

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

LOCATION BASED SERVICES, LLC

Plaintiff,

v.

**CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS,**

Defendant.

Civil Action No. 2:17-cv-573

JURY TRIAL DEMANDED

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which Location Based Services, LLC (“Plaintiff”) accuses Cellco Partnership d/b/a Verizon Wireless (“Defendant”), of infringing U.S. Patent No. 9,214,033 (the “’033 Patent”), alleging as follows:

PARTIES

1. Plaintiff Location Based Services, LLC is a Texas limited liability company, having a place of business at 719 Sawdust Rd., #204, The Woodlands, TX 77380.
2. Upon information and belief, Defendant is a general partnership organized and existing under the laws of the State of Delaware, with its principal place of business located at 1 Verizon Way, Basking Ridge, NJ 07920. Defendant can be served through its registered agent: The Corporation Trust Company, Corporation Trust Center 1209 Orange Street, Wilmington, DE 19801.

JURISDICTION AND VENUE

3. This is an action for infringement of the '033 Patent arising under 35 U.S.C. §§ 271(a)-(b), 281, and 284 - 85. This Court has subject matter jurisdiction over this action under 28 U.S.C. §1331 and §1338(a).

4. Venue is proper in this district under 28 U.S.C. § 1400(b). Defendant has committed acts of patent infringement in this judicial district and has a regular place of business at 8988 S. Broadway Ave., Tyler, TX 75703.

5. Upon information and belief, Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this forum, 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 in this Judicial District.

U.S. PATENT NO. 9,214,033

6. On Dec. 15, 2015, the '033 patent was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Map Display System and Method." A true and correct copy of the '033 patent is attached hereto as Exhibit A.

7. Edward K. Y. Jung, Royce A. Levien, and Robert W. Lord *et al.*, are the inventors of the '033 patent.

8. The inventions of the '033 Patent provide an unconventional solution to the problems associated with displaying real-time data related to traffic status on a map. *See Decl. Dr. Fang Qui*, attached hereto as Exhibit B, ¶ 8. The claims of the '033 Patent "are unconventional in that they associate 'determining a status' of a location on a map, the 'status at least partially based

on one or more traffic-related location interaction rules' associated with the location, the status being a traffic status which is verifiable via remote monitoring devices, and then generating a signal on the displayed map to indicate the traffic condition as verified by the remote monitoring devices." *Id.*

9. In contrast, conventional systems at the time the '033 Patent was filed "relied on simply relaying data regarding the speed of traffic along a stretch of road." *Id.* at 9. The inventions of the '033 Patent "generate a signal based on the traffic status information, the information being verifiable via monitoring devices, and the status being determined according to a location interaction rule associated with the locations on the map." *Id.* Rather than "simply compar[ing] received information regarding traffic delays and display[ing] it on a map" the inventions of the '033 Patent "determine a status based on traffic-related location interaction rules . . . such as comparing the actual speed of travel as detected by monitoring devices with the maximum speed of travel for a given stretch of road." *Id.* "This was unconventional at the time the parent patent was filed, April 30, 2005, in that the locations were associated with specific rules, such as the speed limit for the road in question, and that the actual status was verified by data received from monitoring devices and compared to the location rules for the specific location." *Id.*

10. Plaintiff is the owner by assignment of the '033 Patent with all rights in and to that patent.

11. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiff has complied with such requirements.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 9,214,033

12. Defendant directly or through intermediaries, makes, uses, offers to sell, or sells navigation devices and software which infringe the '033 Patent, shown in Exhibit A-1.

13. Upon information and belief, Defendant, its resellers, and its customers, have been and are now infringing claims 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent in the State of Texas, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, and/or offering for sale navigation devices, services, and software, *i.e.*, the VZ Navigator system (the "Accused Service") and the VZ Navigator App for iOS and Android (the "Accused Devices") (collectively, the "Accused Instrumentality"), covered by one or more claims of the '033 Patent to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing the '033 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '033 Patent pursuant to 35 U.S.C. § 271(a).

14. When placed into operation, the Accused Instrumentality infringes claim 1 of the '033 Patent. It performs a method related to displaying a map, the method comprising: receiving a request for the map, the map illustrating one or more locations; determining a status associated with at least one of the one or more locations on the map (*e.g.*, traffic conditions), the status at least partially based on one or more traffic-related location interaction rules associated with the at least one of the one or more locations on the map (*e.g.*, the current traffic speed as compared to the normal speed of traffic), the status including at least an indication of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, traffic information from other VZ Navigator devices); and generating a signal related to indicating at least one route associated with the at least one of the one or more locations on the map (*e.g.*, a colored line indicating the route and traffic conditions), the signal generated at least partially based on the status including at least an indication of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, the traffic conditions are received from other VZ Navigator devices). *See* Ex. A-1, Figs. 1-8.

15. The Accused Instrumentality infringes claim 2 of the '033 Patent. It is a system comprising a computing device; and one or more instructions that, when executed on the computing device, cause the computing device to at least: receive a request for a map, the map illustrating one or more locations of interest (*e.g.*, gas stations or other points of interest); determine a status associated with at least one of the one or more locations on the map (*e.g.*, traffic conditions), the status at least partially based on one or more traffic-related location interaction rules associated with the at least one of the one or more locations on the map (*e.g.*, the current traffic speed as compared to the normal speed of traffic), the status including at least an indication of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, traffic information from other VZ Navigator devices); and generate a signal related to indicating at least one route associated with the at least one of the one or more locations on the map (*e.g.*, a colored line indicating the route and traffic conditions), the signal generated at least partially based on the status including at least an indication of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, the traffic conditions are received from other VZ Navigator devices). *See* Ex. A-1, Figs. 1-10.

16. The Accused Instrumentality infringes claim 3 of the '033 Patent. It is a machine comprising: circuitry configured for receiving a request for a map (*e.g.*, it contains circuitry which receives user requests for maps), the map illustrating one or more locations; circuitry configured for determining a status associated with at least one of the one or more locations on the map (*e.g.*, it contains circuitry and software for determining traffic conditions), the status at least partially based on one or more traffic-related location interaction rules associated with the at least one of the one or more locations on the map (*e.g.*, the current traffic speed as compared to the normal speed of traffic), the status including at least an indication of at least one traffic condition verifiable

via one or more monitoring devices (*e.g.*, traffic information from other VZ Navigator devices); and circuitry configured for generating a signal related to indicating at least one route associated with the at least one of the one or more locations on the map (*e.g.*, a colored line indicating the route and traffic conditions), the signal generated at least partially based on the status including at least an indication of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, the traffic conditions are received from other VZ Navigator devices). *See* Ex. A-1, Figs. 1-10.

17. The Accused Instrumentality infringes claim 4 of the '033 Patent. It includes circuitry configured for updating (*e.g.*, circuitry which receives transmissions from Wi-Fi or cellular VZ Navigator devices), at one or more times (*e.g.*, it automatically updates traffic conditions), the status associated with the at least one of the one or more locations, the status including at least an indication, at the time of updating (*e.g.*, current traffic conditions), of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, traffic information is received from other VZ Navigator devices); and circuitry configured for generating a signal related to indicating at least one route associated with the at least one of the one or more locations at least partially based on the status including at least the indication, at the time of updating, of at least one traffic condition verifiable via one or more monitoring devices (*e.g.*, it calculates a route based on the traffic conditions received from other VZ Navigator devices and displays a colored line indicative of traffic conditions at the location). *See* Ex. A-1, Figs. 1-10.

18. The Accused Instrumentality infringes claim 5 of the '033 Patent. It includes circuitry configured for receiving data from one or more monitoring devices capable of determining a traffic condition associated with the at least one of the one or more locations on the

map (*e.g.*, it contains circuitry which receives traffic information from other VZ Navigator devices). *See* Ex. A-1, Figs. 1-10.

19. The Accused Instrumentality infringes claim 6 of the '033 Patent. It includes circuitry for updating, at one or more times, the status associated with the at least one of the one or more locations, the status including at least an indication, at the time of updating, of at least one traffic condition verifiable via one or more monitoring devices comprises circuitry configured for periodically updating the status associated with the at least one of the one or more locations. (*e.g.*, it periodically updates traffic conditions associated with the location). *See* Ex. A-1, Figs. 1-10.

20. The Accused Instrumentality infringes claim 8 of the '033 Patent. It includes circuitry configured for receiving a request for data related to preparing written directions associated with an order for traversing the one or more locations (*e.g.*, it can receive a request for directions to multiple locations in a specific order). *See* Ex. A-1, Figs. 1-10.

21. The Accused Instrumentality infringes claim 10 of the '033 Patent. It includes circuitry configured for receiving a request for at least one of walking directions or driving directions for traversing the one or more locations in accordance with one or more location interaction rules (*e.g.*, it receives a request for driving directions associated with rules such as avoid tolls, speed limits, or avoid highways). *See* Ex. A-1, Figs. 1-11.

22. The Accused Instrumentality infringes claim 12 of the '033 Patent. It includes circuitry configured for receiving a request for driving directions capable of directing traversal of the one or more locations including at least avoiding at least one location because of traffic conditions in accordance with one or more interaction rules related to traffic (*e.g.*, it routes a driver around a traffic delay). *See* Ex. A-1, Figs. 1-12.

23. The Accused Instrumentality infringes claim 13 of the '033 Patent. It includes circuitry configured for receiving a request for a map, the map capable of use in illustrating at least one layout of at least one street (*e.g.*, the maps which are requested illustrate street layouts). *See* Ex. A-1, Figs. 1-12.

24. The Accused Instrumentality infringes claim 14 of the '033 Patent. It includes circuitry configured for determining a status associated with one or more diminished traffic capabilities associated with the at least one of the one or more locations on the map (*e.g.*, it determine traffic conditions). *See* Ex. A-1, Figs. 1-12.

25. The Accused Instrumentality infringes claim 16 of the '033 Patent. It includes circuitry configured for determining at least one location to avoid due to traffic conditions in association with the one or more traffic-related location interaction rules (*e.g.*, it routes around high traffic areas where the speed of traffic is significantly below the posted speed limit). *See* Ex. A-1, Figs. 1-12.

26. The Accused Instrumentality infringes claim 17 of the '033 Patent. It includes circuitry configured for generating the signal at least partially based on at least one indication related to the received request for the map, the at least one indication including at least one of shortest distance, least traffic, or fastest route (*e.g.*, the signal indicating the route to be taken is generated based on the driver's preference). *See* Ex. A-1, Figs. 1-12.

27. The Accused Instrumentality infringes claim 18 of the '033 Patent. It includes circuitry configured for generating a signal related to indicating an order for traversing the one or more locations in association with the route (*e.g.*, it displays a colored line representing the route). *See* Ex. A-1, Figs. 1-12.

28. The Accused Instrumentality infringes claim 19 of the '033 Patent. It includes circuitry configured for generating a signal related to revising the route associated with the one or more locations (*e.g.*, it notifies the driver when a faster route is detected due to traffic conditions). *See* Ex. A-1, Figs. 1-12.

29. The Accused Instrumentality infringes claim 20 of the '033 Patent. It includes circuitry configured for generating a signal related to revising the route associated with the one or more locations in real time responsive to the status including at least an indication of a traffic condition verifiable via one or more monitoring devices (*e.g.*, traffic reports for other VZ Navigator devices are used to revise the route in response to changing traffic conditions). *See* Ex. A-1, Figs. 1-12.

30. The Accused Instrumentality infringes claim 21 of the '033 Patent. It includes circuitry configured for generating a signal related to providing written directions in association with a determined route traversing the one or more locations at least partially based on the determined status of the at least one of the one or more locations on the map (*e.g.*, it generates a signal providing written directions of the route based on traffic conditions). *See* Ex. A-1, Figs. 1-12.

31. The Accused Instrumentality infringes claim 22 of the '033 Patent. It includes circuitry configured for generating a signal related to providing a layout of at least one street in association with a determined route traversing the one or more locations at least partially based on the determined status of the at least one of the one or more locations on the map (*e.g.*, it displays a map of the street and route to be taken in response to traffic conditions). *See* Ex. A-1, Figs. 1-12.

32. The Accused Instrumentality infringes claim 24 of the '033 Patent. It includes circuitry configured for generating a signal related to providing a layout of at least one street in

association with a determined route traversing the one or more locations at least partially based on a real time traffic condition of at least one of the one or more locations on the map (*e.g.*, it generates a map of the street and route with a colored line indicating the route and current traffic conditions). *See* Ex. A-1, Figs. 1-12.

33. The Accused Instrumentality infringes claim 25 of the '033 Patent. It includes circuitry configured for generating a signal related to indicating on the map a progress indication (*e.g.*, time to destination and distance to destination). *See* Ex. A-1, Figs. 1-12.

34. The Accused Instrumentality infringes claim 26 of the '033 Patent. It includes circuitry configured for generating a signal related to indicating on the map a distance to a location (*e.g.*, distance to destination). *See* Ex. A-1, Figs. 1-12.

35. The Accused Instrumentality infringes claim 27 of the '033 Patent. It includes circuitry configured for directing to another portion of the map based on the associated status (*e.g.*, it redirects to another portion of the map depending on the impact of traffic on travel time). *See* Ex. A-1, Figs. 1-12.

36. The Accused Instrumentality infringes claim 28 of the '033 Patent. It includes circuitry configured for generating a signal related to a revised map in real time at least partially based on the associated status, the associated status indicative of a real time traffic condition associated with the at least one of the one or more locations (*e.g.*, it generates a revised map in real time based on the current traffic conditions associated with possible routes to the destination). *See* Ex. A-1, Figs. 1-12.

37. The Accused Devices infringe claim 29 of the '033 Patent. They include circuitry configured for receiving a request, the circuitry configured for determining a status, and the circuitry configured for generating a signal are effected in a mobile device, the mobile device

including at least one of a GPS, a smartphone, a tablet, or a mobile computing device (*e.g.*, they are mobile computing devices or smartphones). *See* Ex. A-1, Figs. 1-12.

38. The Accused Service infringes claim 30 of the '033 Patent. It includes circuitry configured for receiving a transmission at a server from a smartphone wirelessly transmitting the request to a server at least partially via a cellular network (*e.g.*, requests for traffic information and map updates are sent via a smartphone operating the VZ Navigator app via a cellular network and received by the Accused Service). *See* Ex. A-1, Figs. 1-13.

39. The Accused Instrumentality infringes claim 32 of the '033 Patent. It includes circuitry configured for generating a signal related to indicating at least one route at least partially based on at least one indication of a direction that a device associated with the received request is at least one of heading or facing (*e.g.*, it generates a signal indicating the route based on the direction of travel, including recalculating the route if the device changes its direction of travel). *See* Ex. A-1, Figs. 1-12.

40. The Accused Instrumentality infringes claim 33 of the '033 Patent. It includes circuitry configured for verifying at least one traffic condition associated with at least one of the one or more locations on the map (*e.g.*, it contains circuitry in communication with VZ Navigator devices which transmit traffic information such as their rate of speed which is associated with their location on the map) and circuitry configured for generating a signal related to indicating the at least one traffic condition in association with indicating the at least one route (*e.g.*, it contains circuitry which sends a signal to VZ Navigator devices in association with the route). *See* Ex. A-1, Figs. 1-12.

41. The Accused Instrumentality infringes claim 34 of the '033 Patent. It includes circuitry configured for verifying at least one traffic condition associated with the at least one of

the one or more locations on the map via one or more monitoring devices (*e.g.*, it verifies traffic conditions such as rate of travel from VZ Navigator devices); and circuitry for determining the status associated with the at least one of the one or more locations on the map at least partially based on verifying the at least one traffic condition (*e.g.*, it determines a status of a location on the map based at least partly on traffic information verified by other VZ Navigator devices). *See* Ex. A-1, Figs. 1-14.

42. As a result of Defendant's infringement of the '033 Patent, Plaintiff has suffered monetary damages and is entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the court, and Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

43. Unless a permanent injunction is issued enjoining Defendant and its agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '033 Patent, Plaintiff will be greatly and irreparably harmed.

COUNT II
INDUCED INFRINGEMENT OF U.S. PATENT NO. 9,214,033

44. Upon information and belief, Defendant has been and is now inducing the infringement by its resellers and end-use customers of claims 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent in the State of Texas, in this Judicial District, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, importing, selling and/or offering for sale the Accused Instrumentality to the injury of Plaintiff. Defendant's resellers and end-use customers are directly

infringing, literally infringing, and/or infringing the '033 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '033 Patent pursuant to 35 U.S.C. § 271(b).

45. As shown above, Defendant have and continue to indirectly infringe the '033 Patent by inducing the infringement by its end-users and resellers of claims 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent in accordance with 35 U.S.C. 271(b).

46. As shown above, Defendant, its resellers, distributors, and end-users of the Accused Devices have engaged in and currently engage in activities that constitute direct infringement of claims 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent.

47. As shown above, the operation and use of the by Defendant, its resellers, or end-user customers of the Accused Instrumentality constitutes a direct infringement of claims

48. Defendant's affirmative acts of selling and/or offering for sale the Accused Instrumentalities and providing instruction manuals, advertisement of the infringing features, and support for the Accused Instrumentalities have induced and continues to induce Defendant's resellers and end users to use the Accused Devices in its normal and customary way to infringe claims 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent.

49. Through its making, selling, and/or offering for sale the Accused Devices, Defendant specifically intends that its resellers and end-users directly infringe 1, 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 32, 33, and 34 of the '033 Patent. Defendant has had knowledge of the '033 Patent since the filing of the original complaint on August 7, 2017, and actually induces others, such as resellers and end-use customers, to directly

infringe by using, selling, supplying, and or distributing the Accused Instrumentality within the United States. Defendant is aware since at least August 7, 2017 that such actions would induce actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '033 Patent.

50. For example, in connection with the sale and/or offering for sale of the Accused Instrumentality, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Accused Devices. Specifically, Defendant provides manuals and support, see, *e.g.*, <https://www.verizonwireless.com/solutions-and-services/navigator/>. When end-users follow such instructions and support, they directly infringe the '033 Patent. Defendant knows or should have known that by providing such instructs and support, resellers and end-use customers follow these instructions and support and directly infringe the '033 Patent.

51. Accordingly, Defendant has performed and continues to perform acts that constitute indirect infringement, and would induce actual infringement, with the knowledge of the '033 Patent and with the knowledge or willful blindness to the fact that the induced acts would constitute infringement.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

1. A judgment in favor of Plaintiff that Defendant has infringed the '033 Patent;
2. a permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith from infringement, inducing the infringement of, or contributing to the infringement of the '033 Patent, or such other equitable relief the Court determines is warranted;

3. a judgment and order requiring Defendant pay to Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the '033 Patent as provided under 35 U.S.C. § 284, and an accounting of ongoing post-judgment infringement; and

4. any and all other relief, at law or equity, to which Plaintiff may show itself to be entitled.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

DATED April 4, 2018.

Respectfully submitted,

By: /s/ Stevenson Moore

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LOCATION BASED SERVICES, LLC

CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of April, 2018, I electronically filed the foregoing document with the clerk of the court for the U.S. District Court, Eastern District of Texas, Marshall Division, using the electronic case filing system of the court. The electronic case filing system sent a “Notice of Electronic Filing” to the attorneys of record who have consented in writing to accept this Notice as service of this document by electronic means.

/s/ Stevenson Moore
Stevenson Moore