic Recovery, Faster maintenance and reduced outage times, NE reconfiguration for compensation in the concerned cells or (base stations (A), eNodeBs etc.) in the areas of the network where users are found to be experiencing problems.

Element 6 of Claim #1	**Corresponding aspects**
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.	A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with Nokia Eden-NET SON is installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the corresponding UE and base stations along with corresponding geographic location of the UE at the time of the said measurement, and stores the UE updated information in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs.

Element 7 of Claim #1	**Corresponding aspects**

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.	Mobile Marketing Suite collects data from customers' devices if consent has been given by the customers, predicts their buying behavior, and delivers personalized communication to them. From this it can be implied that a customer / subscriber can withdraw his/her consent, and if the customer / subscriber withdraws his/her consent, then, the said customer's information available with Nokia's centralized Eden-NET SON operator cannot be shared with third party applications and/or the operator's own personalized marketing/advertising applications. In other words, Nokia's centralized Eden-NET SON shall not provide the non-consenting customer / subscriber's information to the third-party applications and/or the operator's own personalized marketing/advertising applications. **The Mobile Marketing Suite leverages a robust and cutting-edge data platform comprised of:** Data Collection Services that integrate Mobile Marketing Suite into the operator's mobile application and the mobile wireless communication devices is simple and straightforward with the Data Collection Service. Software Development Kits are available for iOS, Android and JavaScript. A REST Application Programming Interface is also available to enable server-to-server integration or to ingest and transform historical activity data. Common Customer Profile that compiles an operator's customer data collected from multiple touch points into a single customer record. This gives the operator a unified view of customer activity and behavior across multiple devices, channels, platforms and applications. A robust A|B testing engine enables the operator to compare between multiple creative versions of the same offer to continuously improve and optimize the customization. Similarly, Nokia Emergency Alert Solution enables operators and public safety authorities to use network subscriber data for conveying important, potentially lifesaving information and alerts to people known to be in an emergency area. Predictive marketing integrates two proven software products from Nokia – CEM on Demand and Mobile Marketing Suite. CEM on Demand analyzes insights from the services, devices, network and care experience. Mobile Marketing Suite collects

	data from Nokia's centralized Eden-NET SON that includes, prediction of their buying behavior, and delivers personalized communication to them. Advanced algorithms predict customers' behavior and automatically deliver highly personalized communication in real-time. Predictive marketing provides close to real-time monitoring of customer experience, campaign success rate and resulting benefits. Nokia Emergency Alert Solution. enables operators and public safety authorities to use network subscriber data for conveying important, potentially lifesaving information and alerts to people known to be in an emergency area. Mobile Marketing Suite and Nokia Emergency Alert Solution leverage the wealth of subscriber data (both real-time and historical) extracted continuously and routinely by the wireless network components (like OSS) for network performance optimization etc.

Element 8 of Claim #1	**Corresponding aspects**
The said first computer **provides access** to the indication of location to the second computer if the no access flag is reset.	Mobile Marketing Suite collects data from customers' devices, if consent has been given by the customers, predicts their buying behavior, and delivers personalized communication to them. From this it can be implied that a customer / subscriber can withdraw/Allow his/her consent, and if the customer / subscriber withdraws his/her consent, then, the said customer's information available with Nokia's centralized Eden-NET SON operator cannot be shared with third party applications and/or the operator's own personalized marketing/advertising applications. In other words, Nokia's centralized Eden-NET SON shall not provide the non-consenting customer / subscriber's information to the third-party applications and/or the

	operator's own personalized marketing/advertising applications. **The Mobile Marketing Suite leverages a robust and cutting-edge data platform comprised of:** Data Collection Services that integrate Mobile Marketing Suite into the operator's mobile application and the mobile wireless communication devices is simple and straightforward with the Data Collection Service. Software Development Kits are available for iOS, Android and JavaScript. A REST Application Programming Interface is also available to enable server-to-server integration or to ingest and transform historical activity data. Common Customer Profile that compiles an operator's customer data collected from multiple touch points into a single customer record. This gives the operator a unified view of customer activity and behavior across multiple devices, channels, platforms and applications. A robust A|B testing engine enables the operator to compare between multiple creative versions of the same offer to continuously improve and optimize the customization. Similarly, Nokia Emergency Alert Solution enables operators and public safety authorities to use network subscriber data for conveying important, potentially lifesaving information and alerts to people known to be in an emergency area.

Element 9 of Claim #1	**Corresponding aspects**
The said first computer **denies access** to the indication of location to the second computer if the no access flag is set.	Mobile Marketing Suite collects data from customers' devices, if consent has been given by the customers, predicts their buying behavior, and delivers personalized communication to them. From this it can be implied that a customer / subscriber can withdraw/Allow his/her consent, and if the customer / subscriber withdraws his/her consent, then, the said customer's information available with Nokia's centralized Eden-NET SON operator cannot be shared with third party applications and/or the operator's own personalized marketing/advertising applications.

	In other words, Nokia's centralized Eden-NET SON shall not provide the non-consenting customer / subscriber's information to the third-party applications and/or the operator's own personalized marketing/advertising applications. **The Mobile Marketing Suite leverages a robust and cutting-edge data platform comprised of:** Data Collection Services that integrate Mobile Marketing Suite into the operator's mobile application and the mobile wireless communication devices is simple and straightforward with the Data Collection Service. Software Development Kits are available for iOS, Android and JavaScript. A REST Application Programming Interface is also available to enable server-to-server integration or to ingest and transform historical activity data. Common Customer Profile that compiles an operator's customer data collected from multiple touch points into a single customer record. This gives the operator a unified view of customer activity and behavior across multiple devices, channels, platforms and applications. A robust A|B testing engine enables the operator to compare between multiple creative versions of the same offer to continuously improve and optimize the customization. Similarly, Nokia Emergency Alert Solution enables operators and public safety authorities to use network subscriber data for conveying important, potentially lifesaving information and alerts to people known to be in an emergency area.

10. Defendant put the inventions claimed by the '320 Patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant obtaining monetary and commercial benefit from it.

11. Defendant has and continues to induce infringement. Defendant has 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, Defendant has 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 Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant’s patent applications, such that Defendant knew and should have known that it was and would be inducing infringement. Further, the USPTO notified T-Mobile of the Traxcell's patent application on about 8/27/2012 in the prosecution of T-Mobile's US 8,472,974 and also on 5/30/2012 for the prosecution of T-Mobile's US 8,280,943.

12. Defendant has 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. Defendant makes, uses, offers to sell, or sells 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 Defendant 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: [2]

Element 1 of Claim #1	Corresponding aspects
A wireless network comprising: at least two wireless devices, each said wireless device communicating via radio frequency signals; a radio tower adapted to receive radio frequency signals from, and transmit radio frequency signals to said wireless devices.	**Nokia Eden-NET** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager,** and provides a solution for optimizing performance of client wireless telecommunications networks. A typical wireless network that Nokia Networks' **SON** solution is used in consists of a Core network and a Radio access network (RAN). The RAN basically consists of base stations (eNodeBs, small cells, micro cells, macro cells etc.), which are primarily involved in two-way receipt and transmission of radio frequency (RF) signals. These base stations communicate (through receipt and transmission of RF signals) **with a plurality of mobile wireless communication devices (like mobile phones, laptops, PDAs, tablets etc.).** The said base stations typically include one or more antennae. Nokia Networks' **SON** solution helps optimize, troubleshoot and improve the quality of said RF-based communications between base stations and the mobile wireless communication devices.

Element 2 of Claim #1	Corresponding aspects
The said wireless network further comprising a first computer, which includes means for receiving performance data of	Nokia Networks offers a centralized **Self-Optimizing Network (SON) solution**, **Nokia Eden-NET SON,** for optimizing a client's wireless telecommunication network. **Nokia Eden-NET SON** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager.** The software associated with the said **Nokia Eden-NET SON** is installed in the client wireless network's **Operations**

[2] Plaintiff's infringement claims are not limited to the components provided herein.

said RF-based interactions between the said radio tower and said wireless devices.	**Support System (OSS).** In a typical wireless network architecture, several RAN elements (base stations) are managed by an Element Management System (EMS). Several EMSs are connected to the NMS, which is connected to the OSS. A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON is** installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the corresponding UE and the corresponding geographic location of the UE at the time of the said measurement, and stores the iinformation of the mobile wireless communication devices in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs. **Nokia's SON solution analyzes** the collected network performance measurements pertaining to the quality of RF-based interactions between the base stations and the UEs, by comparing real-time network performance defining KPIs (Key Performance Indicators) and measurements with the expected standard values or thresholds. Through such comparison, **Nokia's SON solution detects** service-related degradations or failures.

Element 3 of Claim #1	**Corresponding aspects**
wherein the said first computer is further programmed to perform the steps of: 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	Nokia Networks offers a centralized **Self-Optimizing Network (SON) solution**, **Nokia Eden-NET SON,** for optimizing a client's wireless telecommunication network. **Nokia Eden-NET SON** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager.** The software associated with the said **Nokia Eden-NET SON** is installed in the client wireless network's **Operations Support System (OSS).** In a typical wireless network architecture, several RAN elements (base stations) are managed by an Element Management System (EMS). Several EMSs are connected to the NMS, which is connected to the OSS. A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON is** installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the corresponding UE and the corresponding geographic location of the UE at the time of the said measurement, and stores the iinformation of the mobile wireless

routinely storing performance data and a corresponding location for said at least one wireless device in a memory.	communication devices in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs. **Nokia's SON solution analyzes** the collected network performance measurements pertaining to the quality of RF-based interactions between the base stations and the UEs, by comparing real-time network performance defining KPIs (Key Performance Indicators) and measurements with the expected standard values or thresholds. Through such comparison, **Nokia's SON solution detects** service-related degradations or failures.

Element 4 of Claim #1	**Corresponding aspects**
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.	Nokia's centralized Eden-NET SON solution continuously monitors UE location referenced network performance and QoE through the real-time performance metrics (KPIs or KQIs) collected from the network elements. The SON solution analyses the data in real-time, by comparing the observed measurements against the standard values or thresholds, and ascertains or diagnoses the root cause of service degradation. Once the root causes are identified, the SON solution initiates or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements (base stations, eNodeBs etc.) in the problematic areas of the network, thereby alleviating the said issues/problems. These corrective actions basically include, increase network quality, reliability and performance, Failure detection and automatic Recovery, Faster maintenance and reduced outage times, NE reconfiguration for compensation in the concerned cells or base stations in the areas of the network where users are found to be experiencing problems.

Element 5 of Claim #1	**Corresponding aspects**
	Nokia Eden-NET SON is linked or interfaced with the "Alarm Server", and therefore, it receives any "alarms" or "fault alerts or

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.	notifications" generated by the network elements (base stations, eNodeBs etc.). After receiving an alarm, **Nokia Eden-NET SON** determines the root cause of the said alarm by comparing key performance indicators or KPIs (network performance metrics) against thresholds. The KPIs are the measure of the quality of RF signal based communications between the RAN elements (RF transceivers – base stations, eNodeBs etc.) and one or more UEs. Examples of the alarms include – call drops (hand over failures), failure of a BTS in connecting calls to users in its sector or long call setup times (indicates coverage holes or poor coverage), cell outages (leading to coverage holes), overloading of cells (causing drastic degradation in QoS for users at the overloaded cell's edge), high interference for users at certain locations (poor QoS), etc.

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 suggests said corrective action in order to improve communication with at least one said wireless device.	**Nokia Eden-NET SON is** linked or interfaced with the "Alarm Server", and therefore, it receives any "alarms" or "fault alerts or notifications" generated by the network elements (base stations, eNodeBs etc.). After receiving an alarm, **Nokia Eden-NET SON determines** the root cause of the said alarm by comparing key performance indicators or KPIs (network performance metrics) against thresholds. The KPIs are the measure of the quality of RF signal based communications between the RAN elements (RF transceivers – base stations, eNodeBs etc.) and one or more UEs. Once the root causes are identified, the **SON solution** initiates or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements (base stations, eNodeBs etc.) in the problematic areas of the network, thereby alleviating the said issues/problems. These corrective actions basically include, increase network quality, reliability and performance, Failure detection and automatic Recovery, Faster maintenance and reduced outage times, NE reconfiguration for compensation in the concerned cells or base stations in the areas of the network where users are found to be experiencing problems.

17. Defendant put the inventions claimed by the ’284 Patent into service (i.e., used them); but for Defendant’s actions, the claimed-inventions embodiments involving Defendant’s products and services would never have been put into service. Defendant’s acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant obtaining monetary and commercial benefit from it.

18. Defendant has and continues to induce infringement. Defendant 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, Defendant has 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 Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant’s patent applications, such that Defendant knew and should have known that it was and would be inducing infringement. Further, the USPTO notified T-Mobile of the Traxcell's patent application on about 8/27/2012 in the prosecution of T-Mobile's US 8,472,974 and also on 5/30/2012 for the prosecution of T-Mobile's US 8,280,943.

19. Defendant has 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. Defendant makes, uses, offers to sell, or sells 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 Defendant infringes 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: [3]

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 transceiver is coupled, wherein the one or more radio-frequency transceivers configured for radio-frequency communication with at least one mobile wireless communications device	**Nokia Eden-NET** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager,** and provides a solution for optimizing performance of client wireless telecommunications networks. A typical wireless network that Nokia Networks' **SON** solution is used in consists of a Core network and a Radio access network (RAN). The RAN basically consists of base stations (eNodeBs, small cells, micro cells, macro cells etc.), which are primarily involved in two-way receipt and transmission of radio frequency (RF) signals. These base stations communicate (through receipt and transmission of RF signals) with a plurality of mobile wireless communication devices (like Nokia mobile phones, laptops, PDAs, tablets etc.). The said base stations typically include one or more antennae. Nokia Networks' **SON** solution helps optimize, troubleshoot and improve the quality of said RF-based communications between base stations and the mobile wireless communication devices.

[3] Plaintiff's infringement claims are not limited to the components provided herein.

Element 2 of Claim #1	Corresponding aspects
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	Nokia Networks offers a centralized **Self-optimizing Network (SON) solution**, **Nokia Eden-NET SON,** for optimizing a client's wireless telecommunication network. **Nokia Eden-NET SON** combines Eden Rock's **Eden-NET SON** with Nokia Networks' **iSON Manager.** The software associated with the said **Nokia Eden-NET SON is** installed in the client wireless network's **Operations Support System (OSS).** In a typical wireless network architecture, several RAN elements (base stations) are managed by an Element Management System (EMS). Several EMSs are connected to the NMS, which is connected to the OSS. A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON is** installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the correspondingbase stations (eNodeBs, small cells, micro cells, macro cells etc.), and UE. The corresponding geographic location of the UE at the time of the said measurement are stored in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs.

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	A computer/processor or a network of computers/processors (OSS) belonging to the client wireless network in which the central software associated with **Nokia Eden-NET SON is** installed, constitutes the "Computer". OSS continuously receives, through EMS and NMS, correlates network performance measurement with the corresponding UE and the corresponding geographic location of the UE at the time of the said measurement, and stores the iinformation of the mobile wireless communication devices and base stations in a database. These performance measurements are provided in real-time to the **Nokia Eden-NET SON** that contains a **Geo-location engine** that ascertains the geographic locations of UEs. **Nokia's SON solution analyzes** the collected network performance measurements pertaining to the quality of RF-based interactions between the base stations and the UEs, by comparing real-time network performance defining KPIs (Key Performance Indicators) and measurements with the expected standard values or thresholds.

Element 4 of Claim #1	Corresponding aspects
The said first computer references the performance data to expected performance data	The software associated with the said Nokia Eden-NET SON is installed in the client wireless network's Operations Support System (OSS). Nokia's centralized Eden-NET SON solution continuously monitors UE location and referenced network performance and QoE of mobile wireless communication devices through the real-time performance metrics (KPIs or KQIs) collected from the network elements. The **SON solution** analyzes the data in real-time, by comparing the observed measurements against the standard values or thresholds, and ascertains or diagnoses the root cause of service degradation.

Element 5 of Claim #1	Corresponding aspects
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	The software associated with the said Nokia Eden-NET SON is installed in the client wireless network's Operations Support System (OSS). Nokia's centralized Eden-NET SON solution continuously monitors UE location and referenced network performance and QoE of mobile wireless communication devices through the real-time performance metrics (KPIs or KQIs) collected from the network elements. The **SON solution** analyzes the data in real-time, by comparing the observed measurements against the standard values or thresholds, and ascertains or diagnoses the root cause of service degradation. Once the root causes are identified, the SON solution initiates or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements in the problematic areas of the network, thereby alleviating the said issues/problems. These corrective actions basically include, increase network quality (Power adjustment), reliability and performance, Failure detection and automatic Recovery, Faster maintenance and reduced outage times, NE reconfiguration for compensation is the concerned cells or (base stations, eNodeBs etc.) in the areas of the network where users are found to be experiencing problems.

Element 6 of Claim #1	Corresponding aspects

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	**Nokia Eden-NET SON is** linked or interfaced with the "Alarm Server", and therefore, it receives any "alarms" or "fault alerts or notifications "generated by the network elements (base stations. After receiving an alarm, **Nokia Eden-NET SON determines** the root cause of the said alarm by comparing key performance indicators or KPIs (network performance metrics) against thresholds. The KPIs are the measure of the quality of RF signal based communications between the RAN elements (RF transceivers – base stations and one or more UEs. These base stations and eNodeBs communicate (through receipt and transmission of RF signals) with a plurality of mobile wireless communication devices (like Nokia mobile phones, laptops, PDAs, tablets etc.). The said base stations typically include one or more antennae. Nokia Networks' **SON** solution helps optimize, troubleshoot and improve the quality of said RF-based communications between base stations and the mobile wireless communication devices. Once the root causes are identified, the **SON solution** initiates or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements (base stations, eNodeBs, etc.) in the problematic areas of the network, thereby alleviating the said issues/problems.

Element 7 of Claim #1	**Corresponding aspects**
The said first computer determines the at least one suggested corrective action in response to the error code	**Nokia Eden-NET SON initiates** or suggests corrective actions by directing specific and targeted changes in the parameters pertaining to the relevant network elements (base stations, eNodeBs, etc.) in the problematic areas of the network, thereby alleviating the said issues/problems. These corrective actions basically include, increase network quality, reliability and performance, Failure detection and automatic Recovery, Faster maintenance and reduced outage times, NE reconfiguration for compensation in the concerned cells or base stations in the areas of the network where users are found to be experiencing problems.

24. Defendant put the inventions claimed by the '024 Patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused

those claimed-invention embodiments as a whole to perform, and Defendant obtaining monetary and commercial benefit from it.

25. Defendant has and continues to induce infringement. Defendant has 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, Defendant has 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 Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant’s patent applications, such that Defendant knew and should have known that it was and would be inducing infringement. Further, the USPTO notified T-Mobile of the Traxcell's patent application on about 8/27/2012 in the prosecution of T-Mobile's US 8,472,974 and also on 5/30/2012 for the prosecution of T-Mobile's US 8,280,943.

26. Defendant has 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 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 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 further 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.
Element 8: 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 9: The said first computer provides access to the indication of location to the second computer if the no access flag is reset and denies access to the indication of location to the second computer if the no access flag is set.

30. Defendant makes, uses, offers to sell, or sells 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 Defendant infringes claims 1–6 of the ’320 patent, 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: [4]

The Samsung Galaxy S8

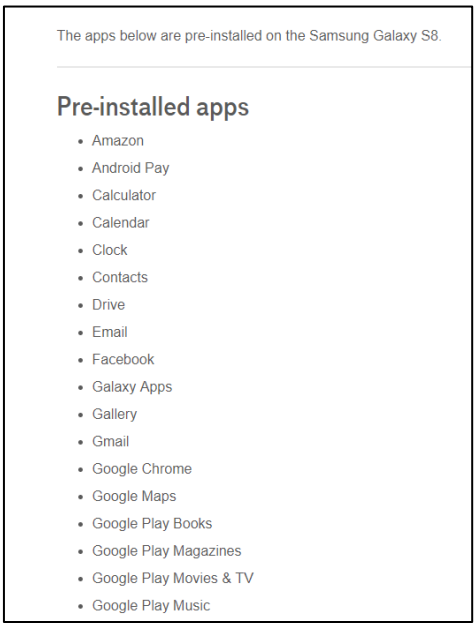
The Samsung Galaxy S8The Samsung Galaxy S8 is powered by 1.9GHz octa-core Samsung Exynos 8895 processor and it comes with 4GB of RAM. The phone packs 64GB of internal storage that can be expanded up to 256GB via a microSD card. As far as the cameras are concerned, the Samsung Galaxy S8 packs a 12-megapixel primary camera on the rear and an 8-megapixel front shooter for selfies.

[4] Plaintiff’s infringement claims are not limited to the components provided herein.

The new Samsung Galaxy S8 featuring:

- Brilliant 5.8" QHD display on the world's first Infinity Screen. The expansive display stretches from edge to edge, giving you the most amount of screen in the least amount of space.
- 12MP rear-facing camera. Take brilliant photos in any light with the dual-pixel technology & more detailed selfies with Samsung's best camera yet.
- Now security is personal. With facial recognition, the Samsung Galaxy S8 easily unlocks with a look.
- With an IP68 water resistant rating, the Samsung Galaxy S8 can resist a splash or accidental dunk.

The Pre-Loaded Applications in the Samsung Galaxy S8



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

- **The Samsung Galaxy S8 Smartphone**

Element 1 of Claim #1	Corresponding aspects
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.	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 example of compatible devices is Samsung Galaxy S8, containing RF transceivers in their hardware and are therefore capable of receiving and transmitting RF signals through antenna's. Samsung Galaxy S8 is android based smartphone that supports T-Mobile Cellular connection for Navigation. Samsung Galaxy S8 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. Google Maps can also show your current location and provide direction from your location/Source to any destination.

Element 2 of Claim #1	Corresponding aspects
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.	The wireless mobile Communication devices example of compatible devices is 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 Samsung Galaxy S8. 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 example of compatible devices is Samsung Galaxy S8). The Google map app estimates the location of the wireless mobile Communication devices examples of compatible devices is 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.
Element 3 of Claim #1	**Corresponding aspects**

The said first processer 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.	In Google Maps App 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 is Samsung Galaxy, 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. Google Maps App provides flexibility to download maps on SD card/internal memory of communication device examples of compatible devices is Samsung Galaxy S8, and navigate offline. When internet is slow or mobile data is expensive, or communication device cannot connect to internet, an area can be saved to phone or tablet examples of compatible devices is 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

Element 4 of Claim #1	**Corresponding aspects**
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.	The wireless mobile communication device examples of compatible devices are Samsung Galaxy S8 can also navigate using Google Map apps. First, user of device examples of compatible devices is 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 is 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 is 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.

Element 5 of Claim #1	**Corresponding aspects**
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.	The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices is Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is T-Mobile 4G LTE HotSpot-Z915) 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 information to find the best route to specified destination. Based on the state of preference flag, user of Communication device examples of

	compatible devices is Samsung Galaxy S8, can start navigation along with selected Traffic, Public transit, Bicycling, Satellite, or Terrain, options provided while navigating to destination.

Element 6 of Claim #1	**Corresponding aspects**
The said second processer selectively determines the location of the wireless mobile communications device dependent on the setting of preference flags	The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices is Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is T-Mobile 4G LTE HotSpot-Z915) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices is Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices is 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 is 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 is Samsung Galaxy S8.

Element 7 of Claim #1	**Corresponding aspects**
The said second processer 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.	The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices is Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is T-Mobile 4G LTE HotSpot-Z915) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices is Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices is 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 is 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 is Samsung Galaxy S8.

Element 8 of Claim #1	**Corresponding aspects**
The said second processer does not determine and communicate	The Google Map app connects to the server at network side to get navigation details for mobile devices examples of compatible devices

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	is Samsung Galaxy S8, so it can be inferred that processor, radio-frequency transceiver and antenna (example of compatible transceiver is T-Mobile 4G LTE HotSpot-Z915) are present within communication network. The Processor at Google server determines location of communication device examples of compatible devices is Samsung Galaxy S8, and sends information back to user. The user of communication device examples of compatible devices is 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 is 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 is Samsung Galaxy S8

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

32. Defendant has and continue to induce infringement. Defendant has 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, Defendant has 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 Defendant by the U.S. Patent and Trademark Office during prosecution of one of Defendant's patent applications, such that Defendant knew and should have known that it

was and would be inducing infringement. Further, the USPTO notified T-Mobile of the Traxcell's patent application on about 8/27/2012 in the prosecution of T-Mobile's US 8,472,974 and also on 5/30/2012 for the prosecution of T-Mobile's US 8,280,943.

33. Defendant has 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 Defendant has infringed the ’284, ’320, ‘024, and ‘388 patents;

ii. award Traxcell damages in an amount sufficient to compensate it for Defendant’ 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 Defendant’s 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 Defendant and its agents, servants, employees, affiliates, divisions, and subsidiaries, and those in association with Defendant, 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 Defendant 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,

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