

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

**LOCATION BASED SERVICES, LLC**

Plaintiff,

v.

**GARMIN INTERNATIONAL, INC.,**

Defendant.

**Civil Action No. 2:17-cv-133-JRG-RSP**

**JURY TRIAL DEMANDED**

**AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

This is an action for patent infringement in which Location Based Services, LLC (“Plaintiff”) accuses Garmin International, Inc. (“Defendant”), of infringing U.S. Patent Nos. 9,214,033, 7,734,073, 7,860,648, 8,805,027, and 8,392,114 (collectively, the “Patents-in-Suit”), alleging as follows:

**PARTIES**

1. Plaintiff Location Based Services, LLC is a Texas limited liability company, with a registered agent located at 719 Sawdust Rd., #204, The Woodlands, TX 77380.
2. Upon information and belief, Defendant Garmin International, Inc., is a corporation organized and existing under the laws of the State of Kansas, with its principal place of business located at 1200 E. 151st St., Olathe, KS 66062. Defendant may be served via its registered agent for service of process: David Ayres at the address above.

**JURISDICTION AND VENUE**

3. This is an action for infringement of the Patents-in-Suit 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. §§ 1391(c) and 1400(b). On information and belief, Defendant has transacted business in this district, and has committed acts of patent infringement in this district.

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 December 15, 2015, United States Patent No. 9,214,033 (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. Plaintiff is the owner by assignment of the '033 Patent with all rights in and to that patent.

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

10. Defendant directly or through intermediaries, makes, uses, imports, sells, and/or offers for sale products and or/systems (*i.e.*, nüvi® 2455LMT, nüvi® 2457LMT, nüvi® 2475LT, nüvi® 2495, nüvi® 2497LMT, nüvi® 2539LMT, nüvi® 2555LMT, nüvi® 2557LMT, nüvi®

2559LMT, nüvi® 2577LT, nüvi® 2589LMT, nüvi® 2595, nüvi® 2597LMT, nüvi® 2598LMTHD, nüvi® 2599LMTHD, nüvi® 2639LMT, nüvi® 2689LMT, nüvi® 2789LMT, nüvi® 2797LMT, nüvi® 2798LMT with Backup Camera, nüvi® 3450LM, nüvi® 3490, nüvi® 3550LM, nüvi® 3590, nüvi® 3597LMTHD, nüvi® 55LMT, nüvi® 56LMT, nüvi® 57LMT, nüvi® 58LMT, nüvi® 65LMT, nüvi® 66LMT, nüvi® 67LMT, nüvi® 68LMT, nüviCam™ MTHD, nüviCam™ LMTHD, Garmin DriveLuxe™ 50LMTHD, Garmin DriveAssist™ 50LMT, Garmin DriveSmart™ 70LMT, Garmin DriveSmart™ 60LMT, Garmin DriveSmart™ 50LMTHD, Garmin DriveSmart™ 50LMT, Garmin DriveLuxe™ 50LMTHD, Garmin DriveAssist™ 50LMT, Garmin DriveSmart™ 70LMT, Garmin DriveSmart™ 60LMT, Garmin DriveSmart™ 50LMTHD, Garmin DriveSmart™ 50LMT, Garmin Drive™ 60LMT, Garmin Drive™ 60LM, Garmin Drive™ 50LMT, Garmin Drive™ 50LM, and Garmin Drive™ 50 (“Garmin GPS Units”) and software, *i.e.*, Garmin U.S.A. for iOS and Android (“Garmin GPS Apps”) (collectively, the “Accused Instrumentalities”) that infringe one or more claims of the ‘033 Patent. Defendant’s Garmin GPS Units directly infringe claims 1-6, 8-11, 13-22, 24-29, and 32 of the ‘033 Patent and Defendant’s Garmin GPS Apps directly infringe claims 1-6, 8-11, 13-22, 24-30, and 32 of the ‘033 Patent. Additionally, Defendant induces the infringement of claims 1-6, 8-11, 13-22, 24-30, and 32-34 of the ‘033 Patent by its customers using the Garmin GPS Apps.

11. Defendant has been placed on actual notice of the ‘033 Patent by at least as early as the date of service of the original complaint, February 16, 2017 in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to, directly or through intermediaries, make, use, sell, and/or offer for sale the Accused Instrumentalities which infringe the ‘033 Patent.

**U.S. PATENT NO. 7,734,073**

12. On June 8, 2010, United States Patent No. 7,734,073 (the “’073 patent”) was duly and legally issued by the United States Patent and Trademark Office for an invention entitled “Image Mapping to Provide Visual Geographic Path.” A true and correct copy of the ’073 patent is attached hereto as Exhibit B.

13. Edward K. Y. Jung, Royce A. Levien, and Robert W. Lord *et al.*, are the inventors of the ’073 patent.

14. Plaintiff is the owner by assignment of the ’073 Patent with all rights in and to that patent.

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

16. Defendant directly or through intermediaries, makes, uses, imports, sells, and/or offers for sale products and or/systems, *i.e.*, the Garmin GPS Apps, that infringe one or more claims of the ’073 Patent. Defendant’s Garmin GPS Apps directly infringe claims 1, 5, 9, 10, 11, 12, 21, and 22 of the ’073 Patent. Additionally, Defendant induces the infringement of claims 1, 5, 9, and 10 of the ’073 Patent by its customers using the Garmin GPS Apps.

17. Defendant has been placed on actual notice of the ’073 Patent by at least as early as the date of service of the original complaint, February 16, 2017 in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to, directly or through intermediaries, make, use, sell, and/or offer for sale the Garmin GPS Apps which infringe the ’073 Patent.

**U.S. PATENT NO. 7,860,648**

18. On December 28, 2010, United States Patent No. 7,860,648 (the “’648 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 ’648 patent is attached hereto as Exhibit C.

19. Edward K. Y. Jung, Royce A. Levien, and Robert W. Lord *et al.*, are the inventors of the ’648 patent.

20. Plaintiff is the owner by assignment of the ’648 Patent with all rights in and to that patent.

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

22. Defendant directly or through intermediaries, makes, uses, imports, sells, and/or offers for sale products and or/systems, *i.e.*, the Garmin GPS Apps, that infringe one or more claims of the ’648 Patent. Defendant’s Garmin GPS Apps directly infringe claims 1, 2, 3, 4, 6, 7, 9, 10, 13, and 14 of the ’648 Patent. Additionally, Defendant induces the infringement of claims 1, 2, 3, 4, 6, and 7 of the ’648 Patent by its customers using the Garmin GPS Apps.

23. Defendant has been placed on actual notice of the ’648 Patent by at least as early as the date of service of the original complaint, February 16, 2017 in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to, directly or through intermediaries, make, use, sell, and/or offer for sale the Garmin GPS Apps which infringe the ’648 Patent.

**U.S. PATENT NO. 8,805,027**

24. On August 12, 2014, United States Patent No. 8,805,027 (the “’027 patent”) was duly and legally issued by the United States Patent and Trademark Office for an invention entitled “Image Mapping to Provide Visual Geographic Path.” A true and correct copy of the ’027 patent is attached hereto as Exhibit D.

25. Edward K. Y. Jung, Royce A. Levien, and Robert W. Lord *et al.*, are the inventors of the '027 patent.

26. Plaintiff is the owner by assignment of the '027 Patent with all rights in and to that patent.

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

28. Defendant directly or through intermediaries, makes, uses, imports, sells, and/or offers for sale products and or/systems, *i.e.*, the Garmin GPS Apps, that infringe one or more claims of the '027 Patent. Defendant's Garmin GPS Apps directly infringe claims 1, 2, and 7 of the '027 Patent. Additionally, Defendant induces the infringement of claims 1 and 2 of the '027 Patent by its customers using the Garmin GPS Apps.

29. Defendant has been placed on actual notice of the '027 Patent by at least as early as the date of service of the original complaint, February 16, 2017 in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to, directly or through intermediaries, make, use, sell, and/or offer for sale the Garmin GPS Apps which infringe the '027 Patent.

**U.S. PATENT NO. 8,392,114**

30. On March 5, 2013, United States Patent No. 8,392,114 (the "'114 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 '114 patent is attached hereto as Exhibit E.

31. Edward K. Y. Jung, Royce A. Levien, and Robert W. Lord *et al.*, are the inventors of the '114 patent.

32. Plaintiff is the owner by assignment of the '114 Patent with all rights in and to that patent.

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

34. Defendant directly or through intermediaries, makes, uses, imports, sells, and/or offers for sale products and or/systems, *i.e.*, the Garmin GPS Apps, that infringe one or more claims of the '114 Patent. Defendant's Garmin GPS Apps directly infringe claims 1, 2, 4, and 7 of the '114 Patent. Additionally, Defendant induces the infringement of claims 1, 2, 4, and 7 of the '114 Patent by its customers using the Garmin GPS Apps.

35. Defendant has been placed on actual notice of the '114 Patent by at least as early as the date of service of the original complaint, February 16, 2017 in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to, directly or through intermediaries, make, use, sell, and/or offer for sale the Garmin GPS Apps which infringe the '114 Patent.

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

36. Upon information and belief, Defendant has been and is now infringing claims 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, and 32 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, *i.e.*, Garmin GPS Units, and software, *i.e.*, Garmin GPS Apps 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).

37. For example, the use of the Accused Instrumentalities by Defendant, its resellers, or end-user customers, directly infringes claim 1 of the '033 Patent. When used, the Accused Instrumentalities perform 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 Garmin 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 Garmin devices). *See* Ex. A-1, Figs. 1-5.

38. Defendant, its resellers, and end-users have directly infringed claim 2 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps are 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 received from other Garmin 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 Garmin devices). *See* Ex. A-1, Figs. 1-5.

39. Defendant, its resellers, and end-users have directly infringed claim 3 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps are a system comprising: circuitry configured for receiving a request for a map (*e.g.*, a voice or touch screen interface), 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.*, they 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 Garmin 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 Garmin devices). *See* Ex. A-1, Figs. 1-5.

40. Defendant, its resellers, and end-users have directly infringed claim 4 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include circuitry configured for updating (*i.e.*, a HD, RDS Radio receiver, Bluetooth device, or cellular radio), at one or more times (*e.g.*, they automatically update traffic conditions as much as every 30 seconds), 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 Garmin 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.*, they calculate a route based on the traffic conditions received from other Garmin devices and displays a colored line indicative of traffic conditions at the location). *See* Ex. A-1, Figs. 1-6.

41. Defendant, its resellers, and end-users have directly infringed claim 5 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, a HD, RDS Radio receiver, Bluetooth device, or cellular radio is used to receive traffic information from other Garmin devices). *See* Ex. A-1, Figs. 1-5.

42. Defendant, its resellers, and end-users have directly infringed claim 6 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin

GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-6.

43. Defendant, its resellers, and end-users have directly infringed claim 8 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, they can receive a request for directions to multiple locations in a specific order). *See* Ex. A-1, Figs. 1-5.

44. Defendant, its resellers, and end-users have directly infringed claim 9 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include circuitry configured for receiving a request for a route associated with an order for traversing the one or more locations (*e.g.*, they can receive a request for directions to multiple locations in a specific order). *See* Ex. A-1, Figs. 1-7.

45. Defendant, its resellers, and end-users have directly infringed claim 10 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, they receives

a request for driving directions associated with rules such as avoid tolls, speed limits, or avoid major roads). *See* Ex. A-1, Figs. 1-8.

46. Defendant, its resellers, and end-users have directly infringed claim 11 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, they will route a driver around a traffic delay). *See* Ex. A-1, Figs. 1-9.

47. Defendant, its resellers, and end-users have directly infringed claim 13 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, they display maps showing the street layouts as well as a lane guidance display). *See* Ex. A-1, Figs. 1-5 and Fig. 10.

48. Defendant, its resellers, and end-users have directly infringed claim 14 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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.*, they determine traffic conditions which include school zones, construction, and other traffic reducing features). *See* Ex. A-1, Figs. 1-5 and Fig. 11.

49. Defendant, its resellers, and end-users have directly infringed claim 15 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include circuitry configured for determining a status associated with one or more diminished traffic capabilities at least partially via one or more of a traffic camera, a red-light camera, a networked camera, or a sensor associated with the at least one of the one or more locations on the map (*e.g.*, traffic cameras). *See* Ex. A-1, Figs. 1-5.

50. Defendant, its resellers, and end-users have directly infringed claim 16 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5 and Fig. 12.

51. Defendant, its resellers, and end-users have directly infringed claim 17 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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 for either the shortest distance, traffic avoidance, or fastest route). *See* Ex. A-1, Figs. 1-5 and Fig. 12.

52. Defendant, its resellers, and end-users have directly infringed claim 18 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin

GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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 as well as text and voice route guidance). *See* Ex. A-1, Figs. 1-5 and Fig. 13.

53. Defendant, its resellers, and end-users have directly infringed claim 19 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5 and Fig. 12.

54. Defendant, its resellers, and end-users have directly infringed claim 20 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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 Garmin devices are used to revise the route in response to changing traffic conditions). *See* Ex. A-1, Figs. 1-5.

55. Defendant, its resellers, and end-users have directly infringed claim 21 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5 and Fig. 12.

56. Defendant, its resellers, and end-users have directly infringed claim 22 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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 as well as an image of upcoming turns or lane changes). *See* Ex. A-1, Figs. 1-5 and Fig. 10.

57. Defendant, its resellers, and end-users have directly infringed claim 24 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5.

58. Defendant, its resellers, and end-users have directly infringed claim 25 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5.

59. Defendant, its resellers, and end-users have directly infringed claim 26 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5.

60. Defendant, its resellers, and end-users have directly infringed claim 27 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5 and Fig. 12.

61. Defendant, its resellers, and end-users have directly infringed claim 28 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps include 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. 1-5 and Fig. 12.

62. Defendant, its resellers, and end-users have directly infringed claim 29 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. The Garmin GPS Devices and Garmin GPS Apps 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 (*i.e.*, it is a mobile computing device or smartphone). *See* Ex. A-1, Figs. 1-5 and Fig. 14.

63. Defendant, its resellers, and end-users have directly infringed claim 30 of the '033 Patent by use of the Garmin GPS. The Garmin GPS Apps use 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 (*i.e.*, requests for traffic information and map updates are sent via a smartphone operating the Garmin App via a cellular network and received by the Garmin servers). *See* Ex. A-1, Figs. 1-5 and Fig. 15.

64. Defendant, its resellers, and end-users have directly infringed claim 32 of the '033 patent by making, using, and/or selling the Garmin GPS Devices, and by the use of the Garmin GPS Apps. They include 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 (*i.e.*, 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. 1-5 and Fig. 16.

65. As a result of Defendant's direct 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.

66. 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**

67. Upon information and belief, Defendant has been and is now inducing the infringement by its resellers and end-use customers of claims 1-6, 8-11, 13-22, 24-30, and 32 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 Garmin GPS Apps 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).

68. 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 1-6, 8-11, 13-22, and 24-30 of the '033 Patent in accordance with 35 U.S.C. 271(b).

69. As shown above, Defendant, its resellers, distributors, and end-users of the Garmin GPS Apps have engaged in and currently engage in activities that constitute direct infringement of claims 1-6, 8-11, 13-22, and 24-30 of the '033 Patent.

70. 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

71. Defendant's affirmative act 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 Garmin GPS Apps in its normal and customary way to infringe claims 1-6, 8-11, 13-22, and 24-30 of the '033 Patent.

72. Through its making, selling, and/or offering for sale the Garmin GPS Apps, Defendant specifically intends that its resellers and end-users directly infringe 1-6, 8-11, 13-22, and 24-30 of the '033 Patent. Defendant has had knowledge of the '033 Patent since the filing of the original complaint 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 the filing of the original complaint that such actions would induce actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '033 Patent.

73. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Garmin GPS Apps. Specifically, Defendant provides manuals and support, see, *e.g.*, <https://itunes.apple.com/us/app/garmin-u-s-a/id435490305?mt=8>. 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 this instructions and support and directly infringe the '033 Patent.

74. 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.

**COUNT III**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,734,073**

75. Upon information and belief, Defendant has been and is now infringing claims 1, 5, 9, 10, 11, 12, 21, and 22 of the '073 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 Garmin software, *i.e.*, Garmin GPS Apps to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing the '073 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '073 Patent pursuant to 35 U.S.C. § 271(a).

76. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 1 of the '073 Patent. They perform a method for a display device to receive a mapped visual path, the method comprising: transmitting a request for the mapped visual path, the request including at least two input path parameters associated with the mapped visual image path (*e.g.*, a request for directions, the request including the start location and destination and a route preference); the transmitting including: transmitting a location parameter as one of the at least two input path parameters (*e.g.*, a destination or starting location); transmitting a time parameter as one of the at least two input path parameters (*e.g.*, route preference setting such as "fastest route"); and receiving from a processing device the mapped visual image path, wherein the mapped visual path including at least two images of a predefined area identified by the at least two input path parameters, the mapped visual path being an integration of the at least two images and the at least two input path parameters (*e.g.*, the mapped path includes the google street view images); and displaying the mapped visual path, the mapped visual path including the at least two images after a stitching operation is performed on the at least two images

(*e.g.*, the google street view images are “stitched” together along the mapped path). *See* Ex. B-1, Figs. 1-5.

77. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 5 of the '073 Patent. They connect to a server operably couplable to a mobile device to wirelessly receive the at least two images (*e.g.*, the smart phone running the Garmin App connects to a server to receive the street view images.) *See* Ex. B-1, Figs. 1-6.

78. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 9 of the '073 Patent. They display the mapped visual path, the mapped visual path including the at least two images after a stitching operation is performed on the at least two images (*e.g.*, the path includes a visual image of at least the starting location and destination). *See* Ex. B-1, Figs. 1-5 and Fig. 7.

79. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 10 of the '073 Patent. They display the mapped visual path, the mapped visual path being scrollable with respect to the predefined area (*i.e.*, the map is scrollable in the predefined area, *e.g.*, USA or North America). *See* Ex. B-1, Figs. 1-5 and Fig. 8.

80. The Garmin GPS Apps infringe claim 11 of the '073 Patent. They are a computer program comprising: computer readable media bearing computer executable instructions (*i.e.*, the Garmin GPS App is contained in a computer readable medium on a smart phone) including: at least two instructions for transmitting a request for the mapped visual path, the request including one or more input path parameters associated with the mapped visual path (*e.g.*, a starting location, destination, and route preferences), including: at least two instruction for transmitting a location parameter as one of the at least two input path parameters (*e.g.*, the destination and route

preferences); at least two instruction for transmitting a time parameter as one of the at least two input path parameters (*e.g.*, fastest route or shortest route); and at least two instructions for receiving from a processing device a mapped visual path, the mapped visual path including at least two images of a predefined area identified by the at least two input path parameters, the mapped visual path being an integration of the at least two images and the at least two input path parameters (*e.g.*, Garmin's street view contains multiple real world images integrated with the input path parameters), including; at least two instructions for displaying the mapped visual path, the mapped visual path being scrollable with respect to the predefined area (*e.g.*, the map is scrollable and can display a traffic over lay if the traffic feature is enabled). *See* Ex. B-1, Figs. 2, 3, 5, 8 and 9.

81. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 12 of the '073 Patent. They contain one or more instructions for combining the at least two images through an image stitching operation, (*e.g.*, two or more images are stitched together along the route). *See* Ex. B-1, Figs. 2, 3, 5, 8 and 9.

82. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 21 of the '073 Patent. They contain one or more instructions for displaying the mapped visual path, the mapped visual path including the at least two images after a stitching operation is performed on the at least two images, *e.g.*, it stitches the two street view images together. *See* Ex. B-1, Figs. 2, 3, 5, 7, 8 and 9.

83. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 22 of the '073 Patent. They contain one or more instructions for displaying the mapped visual path, the mapped visual path being scrollable with respect to the predefined area, *e.g.*, North America. *See* Ex. B-1, Figs. 2, 3, 5, 7, 8 and 9.

84. As a result of Defendant's direct infringement of the '073 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.

85. 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 '073 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT IV**  
**INDUCED INFRINGEMENT OF U.S. PATENT NO. 7,734,073**

86. Upon information and belief, Defendant has been and is now inducing the infringement by its resellers and end-use customers of claims 1, 5, 9 and 10 of the '073 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 Garmin GPS Apps to the injury of Plaintiff. Defendant's resellers and end-use customers are directly infringing, literally infringing, and/or infringing the '073 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '073 Patent pursuant to 35 U.S.C. § 271(b).

87. As shown above, Defendant have and continue to indirectly infringe the '073 Patent by inducing the infringement by its end-users and resellers of claims 1, 5, 9 and 10 of the '073 Patent in accordance with 35 U.S.C. 271(b).

88. As shown above, Defendant, its resellers, distributors, and end-users of the Garmin GPS Apps have engaged in and currently engage in activities that constitute direct infringement of claims 1, 5, 9 and 10 of the '073 Patent.

89. As shown above, the operation and use of the by Defendant, its resellers, or end-user customers of the Garmin GPS Apps constitutes a direct infringement of claims

90. Defendant's affirmative act of selling and/or offering for sale the Garmin GPS Apps and providing instruction manuals, advertisement of the infringing features, and support for the Garmin GPS Apps have induced and continues to induce Defendant's resellers and end users to use the Garmin GPS Apps in its normal and customary way to infringe claims 1, 5, 9 and 10 of the '073 Patent.

91. Through its making, selling, and/or offering for sale the Garmin GPS Apps, Defendant specifically intends that its resellers and end-users directly infringe 1, 5, 9 and 10 of the '073 Patent. Defendant has had knowledge of the '073 Patent since the filing of the original complaint and actually induces others, such as resellers and end-use customers, to directly infringe by using, selling, supplying, and or distributing the Garmin GPS Apps within the United States. Defendant is aware since at least the filing of the original complaint that such actions would induce actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '073 Patent.

92. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Garmin GPS Apps. Specifically, Defendant provides manuals and support, see, e.g., <https://itunes.apple.com/us/app/garmin-u-s-a/id435490305?mt=8>. When end-users follow such instructions and support, the directly infringe the '073 Patent. Defendant knows



or should have known that by providing such instructions and support, resellers and end-use customers follow this instructions and support and directly infringe the '073 Patent.

93. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant

**COUNT V**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 7,860,648**

94. Upon information and belief, Defendant has been and is now infringing claims 1, 2, 3, 4, 6, 7, 9, 10, 13, and 14 of the '648 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 Garmin software, *i.e.*, Garmin GPS Apps to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing the '648 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '648 Patent pursuant to 35 U.S.C. § 271(a).

95. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 1 of the '648 Patent. The Garmin GPS Apps infringe claim 1 of the '648 Patent. They perform a method for a display device to receive a map through a predefined area, the method comprising: transmitting a request for the map including one or more locations, the request including an identifier associated with a user of the display device (*e.g.*, the devices transmits a request for updated or new map data, the request including the user's iCloud or google play account); receiving the map at the display device, the map including one or more locations, at least one location of the one or more locations associated with one or more location interaction rules verifiable via one or more monitoring devices (*e.g.*, the map includes rules related to the maximum and average speed of traffic, verifiable from other Garmin devices); and interacting with the one or more monitoring devices to alter the map on the display device as a

function of the one or more location interaction rules (*e.g.*, the display is altered to show colored lines of varying colors to indicate traffic conditions). *See* Ex. C-1, Figs. 1-6.

96. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 2 of the '648 Patent. They receive a status associated with the at least one of the one or more locations on the map (*e.g.*, it receives information regarding the traffic status). *See* Ex. C-1, Figs. 1-6.

97. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 3 of the '648 Patent. They receive data related to illustrating location detail for the at least one of the one or more locations, the location detail shown being a function of the status (*e.g.*, the traffic data is used to illustrate details regarding the speed of traffic along the route). *See* Ex. C-1, Figs. 1-6.

98. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 4 of the '648 Patent. They periodically update the status in accordance with the location interaction rule associated with the at least one of the one or more locations (*e.g.*, traffic information is periodically updated). *See* Ex. C-1, Figs. 1-6.

99. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 6 of the '648 Patent. They wirelessly transmit the request to a server over a wireless network (*e.g.*, the request for the map data transmits over a cellular or wi-fi network). *See* Ex. C-1, Figs. 1-6.

100. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 7 of the '648 Patent. They transmit via at least one of a wireless LAN (WLAN), an IEEE 802 type wireless network, a Bluetooth type wireless network, and/or a satellite

network (*e.g.*, the transmitted request for the map occurs over a wi-fi network). *See* Ex. C-1, Figs. 1-6.

101. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 9 of the '648 Patent. They are a computer program product comprising: a computer-readable medium (*e.g.*, the Garmin App is contained in a computer readable file) bearing one or more instructions for transmitting a request for the map including one or more locations, the request including an identifier associated with a user of the display device (*e.g.*, the request for to download the applicable map is associated with the user's iCloud or google play account); one or more instructions for receiving the map including one or more locations, at least one location of the one or more locations associated with one or more location interaction rules verifiable via one or more monitoring devices (*e.g.*, the map includes rules related to the maximum and average speed of traffic, verifiable from other Garmin devices); and one or more instructions for interacting with the one or more monitoring devices to alter the map on the display device as a function of the one or more location interaction rules (*e.g.*, the map includes rules related to the maximum and average speed of traffic, verifiable from other Garmin devices). *See* Ex. C-1, Figs. 2, 3, 4, and 7.

102. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 10 of the '648 Patent. They contain a recordable medium in the form of device memory. *See* Ex. C-1, Figs. 2, 3, 4, and 7.

103. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 13 of the '648 Patent. They contain a instructions for transmitting a request for the map including one or more locations, the request including an identifier associated with a user of the display device includes one or more instructions for wirelessly transmitting the request

to a server over a wireless network (*e.g.*, the transmitted request for the map occurs over a wi-fi network). *See* Ex. C-1, Figs. 2, 3, 4, and 7.

104. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 14 of the '648 Patent. They contain instructions for wirelessly transmitting the request to a server over a wireless network includes one or more instructions for transmitting via at least one of a wireless LAN (WLAN), an IEEE 802 type wireless network, a Bluetooth type wireless network, and/or a satellite network (*e.g.*, the transmitted request for the map occurs over a wi-fi network). *See* Ex. C-1, Figs. 2, 3, 4, and 7.

105. As a result of Defendant's direct infringement of the '648 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.

106. 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 '648 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT VI**  
**INDUCED INFRINGEMENT OF U.S. PATENT NO. 7,860,648**

107. 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, 6, and 7 of the '648 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 Garmin GPS Apps to the injury of Plaintiff. Defendant's resellers and end-use customers

are directly infringing, literally infringing, and/or infringing the '648 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '648 Patent pursuant to 35 U.S.C. § 271(b).

108. As shown above, Defendant have and continue to indirectly infringe the '648 Patent by inducing the infringement by its end-users and resellers of claims 1, 2, 3, 4, 6, and 7 of the '648 Patent in accordance with 35 U.S.C. 271(b).

109. As shown above, Defendant, its resellers, distributors, and end-users of the Garmin GPS Apps have engaged in and currently engage in activities that constitute direct infringement of claims 1, 2, 3, 4, 6, and 7 of the '648 Patent.

110. As shown above, the operation and use of the by Defendant, its resellers, or end-user customers of the Garmin GPS Apps constitutes a direct infringement of claims 1, 2, 3, 4, 6, and 7 of the '648 Patent.

111. Defendant's affirmative act of selling and/or offering for sale the Garmin GPS Apps and providing instruction manuals, advertisement of the infringing features, and support for the Garmin GPS Apps have induced and continues to induce Defendant's resellers and end users to use the Garmin GPS Apps in its normal and customary way to infringe claims 1, 2, 3, 4, 6, and 7 of the '027 Patent.

112. Through its making, selling, and/or offering for sale the Garmin GPS Apps, Defendant specifically intends that its resellers and end-users directly infringe 1, 2, 3, 4, 6, and 7 of the '648 Patent. Defendant has had knowledge of the '648 Patent since the filing of the original complaint and actually induces others, such as resellers and end-use customers, to directly infringe by using, selling, supplying, and or distributing the Garmin GPS Apps within the United States. Defendant is aware since at least the filing of the original complaint that such actions would induce

actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '648 Patent.

113. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Garmin GPS Apps. Specifically, Defendant provides manuals and support, see, e.g., <https://itunes.apple.com/us/app/garmin-u-s-a/id435490305?mt=8>. When end-users follow such instructions and support, they directly infringe the '648 Patent. Defendant knows or should have known that by providing such instructions and support, resellers and end-use customers follow these instructions and support and directly infringe the '648 Patent.

114. Accordingly, Defendant has performed and continues to perform acts that constitute indirect infringement, and would induce actual infringement, with the knowledge of the '648 Patent and with the knowledge or willful blindness to the fact that the induced acts would constitute infringement.

**COUNT VII**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,805,027**

115. Upon information and belief, Defendant has been and is now infringing claims 1, 2, and 7 of the '027 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 Garmin software, *i.e.*, Garmin GPS Apps to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing the '027 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '027 Patent pursuant to 35 U.S.C. § 271(a).

116. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 1 of the '033 Patent. They perform a method comprising:

transmitting a request for a mapped visual path, the request including at least two input path parameters associated with the mapped visual path (*e.g.*, it includes a starting location and destination along with route restrictions and a time parameter such as fastest or shortest route), including at least: transmitting a location parameter as one of the at least two input path parameters (*e.g.*, the current location and the destination location); and transmitting a time parameter as one of the at least two input path parameters (*e.g.*, fastest or shortest routes); receiving a mapped visual path, the mapped visual path including at least two images of a predefined area identified by the at least two input path parameters, the mapped visual path being an integration of the at least two images and the at least two input path parameters, including at least one image associated with at least one of a location or time, the at least one of a location or time associated with the request for a mapped visual path (*e.g.*, the received mapped path includes at least two streetview images including the starting location and destination location); and displaying the mapped visual path, the mapped visual path being scrollable with respect to the predefined area (*e.g.*, the map is scrollable within the USA or North America). *See* Ex. D-1, Figs. 1-8.

117. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 2 of the '027 patent by the use of the Garmin GPS Apps. They display the mapped visual path including at least displaying at least one image correlated with at least one of a location or time associated with the request for a path, *e.g.*, the time to destination as well an image of the destination. *See* Ex. D-1, Figs. 1-8.

118. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 7 of the '027 patent by the use of the Garmin GPS Apps. They are computer programs comprising: at least one non-transitory computer readable medium (*e.g.*, it is stored on a smart phone including non-transitory computer readable memory) including at least:

one or more instructions for transmitting a request for a mapped visual path, the request including at least two input path parameters associated with the mapped visual path (*e.g.*, it includes a starting location and destination along with route restrictions and a time parameter such as fastest or shortest route), including at least: one or more instructions for transmitting a location parameter as one of the at least two input path parameters (*e.g.*, the current location and the destination location); and one or more instructions for transmitting a time parameter as one of the at least two input path parameters (*e.g.*, fastest or shortest routes); one or more instructions for receiving a mapped visual path, the mapped visual path including at least two images of a predefined area identified by the at least two input path parameters, the mapped visual path being an integration of the at least two images and the at least two input path parameters, including at least one image associated with at least one of a location or time, the at least one of a location or time associated with the request for a mapped visual path (*e.g.*, the received mapped path includes at least two streetview images); and one or more instructions for displaying the mapped visual path, the mapped visual path being scrollable with respect to the predefined area (*e.g.*, the map is scrollable within the *e.g.*, USA or North America). *See* Ex. D-1, Figs. 1-9.

119. As a result of Defendant's direct infringement of the '027 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.



120. 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 '027 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT VIII**  
**INDUCED INFRINGEMENT OF U.S. PATENT NO. 8,805,027**

121. Upon information and belief, Defendant has been and is now inducing the infringement by its resellers and end-use customers of claims 1 and 2 of the '027 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 Garmin GPS Apps to the injury of Plaintiff. Defendant's resellers and end-use customers are directly infringing, literally infringing, and/or infringing the '027 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '027 Patent pursuant to 35 U.S.C. § 271(b).

122. As shown above, Defendant have and continue to indirectly infringe the '027 Patent by inducing the infringement by its end-users and resellers of claims 1 and 2 of the '027 Patent in accordance with 35 U.S.C. 271(b).

123. As shown above, Defendant, its resellers, distributors, and end-users of the Garmin GPS Apps have engaged in and currently engage in activities that constitute direct infringement of claims 1 and 2 of the '027 Patent.

124. As shown above, the operation and use of the by Defendant, its resellers, or end-user customers of the Garmin GPS Apps constitutes a direct infringement of claims

125. Defendant's affirmative act of selling and/or offering for sale the Garmin GPS Apps and providing instruction manuals, advertisement of the infringing features, and support for the Garmin GPS Apps have induced and continues to induce Defendant's resellers and end users to

use the Garmin GPS Apps in its normal and customary way to infringe claims 1 and 2 of the '027 Patent.

126. Through its making, selling, and/or offering for sale the Garmin GPS Apps, Defendant specifically intends that its resellers and end-users directly infringe 1 and 2 of the '027 Patent. Defendant has had knowledge of the '027 Patent since the filing of the original complaint and actually induces others, such as resellers and end-use customers, to directly infringe by using, selling, supplying, and or distributing the Garmin GPS Apps within the United States. Defendant is aware since at least the filing of the original complaint that such actions would induce actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '027 Patent.

127. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Garmin GPS Apps. Specifically, Defendant provides manuals and support, see, e.g., <https://itunes.apple.com/us/app/garmin-u-s-a/id435490305?mt=8>. When end-users follow such instructions and support, they directly infringe the '027 Patent. Defendant knows or should have known that by providing such instructions and support, resellers and end-use customers follow these instructions and support and directly infringe the '027 Patent.

128. Accordingly, Defendant has performed and continues to perform acts that constitute indirect infringement, and would induce actual infringement, with the knowledge of the '027 Patent and with the knowledge or willful blindness to the fact that the induced acts would constitute infringement.

**COUNT IX**  
**DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,392,114**

129. Upon information and belief, Defendant has been and is now infringing claims 1, 2, 4, and 7 of the '114 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 Garmin software, *i.e.*, Garmin GPS Apps to the injury of Plaintiff. Defendant is directly infringing, literally infringing, and/or infringing the '114 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '114 Patent pursuant to 35 U.S.C. § 271(a).

130. For example, the use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 1 of the '114 Patent. They perform a method for a display device to receive a map through a predefined area, the method comprising: transmitting a request for the map including one or more locations, the request including an identifier associated with a user of the display device (*e.g.*, the request to download a map is associated with the user's iCloud or Google Play account); receiving the map including one or more locations, at least one location of the one or more locations associated with one or more location interaction rules verifiable via one or more monitoring devices (*e.g.*, the locations on the map are associated with interaction rules such as speed limits, road types, travel allowed, and current traffic conditions, which is verifiable via other Garmin devices); and interacting with the one or more monitoring devices to alter the map on the display device as a function of the one or more location interaction rules as modified by one or more user interaction rules associated with the user of the display device (*e.g.*, it takes traffic information from other Garmin devices and uses this information to modify the displayed map to reflect the traffic speed in comparison to the maximum speed associated with the location). *See Ex. E-1, Figs. 1-4.*

131. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 2 of the '114 Patent by use of the Garmin GPS Apps. The Garmin GPS Apps infringe claim 2 of the '114 Patent. They perform a method wherein receiving the map including one or more locations, at least one location of the one or more locations associated with one or more location interaction rules verifiable via one or more motioning devices comprises: receiving one or more icons representing one or more locations on the map, the one or more location interaction rules determining one or more of an obfuscation of the one or more icons or an activation of metadata associated with the one or more locations on the map. *See* Ex. E-1, Figs. 1-5.

132. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 4 of the '114 Patent by use of the Garmin GPS Apps. They wirelessly transmit the request to a server over a wireless network (*e.g.*, the request to download the map takes place over cellular or Wi-Fi network). *See* Ex. E-1, Figs. 1-5.

133. The use of the Garmin GPS Apps by Defendant, its resellers, or end-user customers, directly infringes claim 7 of the '114 Patent by use of the Garmin GPS Apps. They receive an indication shown on the map related to whether one or more user interaction rules associated with the identifier affect the map (*e.g.*, traffic information is received which relates to whether the maximum speed associated with the location is affected by the traffic conditions associated with that location). *See* Ex. E-1, Figs. 1-5.

134. As a result of Defendant's direct infringement of the '114 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.

135. 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 '114 Patent, Plaintiff will be greatly and irreparably harmed.

**COUNT X**  
**INDUCED INFRINGEMENT OF U.S. PATENT NO. 8,392,114**

136. Upon information and belief, Defendant has been and is now inducing the infringement by its resellers and end-use customers of claims 1, 2, 4, and 7 of the '114 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 Garmin GPS Apps to the injury of Plaintiff. Defendant's resellers and end-use customers are directly infringing, literally infringing, and/or infringing the '114 Patent under the doctrine of equivalents. Defendant is thus liable for infringement of the '114 Patent pursuant to 35 U.S.C. § 271(b).

137. As shown above, Defendant have and continue to indirectly infringe the '114 Patent by inducing the infringement by its end-users and resellers of claims 1, 2, 4, and 7 of the '114 Patent in accordance with 35 U.S.C. 271(b).

138. As shown above, Defendant, its resellers, distributors, and end-users of the Garmin GPS Apps have engaged in and currently engage in activities that constitute direct infringement of claims 1, 2, 4, and 7 of the '114 Patent.

139. As shown above, the operation and use of the by Defendant, its resellers, or end-user customers of the Garmin GPS Apps constitutes a direct infringement of claims

140. Defendant's affirmative act of selling and/or offering for sale the Garmin GPS Apps and providing instruction manuals, advertisement of the infringing features, and support for the Garmin GPS Apps have induced and continues to induce Defendant's resellers and end users to use the Garmin GPS Apps in its normal and customary way to infringe claims 1, 2, 4, and 7 of the '114 Patent.

141. Through its making, selling, and/or offering for sale the Garmin GPS Apps, Defendant specifically intends that its resellers and end-users directly infringe 1, 2, 4, and 7 of the '114 Patent. Defendant has had knowledge of the '114 Patent since the filing of the original complaint and actually induces others, such as resellers and end-use customers, to directly infringe by using, selling, supplying, and or distributing the Garmin GPS Apps within the United States. Defendant is aware since at least the filing of the original complaint that such actions would induce actual infringement. Furthermore, Defendant remains aware that these normal and customary activities would infringe the '114 Patent.

142. For example, in connection with the sale and/or offering for sale of the Garmin GPS Apps, Defendant provides manuals and support to resellers and end-use customers regarding the user and operation of the Garmin GPS Apps. Specifically, Defendant provides manuals and support, see, e.g., <https://itunes.apple.com/us/app/garmin-u-s-a/id435490305?mt=8>. When end-users follow such instructions and support, they directly infringe the '114 Patent. Defendant knows or should have known that by providing such instructions and support, resellers and end-use customers follow these instructions and support and directly infringe the '114 Patent.

143. Accordingly, Defendant has performed and continues to perform acts that constitute indirect infringement, and would induce actual infringement, with the knowledge of the

'114 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 Patents-in-Suit;
2. A judgment in favor of Plaintiff that Defendant has induced its resellers and end-users to induce the Patents-in-Suit;
3. 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 Patents-in-Suit, or such other equitable relief the Court determines is warranted;
4. 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 Patents-in-Suit as provided under 35 U.S.C. § 284, and an accounting of ongoing post-judgment infringement; and
5. 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 28, 2017.

Respectfully submitted,

By: /s/ Hao Ni

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**ATTORNEYS FOR PLAINTIFF**

**LOCATION BASED SERVICES, LLC**

**CERTIFICATE OF SERVICE**

I hereby certify that on the 28th day of April, 2017, 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/ Hao Ni

Hao Ni