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

MULLEN INDUSTRIES LLC, *Plaintiff,* v. SAMSUNG ELECTRONICS CO., LTD., and SAMSUNG ELECTRONICS AMERICA, INC., *Defendants.*	Case No. 2:24-cv-00049 **JURY TRIAL DEMANDED**

MULLEN INDUSTRIES LLC'S
COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Mullen Industries LLC ("Mullen Industries" or "Plaintiff") for its Complaint against Defendant Samsung Electronics Co., Ltd. ("SEC") and Defendant Samsung Electronics America, Inc. ("SEA", and collectively with SEC, "Samsung" or "Defendants") for patent infringement under 35 U.S.C. § 271 relating to U.S. Patent Nos. 11,246,024 (the "'024 Patent"), 11,234,117 (the "'117 Patent"), 11,190,633 (the "'633 Patent"), 11,122,418 (the "'418 Patent"), 11,109,218 (the "'218 Patent"), 11,096,039 (the "'039 Patent"), 9,635,540 (the "'540 Patent"), 9,204,283 (the "'283 Patent"), and 8,374,575 (the "'575 Patent" and collectively, the "Patents-in-Suit") alleges as follows:

INTRODUCTION

1. The Patents-in-Suit are directed to technological advancements and security improvements in regards to mobile phones, tablets, smart watches, wireless computers, and server systems. The Patents-in-Suit and additional patented and patent pending technology arose from the research and development of Jeff Mullen and his company Mullen Industries LLC.

2. Jeff Mullen is an inventor, technologist, electrical and computer engineer, MBA graduate, and founder of Mullen Industries LLC.

3. Jeff Mullen has innovated prolifically across a wide array of technologies since the early 2000s, including, for example, with regard to wireless and cellular communications systems and devices, security improvements regarding the same, augmented reality and virtual reality devices, and autonomous defense systems.

4. By way of example, the Patents-in-Suit identify problems that existed in the art of mobile devices and global positioning system technology. *See, e.g.*, '418 Patent at 1:28-33. To address these problems, the Patents-in-Suit disclose technological advancements and security improvements in regards to, for example, "systems and methods … for locating cellular phones … [and] for allowing a user of a cellular phone … to locate the position of a different user's cellular phone … based upon requestor-assigned access rights." *See, e.g.*, '418 Patent at 1:37-43.

5. The Patents-in-Suit teach, for example, that "[i]n order for users to be identified by other users' cell phones or locating devices a user profile may need to be stored remotely from such devices. In such instances user profiles would be used as the locating identifier and the devices into which these profiles are logged into (recognized by) would allow for the user to be located." *Id*. at 9:53-65; *see also* 2:59-3:13, 11:3-24, 12:42-13:3.

6. The Patents-in-Suit disclose, for example, wireless devices that communicate with a backend server system to provide location-based services and features. For example, the Patents-in-Suit teach a mobile device that can receive and display location information regarding another mobile device by "contact[ing] the remote database, hav[ing] his/her identity recognized, hav[ing] his/her access rights for the requested user location determined, and, if the requesting user has the correct access rights, be[ing] provided with the requested user's location." *Id*. at 5:11-44.

7. The Patents-in-Suit describe additional technological advancements and security improvements in regards to wireless devices and server systems. For example, the Patents-in-Suit describe that "different types of access levels may be provided that allow a user to filter location information to a different user." *See id*. at 1:49-54. Such access rights can vary, for example, by time (e.g., location is only accessible for a certain amount of time) or place (e.g., only an approximate location, but not an exact location, may be accessed). *Id*. at 1:55-2:2.

8. As additional examples, the Patents-in-Suit solve technical challenges related to receiving and providing event notifications and location-based information, such as location markers on a map, navigable directions, and distance information, on mobile devices with small display screens. *E.g.*, *id*. at 2:22-34, 8:6-21; '633 Patent at 1:47-2:11.

SAMSUNG'S WILLFUL INFRINGEMENT

9. Jeff Mullen's patented innovations have been widely cited by others. By way of example, the Patents-in-Suit have been cited well over 100 times by others in U.S. Patent Office proceedings.

10. On information and belief, Samsung has possessed knowledge of the Patents-in-Suit and Samsung's infringement thereof since before the filing of the present Complaint.

11. For example, before the filing of the present Complaint, Samsung and/or its subsidiaries and/or representatives conducted one or more meetings with Jeff Mullen.

12. On information and belief, as a result of such one or more meetings, Samsung as a large technology company has possessed knowledge of and monitored the patents and patent applications invented by Jeff Mullen, including the patent applications that ultimately issued as the Patents-in-Suit. On information and belief, as a result of such monitoring, Samsung became aware of each Patent-in-Suit before the filing of the present Complaint. In addition, on information

and belief, Samsung knew that at least Samsung phones, tablets, and servers, which include location-based technologies including at least the ones referenced in this Complaint (e.g., Samsung SmartThings Find), and Samsung watches, which include motion-sensing and notification technologies including at least the ones referenced in this Complaint, infringed the Patents-in-Suit on each date that Samsung incorporated such infringing technologies into Samsung phones, tablets, watches, and servers.

13. On information and belief, Samsung also possessed knowledge of the Patents-in-Suit and of Samsung's infringement thereof before the filing of the present Complaint as a result of Samsung's industry monitoring efforts and corresponding knowledge of Mullen Industries LLC's prior patent infringement suit against Apple Inc., which is Samsung's primary competitor with regard to at least Samsung phones, tablets, watches, and servers. On information and belief, Samsung possessed knowledge of the Patents-in-Suit and of Samsung's infringement thereof upon learning of Mullen Industries LLC's prior suit against Apple Inc. because the prior suit was directed to the same Patents-in-Suit that are the subject of the present Complaint, as well as location-based technologies in Apple phones, tablets, watches, and servers, and motion-sensing and notification technologies in Apple watches, that are similar to the corresponding technologies that Samsung provides in the Samsung phones, tablets, watches, and servers that are the subject of the present Complaint. *See Mullen Industries LLC v. Apple Inc.*, 6:22-cv-00145 (W.D. Tex.), Dkt. 1 (Complaint dated February 9, 2022); *see also Mullen Industries LLC v. Apple Inc.*, 6:22-cv-00145 (W.D. Tex.), Dkt. 25 (Amended Complaint dated May 6, 2022).

14. On information and belief, as a large technology company, Samsung analyzed each of the Patents-in-Suit when it became aware of each such patent and determined how its products

infringed at that time and in each instance thereafter in which Samsung incorporated the infringing technologies into Samsung's phones, tablets, watches, and servers.

15. Notwithstanding Samsung's knowledge of the Patents-in-Suit and Samsung's infringement thereof, Samsung has and continues to willfully infringe the Patents-in-Suit.

16. On information and belief, as a large technology company, to the extent Samsung failed to investigate its infringement upon learning of the Patents-in-Suit, Samsung has been willfully blind.

17. On information and belief, Samsung has and continues to willfully infringe each of the Patents-in-Suit notwithstanding that Samsung knew or should have known, both before and after the filing of the present Complaint, that its actions constituted an unjustifiably high risk of infringement, and notwithstanding that the risk of Samsung's infringement of the Patents-in-Suit was either known to Samsung or so obvious that it should have been known to Samsung both before and after the filing of the present Complaint.

18. On information and belief, Samsung's infringement of the Patents-in-Suit has and continues to be willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, and flagrant.

THE PARTIES

MULLEN INDUSTRIES LLC

19. Plaintiff Mullen Industries LLC is a limited liability company organized and existing under the laws of the State of Delaware.

SAMSUNG

20. On information and belief, Defendant Samsung Electronics Co., Ltd. ("SEC") is a company organized and existing under the laws of the Republic of Korea, with its principal place of business located at 129 Samsung-Ro, Yeongtong-Gu, Suwon-Shi, Gyeonggi-Do, 16677,

Republic of Korea. On information and belief, SEC's Information Technology & Mobile Communications division is responsible for the design, manufacture, testing, and sale of Samsung mobile devices, such as phones, tablets, and watches, and related servers, software and applications, around the world including in the United States.

21. On information and belief, Defendant Samsung Electronics America, Inc. ("SEA") is a corporation organized and existing under the laws of the State of New York with its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660. On information and belief, SEA is a wholly owned subsidiary of SEC. SEA has business locations in this District, including at 6625 Excellence Way, Plano, Texas 75023 and 2601 Preston Road, Frisco, Texas 75034. On information and belief, Defendant SEA is responsible for the design, manufacture, testing, and sale of Samsung mobile devices, such as phones, tablets, and watches, and related servers, software and applications, in the United States, including in this District. Defendant SEA may be served at least via its registered agent for service of process in Texas, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

JURISDICTION AND VENUE

22. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq*. This Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

23. This Court has personal jurisdiction over Samsung. Samsung regularly conducts business and has committed acts of patent infringement within this judicial District and the State of Texas that give rise to this action and has established minimum contacts with this forum such that exercise of jurisdiction over Samsung would not offend traditional notions of fair play and substantial justice. Samsung has committed and continues to commit acts of infringement in this

District and State by, among other things, offering to sell, selling, using (e.g., testing), importing, having made, and making products and services that infringe the Patents-in-Suit.

24. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400. Samsung is registered to do business in Texas and, upon information and belief, Samsung has transacted business in this District, has committed acts of direct infringement in this District, and has regular and established places of business in this District as set forth above.

25. For example, on information and belief, SEA maintains regular and established places of business in this District, including at 6625 Excellence Way, Plano, Texas 75023 and 2601 Preston Road, Frisco, Texas 75034 and has committed acts of infringement in this District. Further, on information and belief, SEC directs and controls the actions of SEA such that it too maintains regular and established places of business in this District, including at 6625 Excellence Way, Plano, Texas 75023 and 2601 Preston Road, Frisco, Texas 75034 and has committed acts of infringement in this District.

26. Additionally, venue is proper as to SEC, a foreign corporation, because suits against foreign entities are proper in any judicial district under 28 U.S.C. § 1391(c)(3).

27. Samsung is subject to this Court's jurisdiction pursuant to due process and the Texas Long Arm Statute due at least to its substantial business in this State and District, including (a) at least part of its past infringing activities, (b) regularly doing or soliciting business in Texas, and/or (c) engaging in persistent conduct and/or deriving substantial revenue from goods and services provided to customers in Texas.

28. Defendants have not contested proper venue and exercise of personal jurisdiction in this District for patent infringement actions in the past. See, e.g., Answer, ¶¶ 13, 18, *Cal. Inst. Tech. v. Samsung Elecs. Co., Ltd. et al.*, No. 2:21-cv-00446, Dkt. 19 (E.D. Tex. Apr. 5, 2022);

Answer to Amended Complaint, ¶¶ 6, 7, *Jawbone Innovations, LLC v. Samsung Elecs. Co., Ltd. et al.*, No. 2:21-cv-00186, Dkt. 27 (E.D. Tex. Dec. 9, 2021).

THE PATENTS-IN-SUIT

29. On January 25, 2022, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,234,117 (the "'117 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '117 Patent is attached hereto as Exhibit 1.

30. On November 30, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,190,633 (the "'633 Patent") entitled "Systems and Methods for Providing Remote Incoming Call Notification for Cellular Phones." A true and correct copy of the '633 Patent is attached hereto as Exhibit 2.

31. On September 14, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,122,418 (the "'418 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '418 Patent is attached hereto as Exhibit 3.

32. On August 31, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,109,218 (the "'218 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '218 Patent is attached hereto as Exhibit 4.

33. On August 17, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,096,039 (the "'039 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '039 Patent is attached hereto as Exhibit 5.

34. On April 25, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,635,540 (the "'540 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '540 Patent is attached hereto as Exhibit 6.

35. On December 1, 2015, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,204,283 (the "'283 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '283 Patent is attached hereto as Exhibit 7.

36. On February 12, 2013, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,374,575 (the "'575 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '575 Patent is attached hereto as Exhibit 8.

37. On February 8, 2022, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,246,024 (the "'024 Patent") entitled "Systems and Methods for Locating Cellular Phones and Security Measures for the Same." A true and correct copy of the '024 Patent is attached hereto as Exhibit 9.

38. Mullen Industries LLC is the sole and exclusive owner of all right, title, and interest in and to the Patents-in-Suit, and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this action. Mullen Industries LLC also has the right to recover all damages for past, present, and future infringement of the Patents-in-Suit.

39. Pursuant to and because Plaintiff, the present owner of the Patents-in-Suit, and Jeff Mullen, the prior owner of the Patents-in-Suit, have complied with 35 U.S.C. §§ 286 and 287(a), Plaintiff is entitled to past damages for Samsung's infringement beginning six years prior to the

filing date of the present Complaint. Plaintiff is also entitled to damages for Samsung's continuing infringement until the expiration of the last to expire of the Patents-in-Suit.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 11,234,117

40. All of the preceding paragraphs of this Complaint are incorporated by reference as if fully set forth herein.

41. Plaintiff has not licensed or otherwise authorized Samsung to make, have made, use, offer for sale, sell, export, or import any products that embody the inventions of the '117 Patent.

42. Samsung has directly infringed the '117 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '117 Patent.

43. On information and belief, Samsung's products that infringe the '117 Patent include at least Samsung's mobile phones and tablet computers. E.g., https://www.samsung.com/us/smartphones/; https://www.samsung.com/us/tablets/. Collectively, the Samsung products that infringe the '117 Patent are referred to as the "'117 Accused Products."

44. Samsung has directly infringed one or more claims of the '117 Patent by making, using (e.g., testing), offering to sell, selling, and/or importing into the United States the accused Samsung phones and tablets.

45. For example, Samsung has directly infringed claim 15 of the '117 Patent. Each of the '117 Accused Products comprises a wireless telephone. Each Samsung phone is capable of,

for example, supporting telephonic communications over cellular networks including 5G. E.g.:[1,2,3]

Galaxy S23 Unlocked | Lavender

SM-S911U1 / SM-S911ULIAXAA | ★★★★★ 4.6 (3258)

Cellular & Wireless	5G The latest network technology with the power of 5G.[3]

[1] https://www.samsung.com/us/smartphones/galaxy-s23/buy/galaxy-s23-128gb-unlocked-sm-s911uliaxaa/.

[2] https://www.samsung.com/us/smartphones/galaxy-s22/buy/galaxy-s22-128gb-verizon-sm-s901ulvavzw/?modelCode=SM-S901ULVAVZW.

[3] https://www.samsung.com/us/mobile/phones/galaxy-a54/buy/?modelCode=SM-A546UZKAATT.

Galaxy S22 Verizon | 128GB | Bora Purple | Learn more

SM-S901ULVAVZW / SM-S901ULVAVZW | ★★★★★ 3.8 (36)

Cellular & Wireless

5G

The latest network technology with the power of 5G.[3]

Galaxy A54 5G Unlocked | 128GB | Awesome Graphite

SM-A546U1 / SM-A546UZKBXAA | ★★★★★ 4.5 (1032) Write a Review

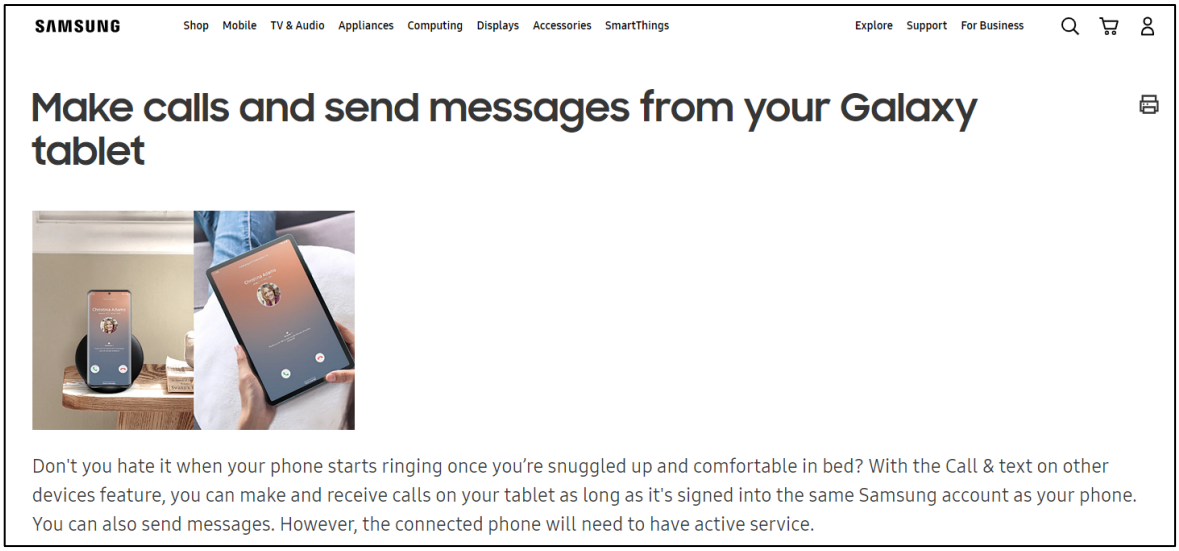
Powerful 5G* performance

Do what you love most — playing games, watching movies or posting photos — at the speed of life with Galaxy A54 5G. Our best of Galaxy A Series powers your day with an impressive processor and virtually lag-free 5G.*

46. As another example, each Samsung tablet is likewise capable of supporting wireless

telephonic communications over, for example, Wi-Fi or cellular networks such as 5G. E.g.:[4,5]

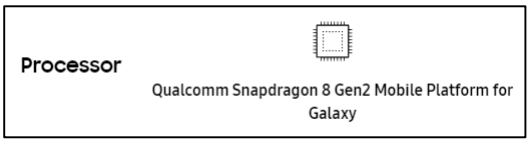
Network[15]
5G / Wi-Fi 6E



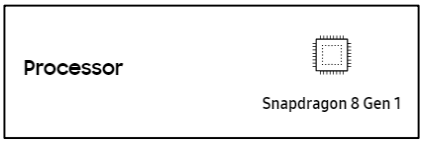
[4] https://www.samsung.com/us/tablets/galaxy-tab-s9/.

[5] https://www.samsung.com/us/support/answer/ANS00083152/.

47. Each of the ’117 Accused Products comprises a processor. For example, Samsung Galaxy S23 phones include a Snapdragon 8 Gen 2 Mobile Platform system-on-chip processor. E.g.:[6]



48. As another example, Samsung Galaxy S22 phones include a Snapdragon 8 Gen 1 system-on-chip processor. E.g.:[7]



49. As another example, Samsung A54 phones include an Exynos 1380 system-on-chip processor. E.g.:[8]

[6] https://www.samsung.com/us/smartphones/galaxy-s23/buy/galaxy-s23-128gb-unlocked-sm-s911uliaxaa/.

[7] https://www.samsung.com/us/smartphones/galaxy-s22/buy/galaxy-s22-128gb-verizon-sm-s901ulvavzw/?modelCode=SM-S901ULVAVZW.

[8] https://semiconductor.samsung.com/us/processor/showcase/smartphone/.

50. As another example, Samsung Galaxy Tab S9 Ultra tablet computers include a Snapdragon 8 Gen 2 processor. E.g.:[9]

Processor
Snapdragon® 8 Gen 2

51. Each of the '117 Accused Products comprises a positioning system for determining a location of the device. For example, Samsung phones and tablets include a global positioning system ("GPS"). E.g.:[10,11]

Your Galaxy phone includes a GPS antenna to track real-time location data. You can easily turn on and off location service on your phone. You can also improve location accuracy to get more accurate location services. See how easy it is to enable and set up your location settings below.

Galaxy Tab S9 Series

Settings

Location

Location services use a combination of GPS, mobile network and Wi-Fi to determine the location of your device.

1. From Settings, tap **Location**.
2. Tap to turn on Location services.

TIP Some apps require location services be turned on to function.

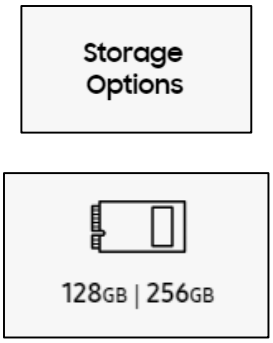
[9] https://www.samsung.com/us/tablets/galaxy-tab-s9/.

[10] https://www.samsung.com/latin_en/support/mobile-devices/how-to-activate-my-location-and-change-settings-for-location-permissions/.

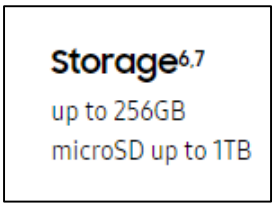
[11] https://downloadcenter.samsung.com/content/PM/202308/20230808065803698/EB/SAM_X710_X810_X818_X910_EN_FINAL_230624/location_d1e8811.html.

52. As another example, the ’117 Accused Products are operable to determine a location of the device on the basis of, for example, Wi-Fi signals in the vicinity of the device.[12]

53. Each of the ’117 Accused Products comprises memory storing programming. For example, each Samsung phone and tablet includes memory for storing programming capable of executing on the phone or tablet, respectively. Each Samsung Galaxy S23 and Galaxy S22 phone includes the following storage capacity, including for the Android operating system (“OS”) and applications. E.g.:[13]



54. As another example, the Samsung Galaxy Tab S9 includes the following storage capacity, including for an OS and applications. E.g.:[14]



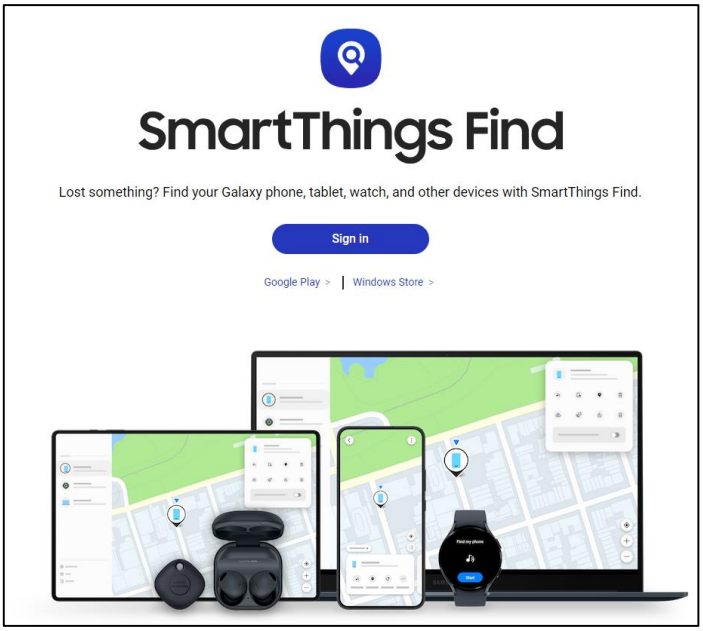
55. Each of the ’117 Accused Products stores programming in its memory capable of

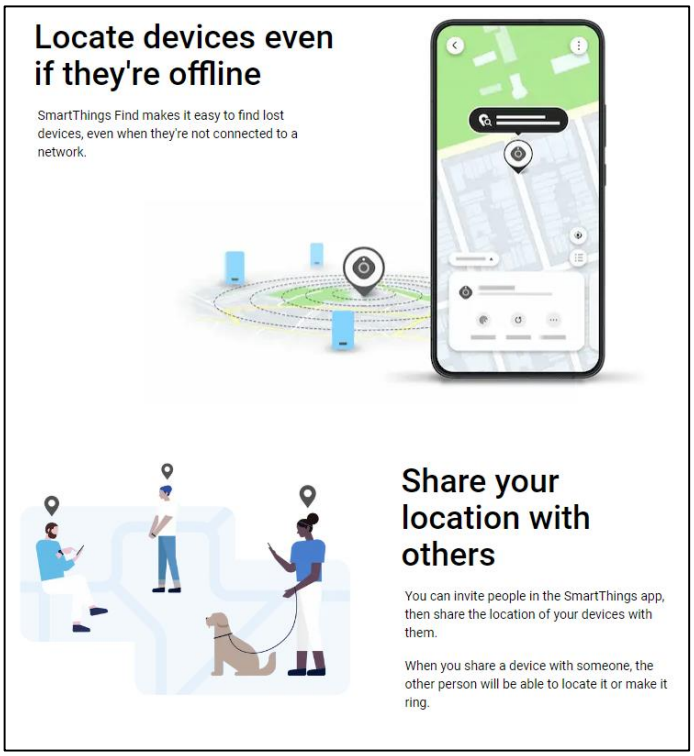
[12] E.g., https://downloadcenter.samsung.com/content/PM/202308/20230808065803698/EB/SAM_X710_X810_X818_X910_EN_FINAL_230624/location_d1e8811.html.

[13] https://www.samsung.com/us/smartphones/galaxy-s22/buy/galaxy-s22-128gb-verizon-sm-s901ulvavzw/?modelCode=SM-S901ULVAVZW (Galaxy S22); see also https://www.samsung.com/us/smartphones/galaxy-s23/buy/galaxy-s23-128gb-unlocked-sm-s911uliaxaa/ (Galaxy S23).

[14] https://www.samsung.com/us/tablets/galaxy-tab-s9/.

providing location-based services and features including, for example, Samsung SmartThings Find. E.g.:[15]



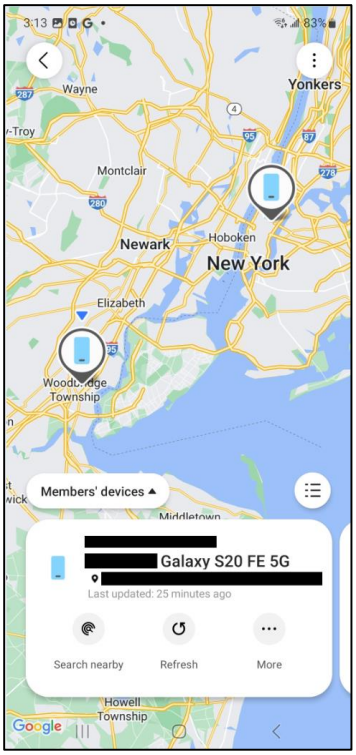


[15] https://smartthingsfind.samsung.com/login?result=true.

56. On information and belief, Samsung SmartThings Find is preinstalled on at least Samsung phones and tablets.

57. Each of the ’117 Accused Products includes programming capable of displaying a plurality of users, wherein each one of said plurality of users is associated to a different one of a plurality of wireless telephones.

58. For example, each of the ’117 Accused Products includes Samsung SmartThings Find programming capable of displaying a plurality of users, wherein each one of said plurality of users is associated to a different one of a plurality of wireless telephones. E.g.:

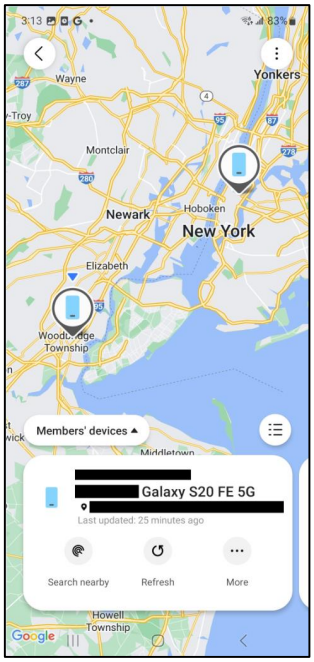


Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of a first user (center-left portion of the display) and a second user (top-right portion of the display)).

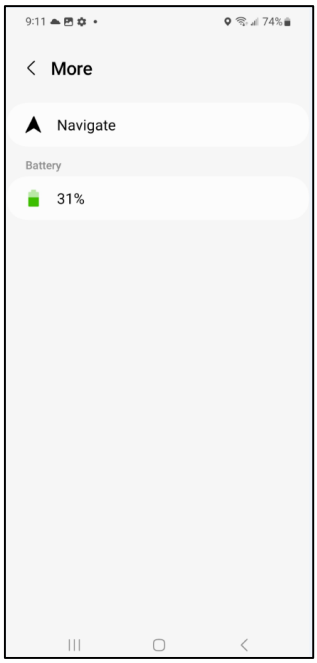
59. Each of the ’117 Accused Products comprises programming capable of receiving a first manual input in a form of a selection of one of said plurality of users.

60. For example, each of the ’117 Accused Products comprises Samsung SmartThings

Find programming capable of receiving a first manual input in a form of a selection of one of said plurality of users. E.g.:



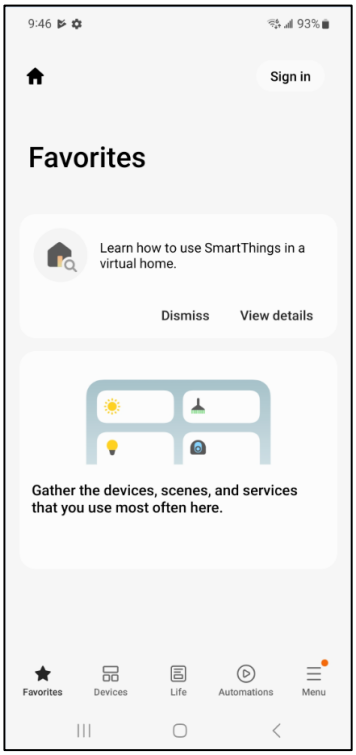
Samsung A54 phone (Redacted screen shot showing the display of a plurality of users, each of which can be manually selected by a user of the Samsung A54 phone).



Samsung A54 phone (Screen shot showing the display in Samsung SmartThings Find of an option to "Navigate" to a particular user's location, which display is provided after a user of the Samsung A54 phone manually selects that particular user from a map display in Samsung SmartThings Find).

61. Each of the '117 Accused Products comprises programming capable of receiving an input in a form of a login and a second manual input in a form of a password.

62. For example, each of the '117 Accused Products comprises Samsung SmartThings Find programming capable of receiving an input in a form of a login and a second manual input in a form of a password. E.g.:



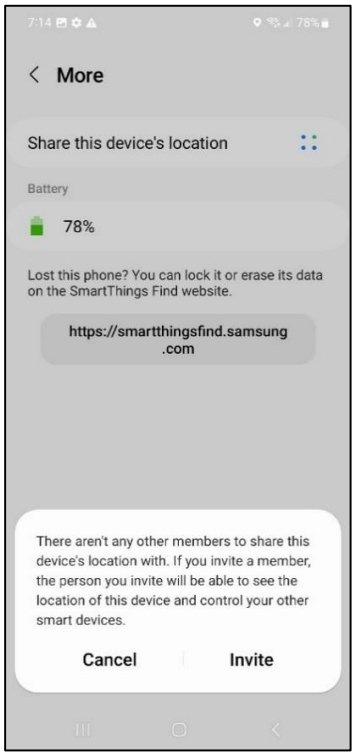
Samsung A54 phone (Screen shot showing that a user must "Sign in" (using a login and password) to access Samsung SmartThings Find location-based features).

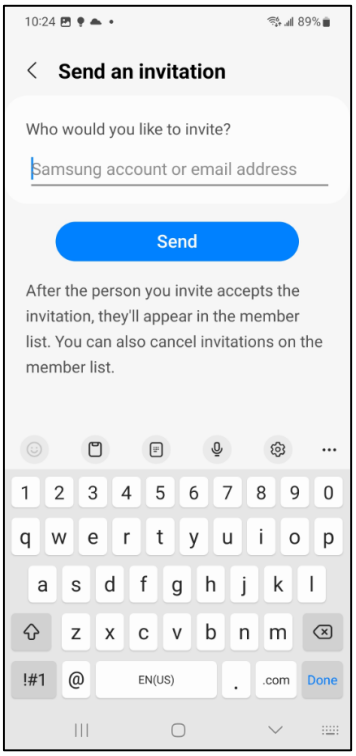
63. Each of the '117 Accused Products comprises programming capable of providing said login and said password to a remote server for use in determining whether to allow access of location information for said one of said plurality of wireless telephones associated to said selected

one of said plurality of users, said determining including identifying a user of said wireless telephone using said login, determining said password is associated with said login, and determining whether said selected one of said plurality of users has provided access rights for said location information to said user of said wireless telephone. For example, each Samsung phone and Samsung tablet programmed with the location-based services and features of Samsung SmartThings Find, is capable of providing the device user's login and associated password to a server, which determines on the basis of such information whether the selected one of said plurality of users has provided to said device user access rights for said location information of said selected one of said plurality of users. Only specific authenticated users associated with specific logins are permitted to access another user's location information.

64. Each of the '117 Accused Products comprises programming capable of assigning location access rights to said one of said plurality of wireless telephones associated with said selected one of said plurality of users for obtaining said location of said wireless telephone.

65. For example, each Samsung phone and Samsung tablet programmed with the location-based services and features of Samsung SmartThings Find is capable of displaying an option for a device user to assign location access rights to a selected one of a plurality of users. E.g.:

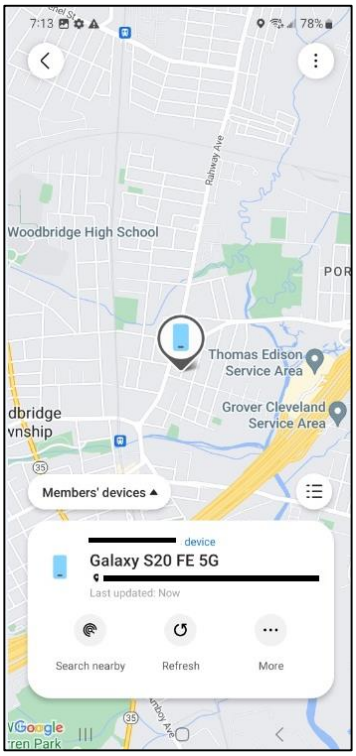




Samsung A54 phone (Screen shots showing the capability to assign to another user in Samsung SmartThings Find location access rights to see the Samsung A54 phone's location).

66. Each of the '117 Accused Products comprises programming capable of receiving said location information for said one of said plurality of wireless telephones from a server and displaying said location information.

67. For example, each Samsung phone and Samsung tablet programmed with the location-based services and features of Samsung SmartThings Find is capable of receiving from a server and displaying location information for a selected one of the plurality of wireless telephones on, for example, a map. E.g.:



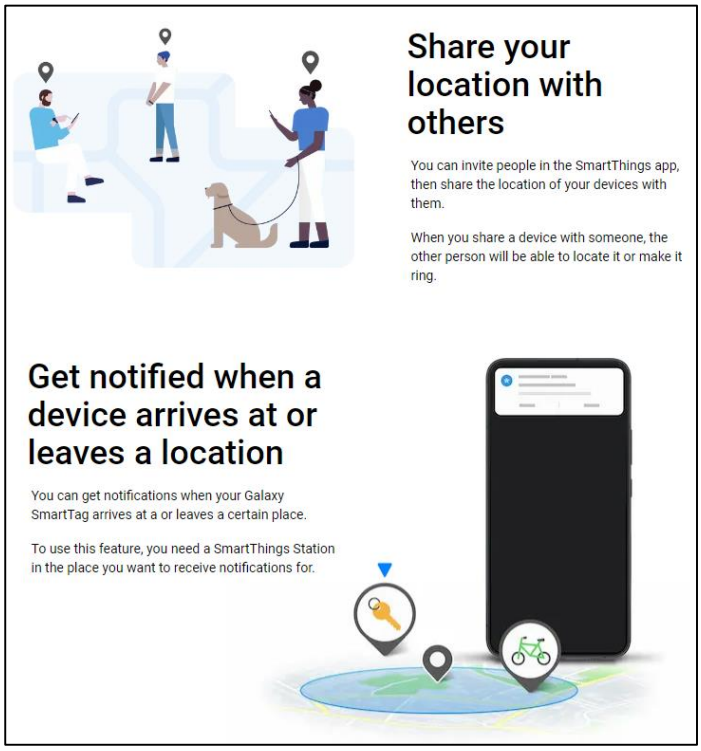
Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of a location of another user).

68. Samsung has also indirectly infringed the ’117 Patent by actively inducing and contributing to the infringement of the ’117 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung had knowledge of the ’117 Patent and of its infringement thereof before the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

69. On information and belief, Samsung has specifically induced and intended others, such as customers, resellers, and retailers, to infringe the ’117 Patent by, for example, using or selling the ’117 Accused Products, and knew that such others perform acts that constituted direct infringement. For example, Samsung has provided instructions to its customers regarding the infringing use and operation of the ’117 Accused Products. When others have followed such instructions, they have directly infringed one or more claims of the ’117 Patent. By providing such

instructions, Samsung knew and intended that others would follow such instructions, and thereby directly infringe one or more claims of the ’117 Patent. Thus, Samsung knew that its actions actively induced infringement by others.

70. For example, Samsung has instructed end users how to open and use Samsung SmartThings Find, for example, for sharing location information with others. E.g.:[16]



71. Samsung has also contributed to the direct infringement of the ’117 Patent by others because the location-based technologies of the ’117 Accused Products have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’117 Accused Products (e.g., within Samsung SmartThings Find) and not infringe the ’117 Patent. Samsung contributes to the direct infringement of the ’117 Patent when, for example, Samsung causes or instructs end users

[16] https://smartthingsfind.samsung.com/login?result=true.

to download updates to the programming on the ’117 Accused Products that, together with such products’ hardware and/or other software, infringes the ’117 Patent.

72. Plaintiff has suffered damages as a result of Samsung’s infringement of the ’117 Patent in an amount to be proved at trial.

73. On information and belief, Samsung’s infringement of the ’117 Patent has been willful.

74. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284, in an amount adequate to compensate for Samsung’s infringement of the ’117 Patent, but in no event less than a reasonable royalty for the use made of the inventions by Samsung together with interest and costs as fixed by the Court.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 11,190,633

75. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

76. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products that embody the inventions of the ’633 Patent.

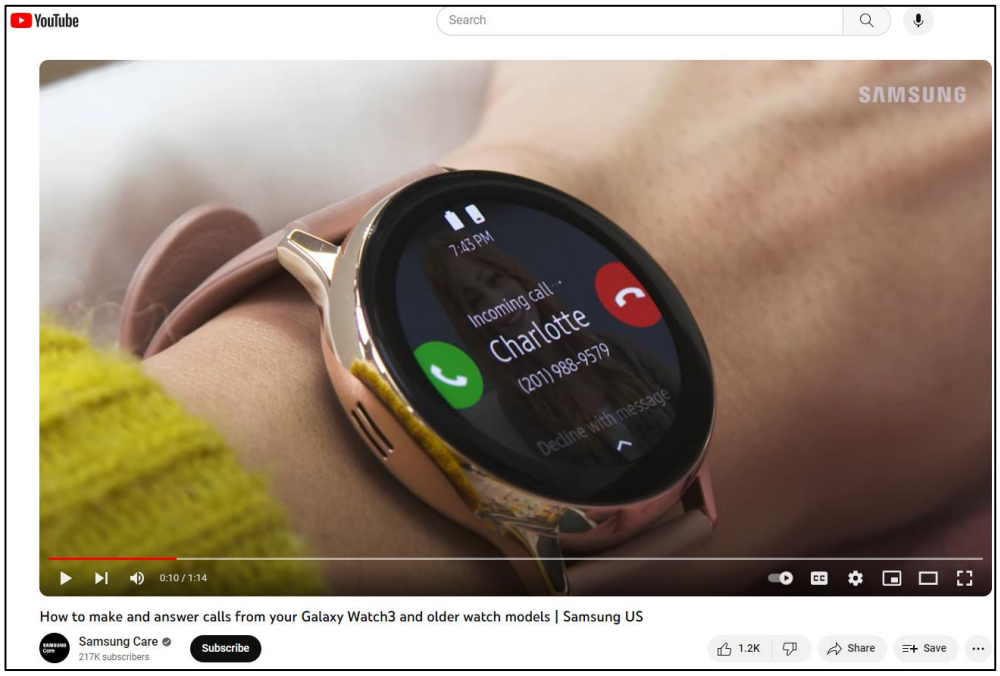
77. Samsung has and continues to directly infringe the ’633 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using (e.g., testing), offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’633 Patent.

78. On information and belief, Samsung’s products that infringe the ’633 Patent include at least Samsung’s smart watches. E.g., https://www.samsung.com/us/watches/. Collectively, the Samsung products that infringe the ’633 Patent are referred to as the “’633 Accused Products.”

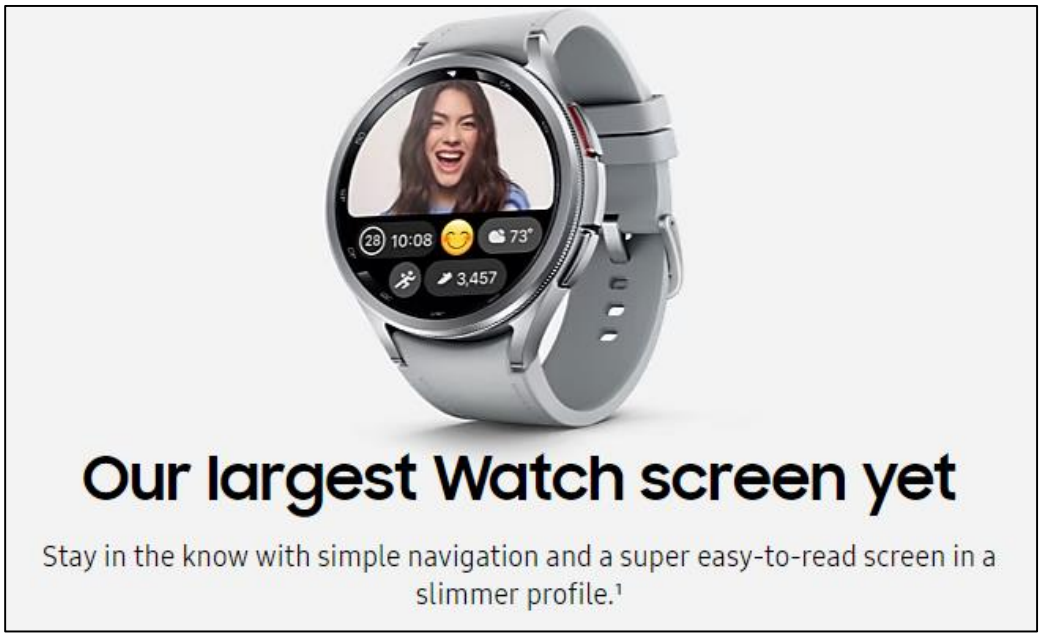
79. Samsung has and continues to directly infringe one or more claims of the ’633 Patent including, for example, at least claim 1 of the ’633 Patent, by making, using (e.g., testing), offering to sell, selling, and/or importing into the United States the ’633 Accused Products, each of which comprises a watch for use with a mobile telephonic device that provides notification of an incoming call. For example, each Samsung watch is a watch for use with a mobile phone, where the Samsung watch notifies a user of an incoming call to the phone. E.g.:[17,18]

[17] https://www.samsung.com/us/watches/.

[18] https://www.youtube.com/watch?app=desktop&v=Cr3-8NDt3Hk.



80. Each of the ’633 Accused Products comprises a watch band, a second watch band, and a buckle, where said buckle is coupled to said second watch band. E.g.:[19]



[19] https://www.samsung.com/us/watches/.

81. Each of the ’633 Accused Products comprises a device operable to receive first wireless communication signals associated with a first event and second wireless communication signals associated with a second event from said mobile telephonic device, wherein said first event and second event are different. For example, each Samsung watch is operable to receive wireless communication signals from a phone associated with notification events. Such notification events include, for example, an incoming call, missed call, voice message, text message, reminder, and calendar notification, which are different events. E.g.:[20,21,22,23,24,25]

[20] https://www.youtube.com/watch?app=desktop&v=Cr3-8NDt3Hk (incoming call notification).

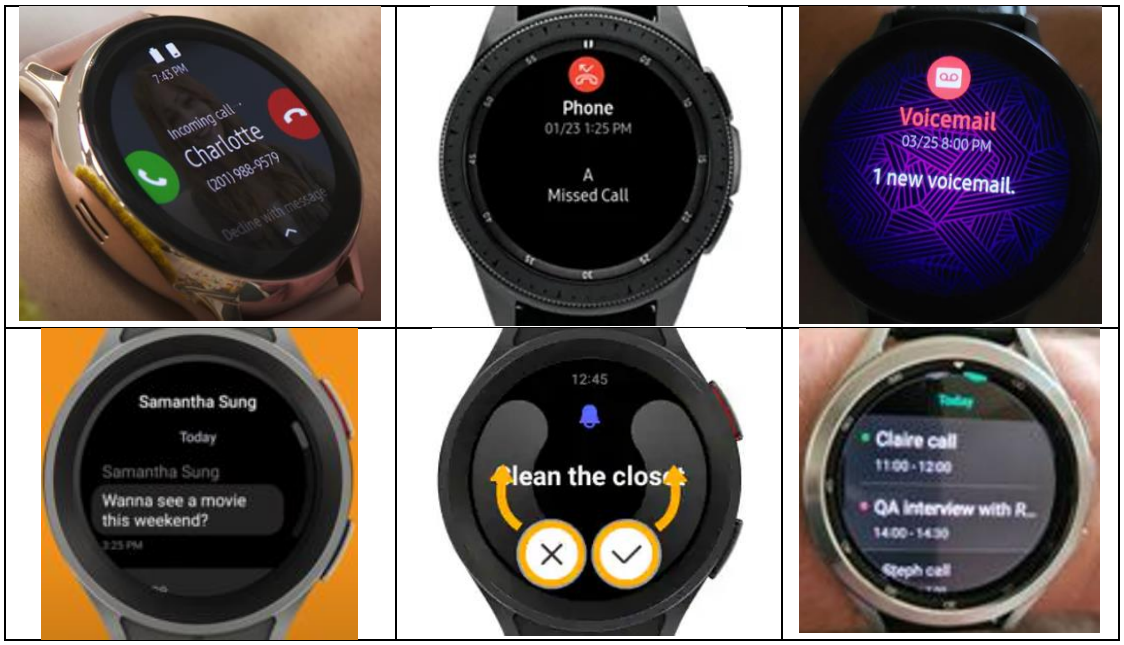
[21] https://medium.com/@iOSTrixFixX/call-function-in-samsung-galaxy-watch-with-iphone-613a2949c4d2 (missed call notification).

[22] https://www.reddit.com/r/GalaxyWatch/comments/n1bsbk/voicemail_notification_wont_go_away_but_no/?rdt=54836 (voicemail notification).

[23] https://www.youtube.com/watch?app=desktop&v=h_oRlZFILlY (text message notification).

[24] https://www.att.com/device-support/article/wireless/KM1498216/Samsung/SamsungSMR925U (reminder notification).

[25] https://eu.community.samsung.com/t5/wearables/galaxy-watch-4-classic-calendar-entries-amp-notification/td-p/3873477 (calendar notification).

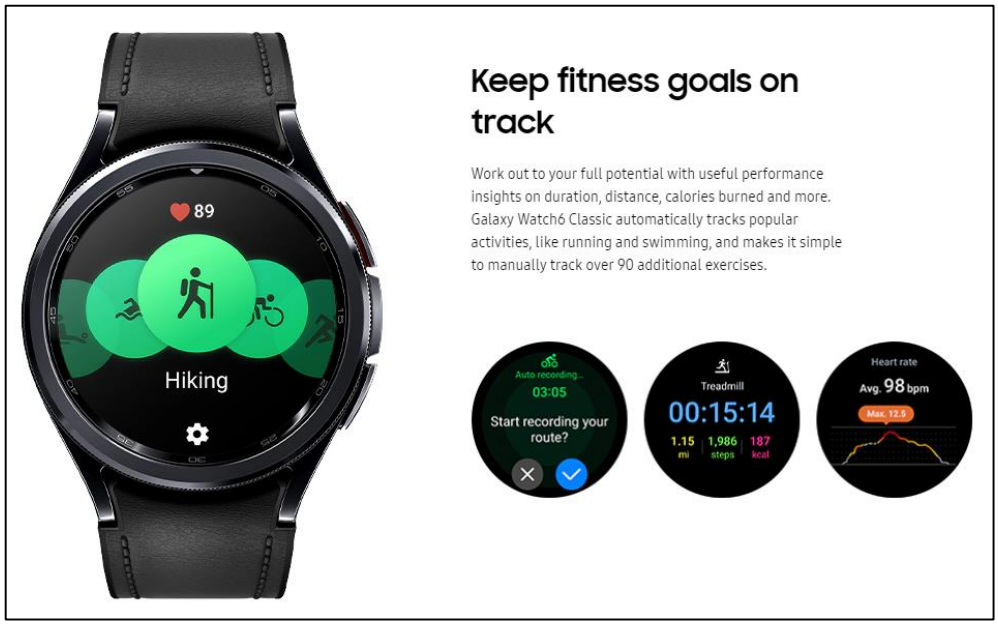


82. Each of the ’633 Accused Products comprises a battery. E.g.:[26]

83. Each of the ’633 Accused Products comprises motion sensing operable to distinguish between a plurality of different types of motion. For example, each Samsung watch

[26] https://www.samsung.com/us/watches/galaxy-watch6-classic/#performance.

includes an accelerometer and a gyroscope.[27] Samsung watches also include, for example, step detection motion sensing: E.g.:[28]

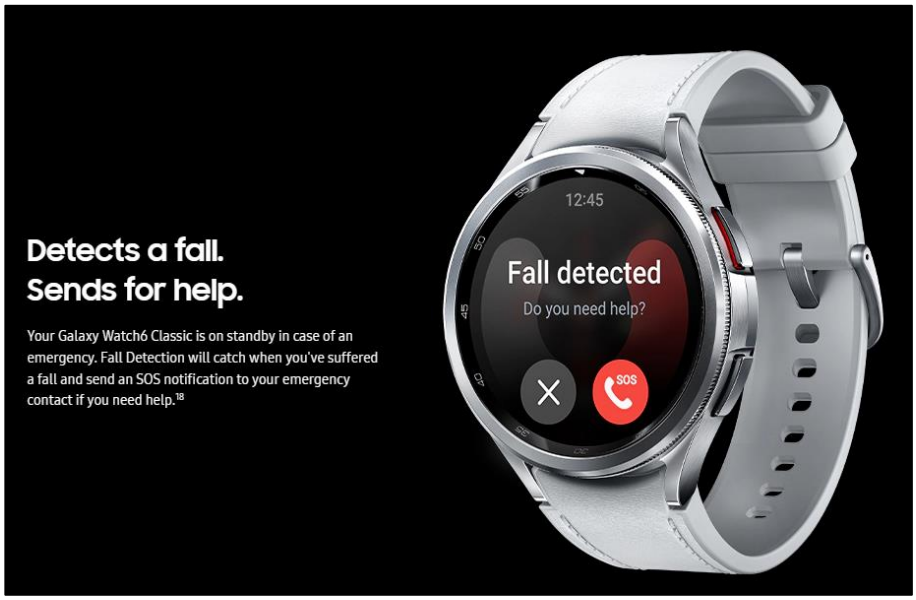


84. As another example, Samsung watches include fall detection motion sensing. E.g.:[29]

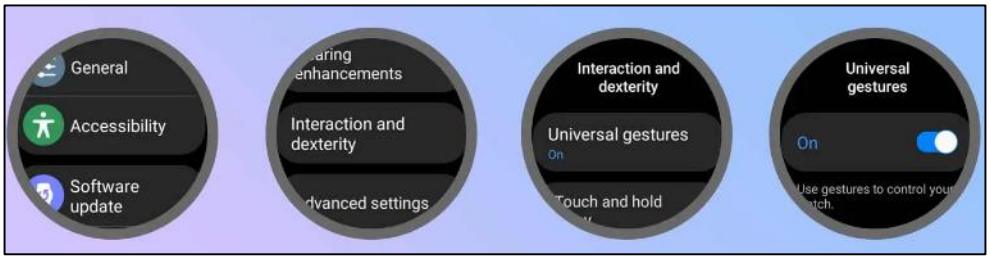
[27] E.g., https://developer.samsung.com/tizen/blog/en-us/2019/04/15/how-to-use-sensors-on-a-galaxy-watch.

[28] https://www.samsung.com/us/watches/galaxy-watch6-classic/#performance.

[29] https://www.samsung.com/us/watches/galaxy-watch6-classic/#performance.



85. In addition, Samsung watches include Universal Gestures sensing to convert different types of gestures into action commands. E.g.:[30]



Gesture	Action
Shake your wrist twice	Turn on Universal Gestures
Pinch your thumb and index finger	Next item
Double pinch	Previous item
Make a fist	Tap
Make a fist twice	Open the action menu

[30] https://9to5google.com/2023/06/09/interactive-gestures-galaxy-watch/.

86. Each of the ’633 Accused Products is operable to provide first user-perceivable notification signals that are dependent upon said received first communication signals, and said device is operable to provide second user perceivable notification signals that are dependent upon said second communication signals. For example, each Samsung watch is operable to provide various visual displays as well as audio and haptic signals that can be perceived by a user and that correspond to various respective notifications. E.g.:[31]

Manage notifications on your Samsung Galaxy Watch

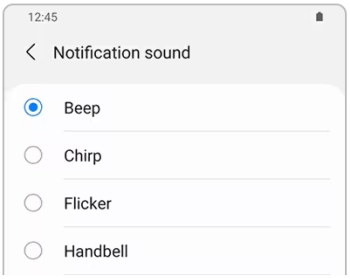
Last Update date : Jan 05. 2023

Getting a lot of spam email notifications on your Galaxy Watch? No worries, you can choose which apps send notifications to your Galaxy Watch and how much information is displayed on your screen. Once you customize your preferences, you'll only see the reminders and messages that you want to.

. . .

Manage notification sounds

You may want to apply a unique sound to your watch notifications, like a ringtone. Or, maybe you prefer vibration alerts instead. You can set up your watch's sounds to match your preferences, whether you're receiving texts, emails, or app alerts. These options can be applied right from your watch or from the Galaxy Wearable app on your connected phone.



Make sure the notification volume is enabled so you don't miss anything. Open the **Galaxy Wearable** app on the connected phone, then tap **Sounds and vibration**, and then adjust the settings for Volume and Notification sound.

[31] https://www.samsung.com/latin_en/support/mobile-devices/manage-notifications-on-your-samsung-galaxy-watch/.

87. Samsung also has and continues to indirectly infringe the ’633 Patent by actively inducing and contributing to the infringement of the ’633 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung has possessed knowledge of the ’633 Patent and of its infringement thereof both before and after the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

88. On information and belief, Samsung has and continues to specifically induce and intend that others, such as customers, resellers, and retailers, infringe the ’633 Patent by, for example, using or selling the ’633 Accused Products, and has and continues to know that such others perform acts that constitute direct infringement. For example, Samsung has and continues to provide instructions to its customers regarding the infringing use and operation of the ’633 Accused Products. See e.g., Samsung’s website instructions identified in the foregoing paragraphs regarding the motion-sensing and notification technologies of Samsung’s watches. When others follow such instructions, they have and continue to directly infringe one or more claims of the ’633 Patent. By providing such instructions, Samsung has and continues to know and intend that others will follow such instructions, and thereby directly infringe one or more claims of the ’633 Patent. Thus, Samsung has and continues to know that its actions actively induce infringement by others.

89. Samsung also has and continues to contribute to the direct infringement of the ’633 Patent by others because the motion-sensing and notification technologies of the ’633 Accused Products have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the motion-sensing and notification technologies of the ’633 Accused Products and not infringe the ’633 Patent. Samsung contributes to the direct infringement of the ’633 Patent when, for example, Samsung causes or instructs end users to download updates to the programming on the ’633 Accused Products that, together with

such products' hardware and/or other software, infringes the '633 Patent.

90. Plaintiff has and continues to suffer damages as a result of Samsung's infringement of the '633 Patent in an amount to be proved at trial.

91. On information and belief, Samsung's infringement of the '633 Patent has and continues to be willful.

92. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung's infringement of the '633 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

COUNT III
INFRINGEMENT OF U.S. PATENT NO. 11,122,418

93. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

94. Plaintiff has not licensed or otherwise authorized Samsung to make, have made, use, offer for sale, sell, export, or import any products that embody the inventions of the '418 Patent.

95. Samsung has directly infringed the '418 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using (e.g., testing), offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the '418 Patent.

96. On information and belief, Samsung's products that infringe the '418 Patent include at least Samsung's mobile phones and tablet computers. E.g., https://www.samsung.com/us/smartphones/; https://www.samsung.com/us/tablets/. Collectively, the Samsung products that infringe the '418 Patent are referred to as the "'418 Accused Products."

97. Samsung has directly infringed one or more claims of the '418 Patent including, for example, at least claim 1 of the '418 Patent, by making, using (e.g., testing), offering to sell, selling, and/or importing into the United States the '418 Accused Products, each of which comprises a system that is capable of providing location-based services and features. For example, each Samsung phone and Samsung tablet includes memory for storing programming capable of executing on the phone or tablet, respectively.[32]

98. Each Samsung phone and Samsung tablet stores programming in its memory capable of providing location-based services and features including, for example, Samsung SmartThings Find.[33]

99. Each of the '418 Accused Products comprises a first wireless device, wherein a location of said first wireless device is operable of being determined. For example, Samsung phones and tablets include a global positioning system operable to determine a location of the phone or tablet, respectively.[34,35] In addition, Samsung phones and tablets are operable to determine a location of the phone or tablet on the basis of, for example, Wi-Fi signals in the vicinity of the device.[36]

100. Each of the '418 Accused Products is operable to provide said location of said first wireless device to a remote system, which location is operable of being requested by a second

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[32] E.g., https://www.samsung.com/us/smartphones/galaxy-s22/buy/galaxy-s22-128gb-verizon-sm-s901ulvavzw/?modelCode=SM-S901ULVAVZW (Galaxy S22); see also https://www.samsung.com/us/smartphones/galaxy-s23/buy/galaxy-s23-128gb-unlocked-sm-s911uliaxaa/ (Galaxy S23); https://www.samsung.com/us/tablets/galaxy-tab-s9/.

[33] E.g., https://smartthingsfind.samsung.com/login?result=true.

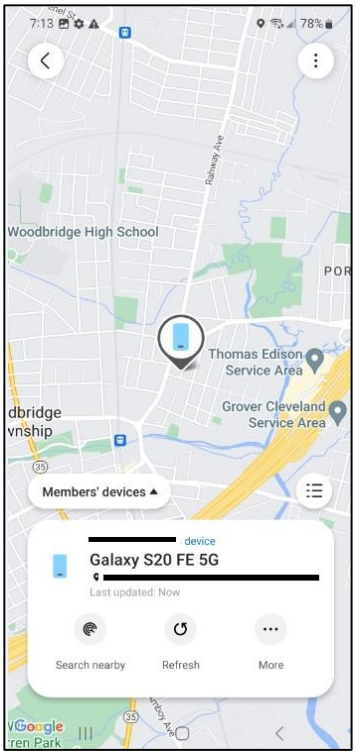
[34] https://www.samsung.com/latin_en/support/mobile-devices/how-to-activate-my-location-and-change-settings-for-location-permissions/.

[35] https://downloadcenter.samsung.com/content/PM/202308/20230808065803698/EB/SAM_X710_X810_X818_X910_EN_FINAL_230624/location_d1e8811.html.

[36] *Id*.

wireless device outside of a call for communication between said first wireless device and said second wireless device. Each Samsung phone and tablet programmed with the foregoing location-based services and features is capable of providing the location of the phone or tablet, respectively, to a remote server system, which location is operable of being requested by a second wireless device outside of a call for communication between said first wireless device and said second wireless device.

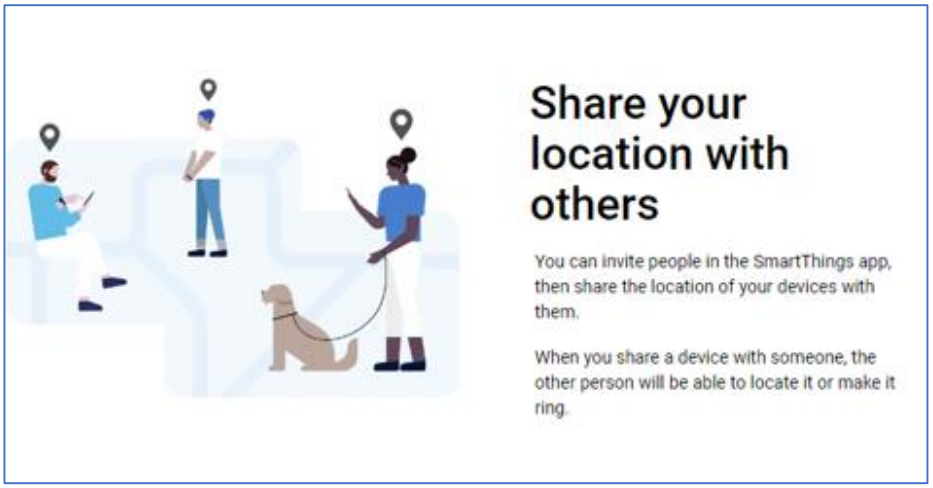
101. For example, the location of the Samsung phone or tablet is operable to be requested via Samsung SmartThings Find by a second wireless device, and outside of a call for communication between the first wireless device and the second wireless device. E.g.:



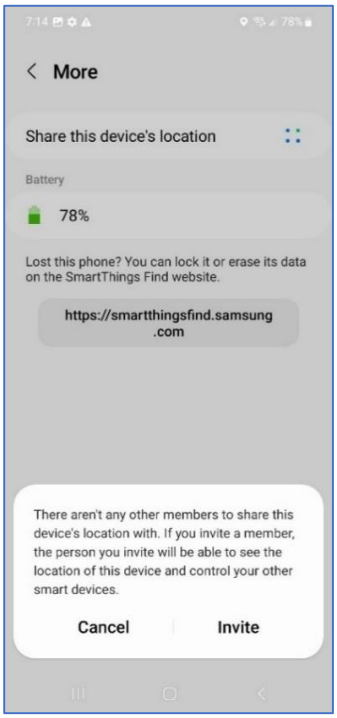
Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of another user's location outside of a call for communication; likewise, the location of the Samsung A54 phone can be requested and displayed on such user's Samsung Galaxy S20 FE 5G phone outside of a call for communication).

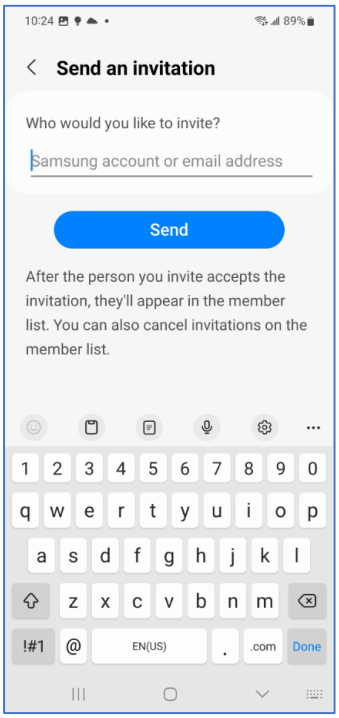
102. Each of the ’418 Accused Products is operable to provide a permission by said first wireless device for said second wireless device to access location information about said location, wherein said permission is operable of being stored in said remote system, said remote system is located remotely from said first and second wireless devices, and said location information is operable of being provided from said remote system to said second wireless device in accordance with said permission outside of said call.

103. For example, each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find is operable to provide, for storage in a remote server system, a permission for the second wireless device to access location information about the phone or tablet’s location. Each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find includes, for example, options to add and/or remove devices that can access the phone or tablet’s location from the remote server system. Such options, when selected, instruct the remote server system to change the wireless device(s) authorized to view the first wireless device’s location data. E.g.:[37]



[37] https://smartthingsfind.samsung.com/login?result=true.

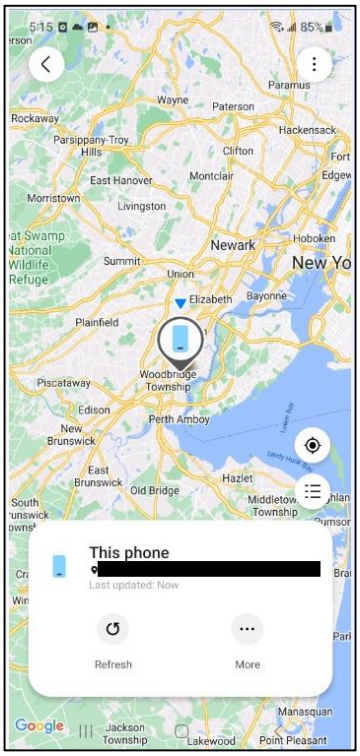




Samsung A54 phone (Screen shots showing the capability in Samsung SmartThings Find to allow another user to see the A54 phone's location).

104. Each of the '418 Accused Products is operable to provide a first map provided with respect to said location.

105. For example, each of the '418 Accused Products is operable to provide in Samsung SmartThings Find a first map provided with respect to said location. E.g.:



Samsung A54 phone (Redacted screen shot showing in Samsung SmartThings Find a map provided with respect to the location of the Samsung A54 phone).

106. Samsung has also indirectly infringed the ’418 Patent by actively inducing and contributing to the infringement of the ’418 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung had knowledge of the ’418 Patent and of its infringement thereof before the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

107. On information and belief, Samsung has specifically induced and intended others, such as customers, resellers, and retailers, to infringe the ’418 Patent by, for example, using or selling the ’418 Accused Products, and knew that such others perform acts that constituted direct infringement. For example, Samsung has provided instructions to its customers regarding the infringing use and operation of the ’418 Accused Products. When others have followed such instructions, they have directly infringed one or more claims of the ’418 Patent. By providing such

instructions, Samsung knew and intended that others would follow such instructions, and thereby directly infringe one or more claims of the ’418 Patent. Thus, Samsung knew that its actions actively induced infringement by others.

108. For example, Samsung has instructed end users how to open and use Samsung SmartThings Find, for example, for location sharing with other users outside of a call for communication.[38]

109. Samsung has also contributed to the direct infringement of the ’418 Patent by others because the location-based technologies of the ’418 Accused Products have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’418 Accused Products (e.g., within Samsung SmartThings Find) and not infringe the ’418 Patent. Samsung contributes to the direct infringement of the ’418 Patent when, for example, Samsung causes or instructs end users to download updates to the programming on the ’418 Accused Products that, together with such products’ hardware and/or other software, infringes the ’418 Patent.

110. Plaintiff has suffered damages as a result of Samsung’s infringement of the ’418 Patent in an amount to be proved at trial.

111. On information and belief, Samsung’s infringement of the ’418 Patent has been willful.

112. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’418 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

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[38] https://smartthingsfind.samsung.com/login?result=true.

COUNT IV
INFRINGEMENT OF U.S. PATENT NO. 11,109,218

113. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

114. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products that embody the inventions of the ’218 Patent.

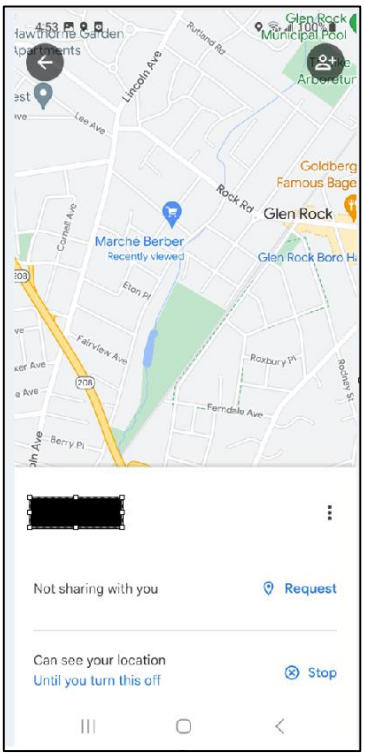
115. Samsung has and continues to directly infringe the ’218 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using (e.g., testing), offering to sell, selling, exporting from, and/or importing into the United States products that satisfy each and every limitation of one or more claims of the ’218 Patent.

116. On information and belief, Samsung’s products that infringe the ’218 Patent include at least Samsung’s mobile phones and tablet computers. E.g., https://www.samsung.com/us/smartphones/; https://www.samsung.com/us/tablets/. Collectively, the Samsung products that infringe the ’218 Patent are referred to as the “’218 Accused Products.”

117. Samsung has and continues to directly infringe one or more claims of the ’218 Patent including, for example, at least claim 11 of the ’218 Patent, by making, using, offering to sell, selling, and/or importing into the United States the ’218 Accused Products, each of which comprises a system capable of providing location-based services and features. For example, each Samsung phone and tablet stores in memory programming capable of providing location-based services and features including, for example, Samsung SmartThings Find and Google Maps.

118. Each of the ’218 Accused Products comprises a wireless telephonic device. For example, each Samsung phone is capable of supporting telephonic communications over cellular networks such as 5G. Each Samsung tablet is likewise capable of supporting telephonic communications over, for example, WiFi using WiFi calling and/or cellular networks such as 5G.

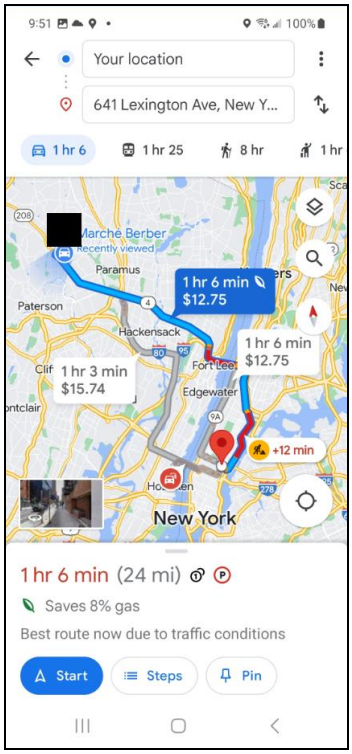
119. Each of the ’218 Accused Products is operable to provide a display screen after a request from said wireless telephonic device for access to a first location of a first wireless device, wherein said display screen includes a map provided from a perspective of said wireless telephonic device. For example, each Samsung phone and tablet programmed with Google Maps is capable of requesting a location of a first wireless device from a server when, for example, a user of the phone or tablet accesses the Google Maps application. Each Samsung phone and tablet programmed with Google Maps is capable of displaying an option to access a first location of a first wireless device when, for example, a user of the phone or tablet or has shared its location with the first wireless device and either the first wireless device has not yet provided reciprocal location access rights or has revoked the user’s location access rights. E.g.:



Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of an option to request location access rights from a first wireless device (“Request”)).

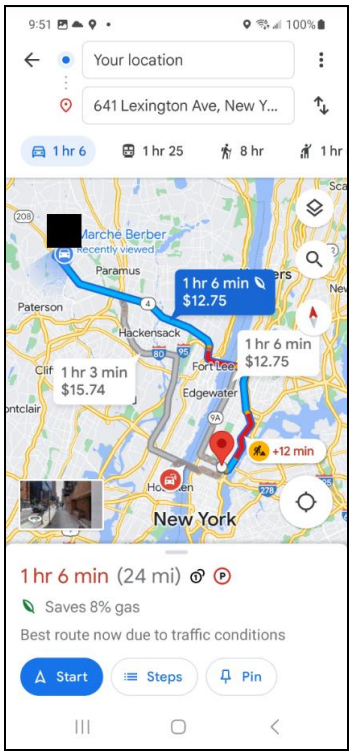
120. On information and belief, Google Maps is preinstalled on at least Samsung phones and tablets.

121. After each such Samsung phone and tablet requests access to the first location of the first wireless device, each such phone and tablet is operable to provide a display screen that includes a map provided from a perspective of the Samsung phone or tablet, respectively. E.g.:



Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of a map from the perspective of the Samsung Galaxy S23 phone, where the location of the phone ("Your location") is marked with a blue spot on the map in the top left portion of the display).

122. Each of the '218 Accused Products is also operable to provide on such a display screen indicia on said map representative of said first location, indicia on said map representative of a second user according to a second location obtained from a second wireless device, a distance from said wireless telephonic device to said first location, a compass, an address of said first location, and a travel time based on at least the first location and the location of said wireless telephonic device. E.g.:



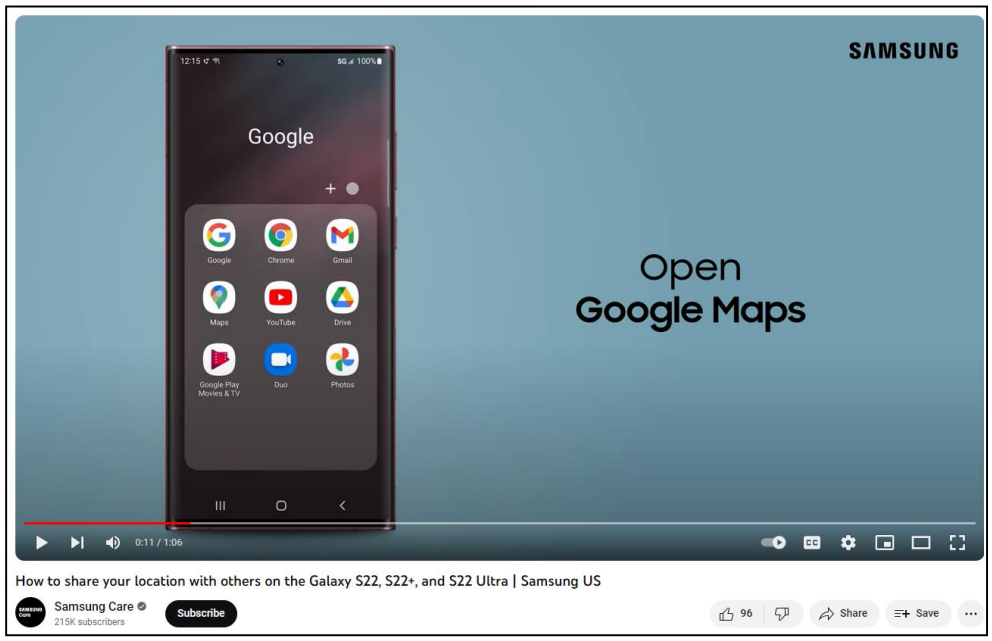
Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of (i) indicia on a map representative of said first location (identified as the destination point of the travel route); (ii) indicia on said map representative of a second user according to a second location obtained from a second wireless device (identified as the location marker redacted by a black square box in the top left portion of the display , on top of the blue spot that reflects the location of the Galaxy S23 phone); (iii) a distance from the Galaxy S23 phone to said first location ("24 mi[les]"); (iv) a compass (shown towards the right-middle edge of the display); (v) an address of said first location ("641 Lexington Ave …"); and (vi) a travel time based on at least the first location and the location of said wireless telephonic device (e.g., "1 hr 6 min")).

123. Samsung also has and continues to indirectly infringe the '218 Patent by actively inducing and contributing to the infringement of the '218 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung has possessed knowledge of the '218 Patent and of its infringement thereof both before and after the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

124. On information and belief, Samsung has and continues to specifically induce and intend that others, such as customers, resellers, and retailers, infringe the '218 Patent by, for

example, using or selling the ’218 Accused Products, and has and continues to know that such others perform acts that constitute direct infringement. For example, Samsung has and continues to provide instructions to its customers regarding the infringing use and operation of the ’218 Accused Products. When others have and continue to follow such instructions, they directly infringe one or more claims of the ’218 Patent. By providing such instructions, Samsung has and continues to know and intend that others follow such instructions, and thereby directly infringe one or more claims of the ’218 Patent. Thus, Samsung has and continues to know that its actions actively induce infringement by others.

125. For example, Samsung has and continues to instruct end users how to open and use Google Maps, for example, to find one’s family and friends on a map. E.g.:[39,40]

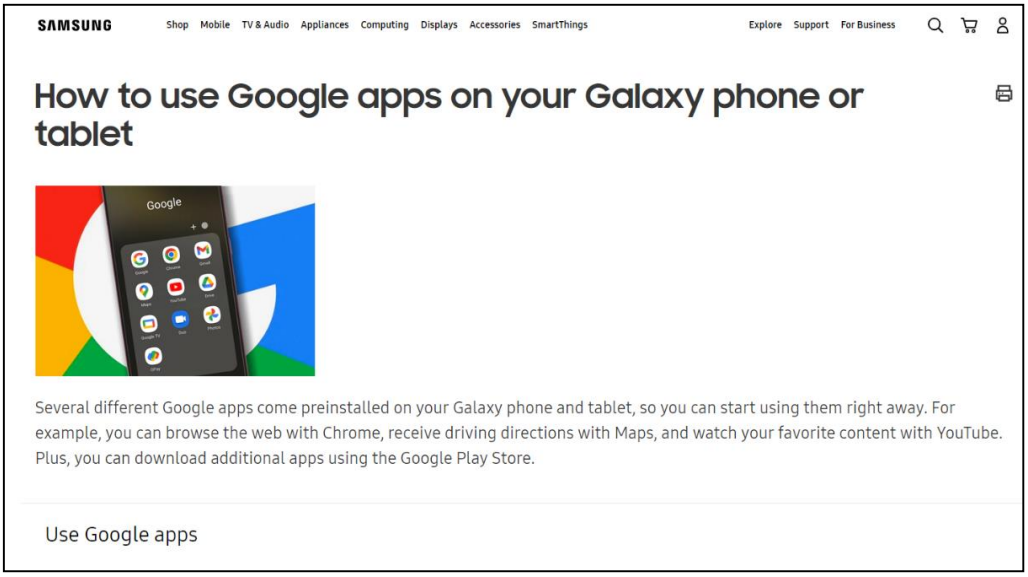


…

[39] https://www.youtube.com/watch?app=desktop&v=wjXDjjPdGb0.

[40] https://r2.community.samsung.com/t5/Tech-Talk/How-to-Find-Your-Family-and-Friends-Using-Google-Maps/td-p/7430575.

126. As another example, Samsung has and continues to directly hyperlink from Samsung's description of Google Maps on Samsung's website to Google's website pages that provide further instructions on how end users can utilize Google Maps, for example, for location sharing via a map and obtaining directions. E.g.:[41,42]



. . .

[41] https://www.samsung.com/us/support/answer/ANS00089082/.

[42] https://support.google.com/maps#topic=3092425; see also https://support.google.com/maps/answer/7326816?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA ("Share your real-time location with others"); https://support.google.com/maps/answer/11966807?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA ("Get Location Sharing notifications").

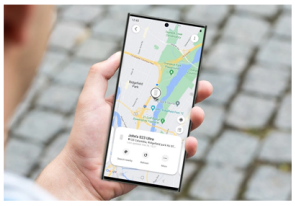
Use Google Maps with friends

Share your real-time location with others
Show others where you are with iMessage
Create a list of places
Find & share a location using Plus Codes
Discover new places & experiences
Send messages directly to businesses
Play Snake in Google Maps
Get Location Sharing notifications

127. As another example, Samsung has and continues to induce end users to use Google Maps to obtain directions to other users by way of Samsung specifically programming into the Samsung SmartThings Find application an option to "Navigate" to another user, selection of which launches the Google Maps application to provide such directions. E.g.:[43]

SAMSUNG Shop Mobile TV & Audio Appliances Computing Displays Accessories SmartThings Explore Support For Business

Use SmartThings Find with the SmartThings app



With all the devices we own these days, it's easy to accidentally misplace one or two. Luckily, SmartThings Find in the SmartThings app will help you locate your precious devices, like your phone, tablet, earbuds, and watch. SmartThings Find will scan for your devices and even show you a map with detailed information, including addresses and timestamps. You can also share device information with other Galaxy users so a friend can locate a device for you, or turn on the Offline finding feature. If you need additional tracking options, you can use the Samsung SmartTag as well.

...

- **Navigate:** Open Google Maps Navigation to generate the fastest route to your device. This option may not be available if the device cannot be located. You may need to tap **More**, and then tap **Navigate**.

128. Samsung also has and continues to contribute to the direct infringement of the '218 Patent by others because the location-based technologies of the '218 Accused Products have no

[43] E.g., https://www.samsung.com/us/support/answer/ANS00088182/.

substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’218 Accused Products and not infringe the ’218 Patent. Samsung contributes to the direct infringement of the ’218 Patent when, for example, Samsung causes or instructs end users to download updates to the programming on the ’218 Accused Products that, together with such products’ hardware and/or other software, infringes the ’218 Patent.

129. Plaintiff has and continues to suffer damages as a result of Samsung’s infringement of the ’218 Patent in an amount to be proved at trial.

130. On information and belief, Samsung’s infringement of the ’218 Patent has and continues to be willful.

131. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’218 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

COUNT V
INFRINGEMENT OF U.S. PATENT NO. 11,096,039

132. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

133. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products that embody the inventions of the ’039 Patent.

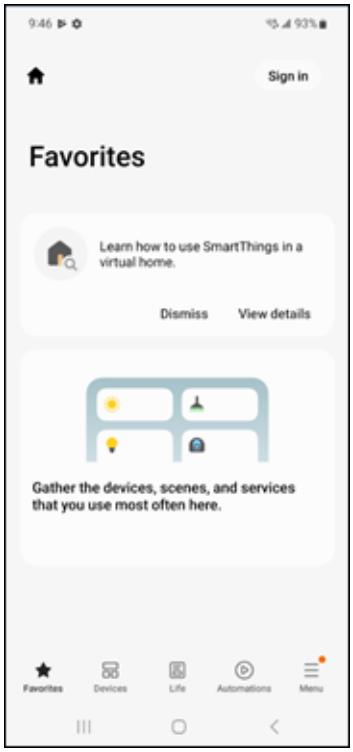
134. Samsung has and continues to directly infringe the ’039 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using (e.g., testing), offering to sell, selling, exporting from, and/or importing into the United States products, including server systems, that satisfy each and every limitation of one or more

claims of the ’039 Patent (the “’039 Accused Products”).

135. Samsung has and continues to directly infringe one or more claims of the ’039 Patent including, for example, at least claims 1, 4, 7, 8, 9, and 13 of the ’039 Patent. For example, on information and belief, Samsung has and continues to directly infringe claim 1 of the ’039 Patent by making, using, offering to sell, selling, and/or importing into the United States the ’039 Accused Products, each of which comprises a remote system that allows Samsung phones and tablets to access location-based services and features. As another example, on information and belief, Samsung demonstrates and/or tests at least Samsung phones and/or tablets in the United States, which, in turn, puts into use the ’039 Accused Products that provide location-based services and features.[44]

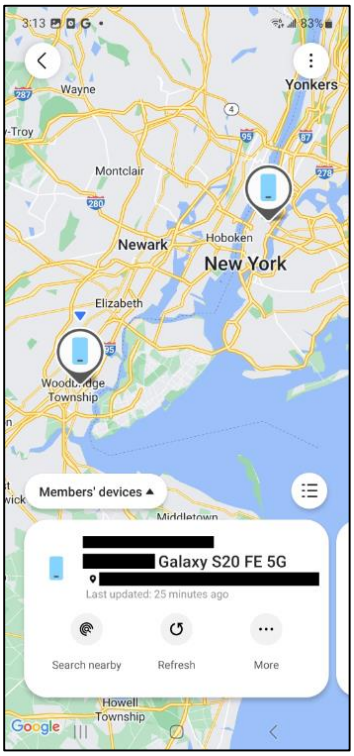
136. Each of the ’039 Accused Products comprises a remote system, wherein user information is operable to be identified from a plurality of different user information by receiving at least a manually entered login from a first wireless device associated with said user information and a manually entered password associated with said login. For example, the ’039 Accused Products are operable to receive from each Samsung phone and tablet programmed with Samsung SmartThings Find a user’s manually input login as well as a manually input password in order to identify such device for location sharing. E.g.:

[44] E.g., https://www.zdnet.com/article/how-samsung-tests-its-smartphones-and-hopes-to-win-back-trust/ (noting that “Our [Samsung] phones are extensively tested, retested, and then tested again.”).



Samsung A54 phone (Screen shot showing that a user must "Sign in" (using a login and password) to access location-based features of Samsung SmartThings Find).

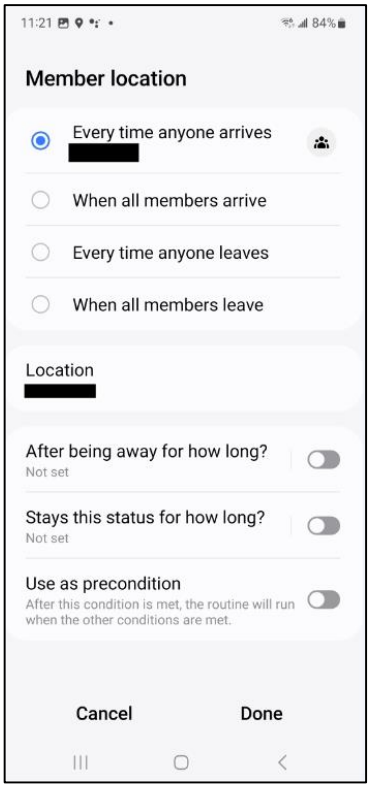
137. Each of the '039 Accused Products is operable to record a location of said first wireless device after said user information has been identified on said first wireless device and said location is associated with said user information and provided by said first wireless device to said remote system. For example, each of the '039 Accused Products is capable of obtaining and recording a location of a Samsung phone or tablet from the phone or tablet, and of providing to the Samsung phone or tablet the location of another wireless telephone. E.g.:



Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of a first user's location (redacted Galaxy S20 FE 5G identified on left side of image as an icon depicting a wireless telephone) obtained from a remote system).

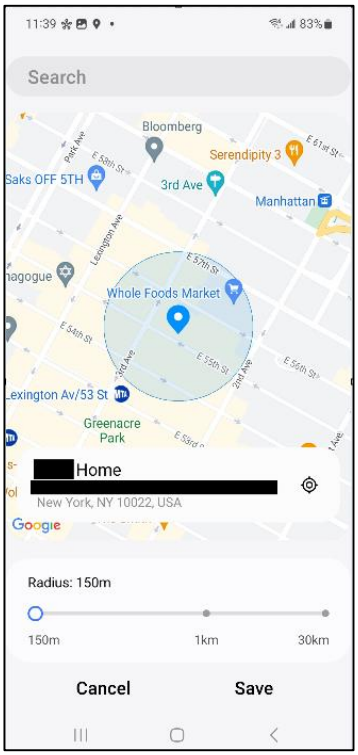
138. Each of the '039 Accused Products is operable to provide a location-based event based, at least in part, on said location of said first wireless device, wherein said location-based event is operable to be manually pre-selected from a list of at least three types of location-based events on a device, and a location-based event notification is operable to be provided on said device as a result of, at least in part, location access rights of said device from said first wireless device. For example, each Samsung phone and tablet programmed with SmartThings Find is capable of displaying selectable location-based events, including at least events corresponding to whether the first wireless device such as another Samsung phone or tablet (i) arrives at a location, (ii) leaves a location, (iii) is one of multiple member devices that all have arrived at a location, and (iv) is one of multiple member devices that all have left a location. The '039 Accused Products transmit

alerts to a Samsung phone or table in response to the user of such phone or tablet setting such events in Samsung SmartThings Find. E.g.:



Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of selectable location-based events that are based on the location of another member's wireless device).

139. Each of the '039 Accused Products is operable to provide at least three types of location-based events, wherein a first one of said at least three types of location-based events is, at least in part, region-based, and a second one of said at least three types of location-based events is, at least in part, distance-based. For example, the '039 Accused Products are operable to provide location-based events as a result of user selection of options displayed on Samsung phones and tablets via Samsung SmartThings Find, including with regard to events (i) – (iv) enumerated above. Each of the events (i) – (iv) enumerated above is, at least in part, region based including because each corresponding location can be defined as an area. E.g.:



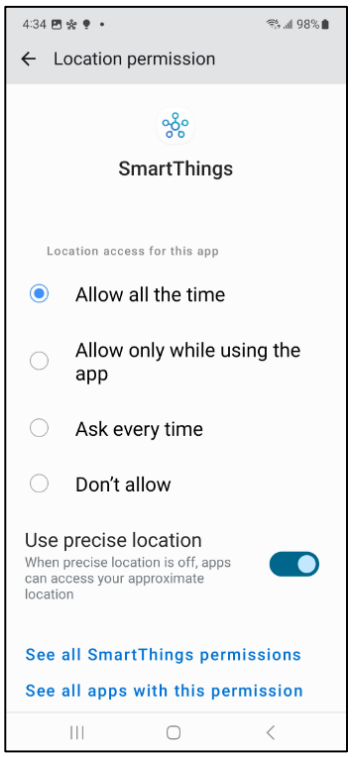
Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of a selectable location for region-based notification).

140. At least the Samsung SmartThings Find above-enumerated event (iii) corresponding to the device being one of multiple member devices that all have arrived at a location is, at least in part, distance based including because it relates to the distance between the member devices in Samsung SmartThings Find, including both the wireless device that set the notification and the first wireless device. Such a notification indicates that all member devices are at the same location, which means that there is no distance between the wireless device that set the notification and the first wireless device.

141. All of the above-enumerated events (i)-(iv) for Samsung SmartThings Find are also, at least in part, distance-based including because each corresponding location is defined as having a radius corresponding to a specific distance. As identified in the screen shot above, the user can

adjust the radius from "150m" (meters) to "30km" (kilometers) which means that the notification can be triggered when a device is within a specific distance (150m – 30km) of a center point.

142. In addition, all of the above-enumerated events (i)-(iv) for Samsung SmartThings Find are, at least in part, distance-based including because each corresponding location can be defined as having a customizable distance that it occupies, including either a precise location or an approximate location. E.g.:



Samsung A54 phone (Screen shot showing the display of location permissions for SmartThings Find, including whether to "[u]se precise location" or "approximate location").

143. Samsung also has and continues to indirectly infringe the '039 Patent, including at least claims 1, 4, 7, 8, 9, and 13 of the '039 Patent, by actively inducing and contributing to the infringement of at least such claims of the '039 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung has possessed knowledge of the '039 Patent and of its infringement thereof both before and after the filing of the present Complaint for at least

the reasons described above in paragraphs 9-18.

144. On information and belief, Samsung has and continues to specifically induce and intend that others, such as customers, resellers, and retailers, infringe the '039 Patent by, for example, using or selling the '039 Accused Products, and has and continues to know that such others perform acts that constitute direct infringement. For example, Samsung has and continues to provide instructions to its customers regarding the infringing use and operation of the '039 Accused Products. When others have and continue to follow such instructions, they have and continue to directly infringe one or more claims of the '039 Patent. By providing such instructions, Samsung has and continues to know and intend that others follow such instructions, and thereby directly infringe one or more claims of the '039 Patent. Thus, Samsung has and continues to know that its actions actively induce infringement by others.

145. For example, Samsung has instructed end users how to open and use Samsung SmartThings Find, for example, for location sharing with other users.[45]

146. As another example, Samsung has and continues to instruct end users how to open and use Google Maps, for example, to find one's family and friends on a map.[46]

147. As another example, Samsung has and continues to directly hyperlink from Samsung's description of Google Maps on Samsung's website[47] to Google's website pages that provide further instructions on how end users can utilize Google Maps, for example, for location

[45] https://smartthingsfind.samsung.com/login?result=true.

[46] https://www.youtube.com/watch?app=desktop&v=wjXDjjPdGb0; see also https://r2.community.samsung.com/t5/Tech-Talk/How-to-Find-Your-Family-and-Friends-Using-Google-Maps/td-p/7430575.

[47] https://www.samsung.com/us/support/answer/ANS00089082/.

sharing via a map, directions, and notifications.[48]

148. Samsung also has and continues to contribute to the direct infringement of the ’039 Patent by others because the location-based technologies of the ’039 Accused Products have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’039 Accused Products and not infringe the ’039 Patent. Samsung contributes to the direct infringement of the ’039 Patent when, for example, Samsung causes or instructs end users to download updates to the programming on at least Samsung phones and tablets, and to use such programming, in a manner that results in infringement of the ’039 Patent. Samsung also contributes to the direct infringement of the ’039 Patent when, for example, Samsung provides updates to the programming on the ’039 Accused Products that, together with such products’ hardware and/or other software, infringes the ’039 Patent.

149. Plaintiff has and continues to suffer damages as a result of Samsung’s infringement of the ’039 Patent in an amount to be proved at trial.

150. On information and belief, Samsung’s infringement of the ’039 Patent has and continues to be willful.

151. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’039 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

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[48] https://support.google.com/maps#topic=3092425; see also https://support.google.com/maps/answer/7326816?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (“Share your real-time location with others”); https://support.google.com/maps/answer/11966807?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (“Get Location Sharing notifications”).

COUNT VI
INFRINGEMENT OF U.S. PATENT NO. 9,635,540

152. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

153. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the ’540 Patent.

154. Samsung has directly infringed the ’540 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the ’540 Patent.

155. On information and belief, Samsung’s infringement of the ’540 Patent includes Samsung’s performance of processes or methods in connection with providing location-based services and features to Samsung end-user devices including phones and tablets, and each of which includes a method of mobile-to-mobile locating (the “’540 Accused Processes”).

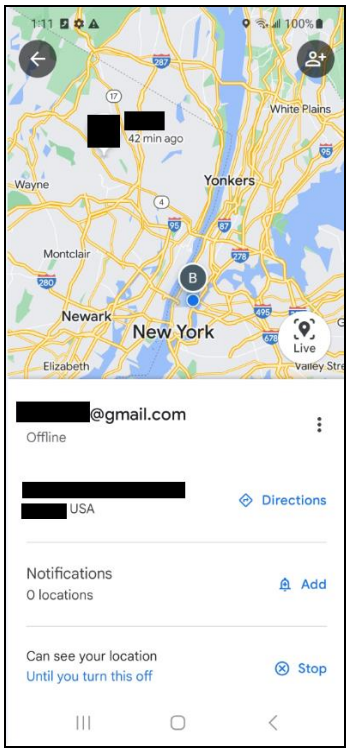
156. Samsung has directly infringed one or more claims of the ’540 Patent including, for example, at least claim 1 of the ’540 Patent. For example, on information and belief, Samsung has operated, demonstrated, and/or tested at least Samsung phones, tablets, and/or servers in the United States, which, in turn, has put into use the ’540 Accused Processes that provide location-based services in a manner that infringes the ’540 Patent.[49] On information and belief, all steps of the asserted claims have been performed by or have been attributable to Samsung.

157. Each of the ’540 Accused Processes comprises requesting a location of a first wireless device by a second wireless device from a server located remotely from said first and

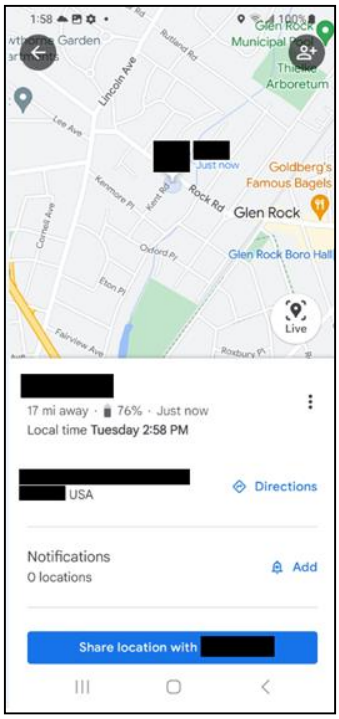
[49] E.g., https://www.zdnet.com/article/how-samsung-tests-its-smartphones-and-hopes-to-win-back-trust/.

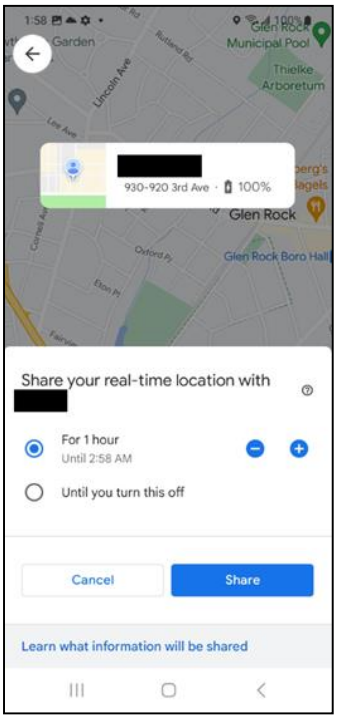
second wireless devices. For example, in connection with the use of Samsung phones and tablets, each of which is a wireless device, each such Samsung phone or tablet is capable of requesting a location of a first wireless device from a remote server system when, for example, a user of the Samsung phone or tablet accesses the Google Maps application. Each Samsung phone or tablet will request the location of another device when, for example, the user of the Samsung device had previously been granted access rights to receive the location for the other device. The remote server system, in turn, requests a location of a first wireless device (e.g., Samsung phone or tablet), for example, by retrieving such location from server system memory or storage, in order to provide such location to a second wireless device (e.g., another Samsung phone or tablet) that requests such location.

158. Each of the ’540 Accused Processes comprises determining that said second wireless device does not have location access rights for said first wireless device, and asking said second wireless device if said location access rights are to be requested from said first wireless device after determining that said second wireless device does not have said location access rights for said first wireless device. For example, each Samsung phone and tablet programmed with Google Maps is capable of displaying an option to request location access rights from the first wireless device when, for example, a user of the phone or tablet has shared its location with the first wireless device and it is determined that either the first wireless device has not yet provided reciprocal location access rights or the first wireless device has revoked the second wireless device’s location access rights (e.g., by selecting an option to “Stop” sharing or because prior sharing was only enabled for a specific period of time such as “For 1 hour” and that period of time had passed). E.g.:

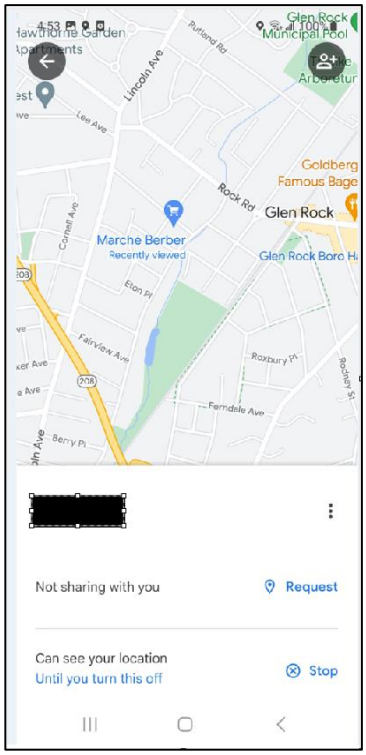


Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of an option to "Stop" sharing a location with a second wireless device).





Samsung Galaxy S23 (Redacted screen shots showing the capability to assign in Google Maps location access rights – left: "Share location with [Redacted]"; right: "Share your real-time location" with the other user "For 1 hour" or "Until you turn this off").

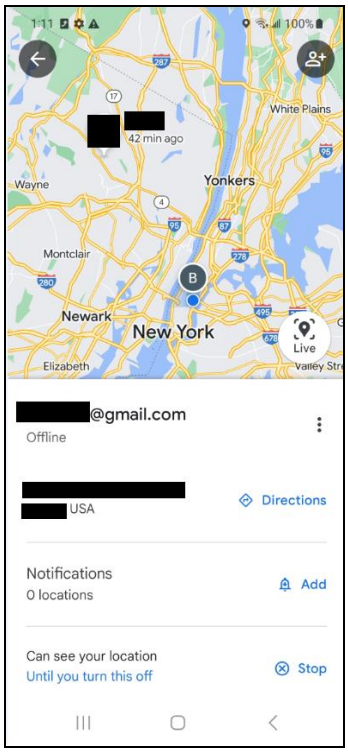


Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of an option ("Request") to request location access rights from a wireless device for which the Samsung Galaxy S23 phone does not presently possess location access rights).

159. Each of the '540 Accused Processes comprises requesting that said location access rights be assigned for said second wireless device by said first wireless device, assigning said location access rights on said server to said second wireless device by said first wireless device, and storing said location access rights on said server. For example, as identified above, each Samsung phone and tablet programmed with Google Maps includes an option to request location access rights from a wireless device ("Request"). When a user of the first wireless device assigns location access rights to the second wireless device by sharing the first wireless device's location with the second wireless device, the remote server system also, in turn, assigns location access

rights for the first wireless device to the second wireless device and stores said location access rights on said server.

160. Each of the ’540 Accused Processes comprises determining said access rights assigned by said first wireless device to said second wireless device on said server, and providing said location from said server to said second wireless device dependent upon said access rights. Each Samsung phone and tablet communicates with the remote server system in order to determine whether said Samsung phone or tablet has location access rights for the first wireless device before a location of the first wireless device can be provided to the Samsung phone or tablet. The remote server system provides, and the Samsung phone or tablet receives, said location after a user of the first wireless device authorizes the Samsung phone or tablet to access the first wireless device’s location. E.g.:



Samsung Galaxy S23 (Redacted screen shot showing the display in Google Maps of the locations of two other devices, namely, one identified with a redacted black square and another identified as “B”).

161. Samsung has also indirectly infringed the ’540 Patent by actively inducing and contributing to the infringement of the ’540 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung had knowledge of the ’540 Patent and of its infringement thereof before the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

162. On information and belief, Samsung has specifically induced and intended others, such as customers, resellers, and retailers, to infringe the ’540 Patent by, for example, using the ’540 Accused Processes, and knew that such others perform acts that constituted direct infringement. For example, Samsung has provided instructions to its customers regarding the infringing use and operation of the ’540 Accused Processes. When others have followed such instructions, they have directly infringed one or more claims of the ’540 Patent. By providing such instructions, Samsung knew and intended that others would follow such instructions, and thereby directly infringe one or more claims of the ’540 Patent. Thus, Samsung knew that its actions actively induced infringement by others.

163. For example, Samsung has instructed end users how to open and use Google Maps, for example, to find one’s family and friends.[50]

164. As another example, Samsung has directly hyperlinked from Samsung’s description of Google Maps on Samsung’s website[51] to Google’s website pages that provide further instructions on how end users can utilize Google Maps, for example, for location sharing,

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[50] https://www.youtube.com/watch?app=desktop&v=wjXDjjPdGb0; see also https://r2.community.samsung.com/t5/Tech-Talk/How-to-Find-Your-Family-and-Friends-Using-Google-Maps/td-p/7430575.

[51] https://www.samsung.com/us/support/answer/ANS00089082/.

directions, and notifications.[52]

165. Samsung has also contributed to the direct infringement of the ’540 Patent by others because the location-based technologies of the ’540 Accused Processes have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’540 Accused Processes and not infringe the ’540 Patent. Samsung contributes to the direct infringement of the ’540 Patent when, for example, Samsung causes or instructs others to download updates to the programming on at least Samsung phones, tablets, and/or servers, and to use such programming, in a manner that results in infringement of the ’540 Patent by putting the ’540 Accused Processes into use.

166. Plaintiff has suffered damages as a result of Samsung’s infringement of the ’540 Patent in an amount to be proved at trial.

167. On information and belief, Samsung’s infringement of the ’540 Patent has been willful.

168. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’540 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

COUNT VII
INFRINGEMENT OF U.S. PATENT NO. 9,204,283

169. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

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[52] https://support.google.com/maps#topic=3092425; see also https://support.google.com/maps/answer/7326816?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (“Share your real-time location with others”); https://support.google.com/maps/answer/11966807?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (“Get Location Sharing notifications”).

170. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the '283 Patent.

171. Samsung has and continues to directly infringe the '283 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the '283 Patent.

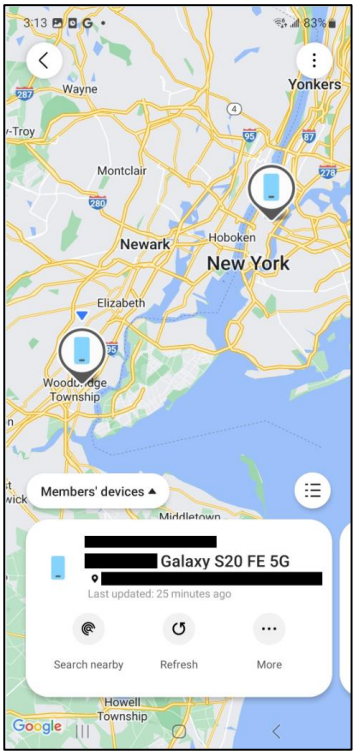
172. On information and belief, Samsung's infringement of the '283 Patent includes Samsung's performance of processes or methods in connection with providing location-based services and features to Samsung end-user devices including phones and tablets, and each of which includes a method of mobile-to-mobile locating (the "'283 Accused Processes").

173. Samsung has and continues to directly infringe one or more claims of the '283 Patent including, for example, at least claims 1, 2, 6, 8, 9, 13, 15, 16, and 17 of the '283 Patent. For example, on information and belief, Samsung demonstrates and/or tests at least Samsung phones and/or tablets in the United States, which, in turn, puts into use the '283 Accused Processes that provide location-based services and features in a manner that infringes the '283 Patent.[53] As another example, on information and belief, Samsung operates, demonstrates, and/or tests Samsung servers in the United States, which, in turn, puts into use the '283 Accused Processes in a manner that infringes the '283 Patent. On information and belief, all steps of the asserted claims are performed by or attributable to Samsung.

[53] E.g., https://www.zdnet.com/article/how-samsung-tests-its-smartphones-and-hopes-to-win-back-trust/.

174. Each of the ’283 Accused Processes comprises displaying on a first wireless telephonic device a plurality of users, wherein each one of said plurality of users is associated to a different one of a plurality of wireless telephonic devices.

175. For example, each Samsung phone and tablet is a first wireless telephonic device programmed with the location-based services and features of Samsung SmartThings Find including the capability to display the locations of other users. A remote server system provides such location information for display on the first wireless telephonic device in response to, for example, a user of the first wireless telephonic device accessing Samsung SmartThings Find. E.g.:



Samsung A54 phone (Redacted screen shot showing the display of a plurality of users, each of which is associated to a different one of a plurality of wireless telephonic devices).

176. Each of the ’283 Accused Processes comprises receiving on said first wireless telephonic device a first manual input in a form of a selection of one of said plurality of users. For example, each Samsung phone and tablet programmed with the location-based services and

features of Samsung SmartThings Find, including the capability to display the locations of other users, includes the capability to display the locations of such other users in a manner such that each of such other users can be manually selected by a user of the Samsung phone or tablet. See e.g., the Samsung SmartThings Find screen shot provided above, in which each other user displayed on the Samsung phone is capable of being selected by manual input.

177. Each of the '283 Accused Processes comprises receiving on said first wireless telephonic device an input in a form of a login and a second manual input in a form of a password. For example, each Samsung phone or tablet programmed with Samsung SmartThings Find requires a user of the device to manually input, and for the Samsung phone or tablet to receive, a login as well as a password, which are, in turn, received by a remote server system for use in identifying the Samsung phone or tablet.[54]

178. Each of the '283 Accused Processes comprises determining whether to allow access of location information for said one of said plurality of wireless telephonic devices associated to said selected one of said plurality of users, wherein said determination includes identifying said user of said first wireless telephonic device from said plurality of users using said login and determining said password is associated with said login and determining whether said selected one of said plurality of users has provided access rights for said location information to said user of said first wireless telephonic device, and said first wireless telephonic device is operable to assign location access rights to said one of said plurality of wireless telephonic devices associated with said selected one of said plurality of users for obtaining a location of said first wireless telephonic

[54] E.g., https://www.samsung.com/us/support/troubleshooting/TSG01110304/#:~:text=The%20SmartThings%20app%20uses%20your,the%20account%20from%20the%20app. ("The SmartThings app uses your Samsung account credentials. To create an account, you simply need to sign in with your Samsung account.").

device. For example, a remote server system receives the foregoing login and password and determines on the basis of such information whether the device that provided such information is authorized to access location information corresponding to other devices.[55] Each user device is operable to assign location access rights to other devices.[56] According to such defined location access rights, the remote server system only permits specific authenticated users associated with specific logins and passwords to access other devices' location information.[57]

179. Each of the '283 Accused Processes comprises transmitting said location information from a server to said first wireless telephonic device, and displaying said location information on said first wireless device. For example, after the remote server system determines that the selected one of the plurality of users has provided access rights for the location information that permit the first wireless telephonic device to access such location information, the remote server system transmits the location information to the first wireless telephonic device and continues to do so in order to provide location updates for display on said first wireless telephonic device (see e.g. *supra*, showing on a Samsung mobile device programmed with Samsung SmartThings Find the display on a map of a location of another user's device).

180. Samsung also has and continues to indirectly infringe the '283 Patent, including at least claims 1, 2, 6, 8, 9, 13, 15, 16, and 17 of the '283 Patent, by actively inducing and contributing to the infringement of at least such claims of the '283 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung has possessed knowledge of the '283

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[55] *Id.*

[56] E.g., https://support.smartthings.com/hc/en-us/articles/360051931312-Share-Control-of-your-Smart-Devices- (referring to the ability to grant, or remove, access rights of others in Samsung SmartThings Find).

[57] *Id.*

Patent and of its infringement thereof both before and after the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

181. On information and belief, Samsung has and continues to specifically induce and intended that others, such as customers, resellers, and retailers, infringe the '283 Patent by, for example, using the '283 Accused Processes, and has and continues to know that such others perform acts that constitute direct infringement. For example, Samsung has and continues to provide instructions to its customers regarding the infringing use and operation of the '283 Accused Processes. When others have and continue to follow such instructions, they have and continue to directly infringe one or more claims of the '283 Patent. By providing such instructions, Samsung has and continues to know and intend that others will follow such instructions, and thereby directly infringe one or more claims of the '283 Patent. Thus, Samsung has and continues to know that its actions actively induce infringement by others.

182. For example, Samsung has and continues to instruct end users how to open and use Samsung SmartThings Find, for example, for location sharing with others.[58]

183. As another example, Samsung has and continues to instruct end users how to open and use Google Maps, for example, to find one's family and friends.[59]

184. As another example, Samsung has and continues to directly hyperlink from Samsung's description of Google Maps on Samsung's website[60] to Google's website pages that provide further instructions on how end users can utilize Google Maps, for example, for location

[58] https://smartthingsfind.samsung.com/login?result=true.

[59] https://www.youtube.com/watch?app=desktop&v=wjXDjjPdGb0; see also https://r2.community.samsung.com/t5/Tech-Talk/How-to-Find-Your-Family-and-Friends-Using-Google-Maps/td-p/7430575.

[60] https://www.samsung.com/us/support/answer/ANS00089082/.

sharing, directions, and notifications.[61]

185. Samsung also has and continues to contribute to the direct infringement of the ’283 Patent by others because the location-based technologies of the ’283 Accused Processes have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’283 Accused Processes and not infringe the ’283 Patent. Samsung contributes to the direct infringement of the ’283 Patent when, for example, Samsung causes or instructs others to download updates to the programming on at least Samsung phones, tablets, and/or servers, and to use such programming, in a manner that results in infringement of the ’283 Patent by putting the ’283 Accused Processes into use.

186. Plaintiff has and continues to suffer damages as a result of Samsung’s infringement of the ’283 Patent in an amount to be proved at trial.

187. On information and belief, Samsung’s infringement of the ’283 Patent has and continues to be willful.

188. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’283 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

COUNT VIII
INFRINGEMENT OF U.S. PATENT NO. 8,374,575

189. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

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[61] https://support.google.com/maps#topic=3092425; see also https://support.google.com/maps/answer/7326816?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (Share your real-time location with others); https://support.google.com/maps/answer/11966807?hl=en&ref_topic=7301134&sjid=16018432753100644351-NA (Get Location Sharing notifications).

190. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products, or to perform any processes or methods, that embody the inventions of the ’575 Patent.

191. Samsung has directly infringed the ’575 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by performing processes or methods that satisfy each and every limitation of one or more claims of the ’575 Patent.

192. On information and belief, Samsung’s infringement the ’575 Patent includes Samsung’s performance of processes or methods in connection with providing location-based services and features to Samsung end-user devices including phones and tablets, and each of which includes a method of mobile-to-mobile locating (the “’575 Accused Processes”).

193. Samsung has directly infringed one or more claims of the ’575 Patent including, for example, at least claim 30 of the ’575 Patent. For example, on information and belief, Samsung has operated, demonstrated and/or tested at least Samsung phones, tablets, and/or servers in the United States, which, in turn, has put into use the ’575 Accused Processes that provide location-based services and features in a manner that infringes the ’575 Patent.[62] On information and belief, all steps of the asserted claims have been performed by or have been attributable to Samsung.

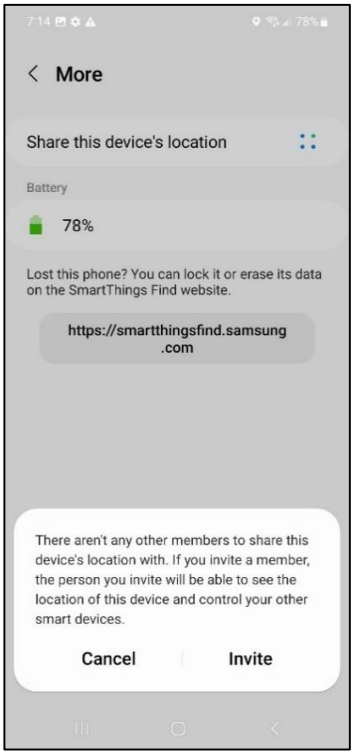
194. Each of the ’575 Accused Processes comprises obtaining a location of a first wireless telephone. For example, each Samsung phones and tablets is a wireless telephone. Samsung phones and tablets are capable of obtaining a location of the phone or tablet using a global positioning system. As another example, Samsung phones and tablets are capable of determining a location of the phone or tablet on the basis of, for example, Wi-Fi signals in the

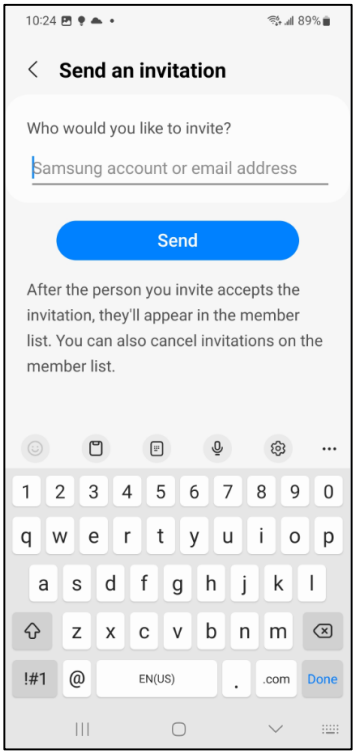
[62] E.g., https://www.zdnet.com/article/how-samsung-tests-its-smartphones-and-hopes-to-win-back-trust/.

vicinity of the phone or tablet. Each Samsung phone and tablet is capable of providing the location of the phone or tablet to a remote server system.

195. Each of the ’575 Accused Processes comprises changing, at the direction of said first wireless telephone, a list of users on a remote server for a profile associated with said first wireless telephone that are allowed to access said location, wherein each user of said list of users is representative of one of a plurality of wireless telephones.

196. For example, each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find includes options to add and/or remove individuals who can access the phone’s or tablet’s location from a remote server. Such options, when selected, instruct such server to change in a profile associated with the device a list of users authorized to view the device’s location data, where each such authorized user is associated with a wireless telephone (e.g., phone or tablet). E.g.:





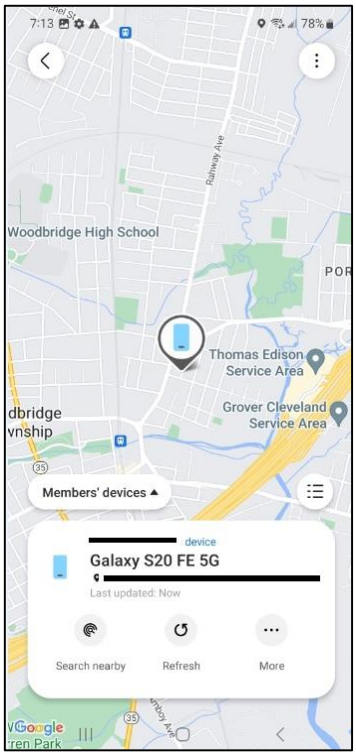
Samsung A54 phone (Screen shots showing the ability to assign to another user of a wireless telephone in Samsung SmartThings Find location access rights to see the A54 phone's location).

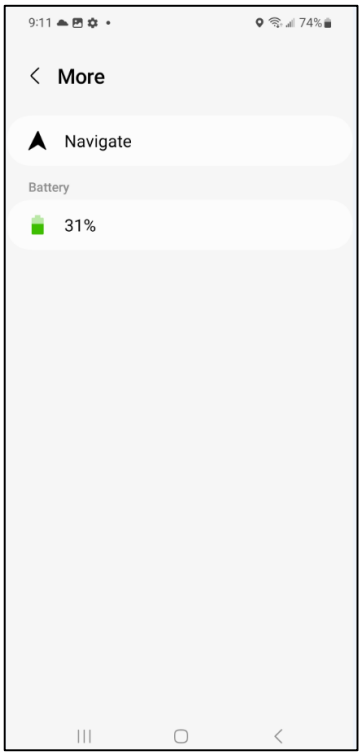
197. Each of the '575 Accused Processes comprises transmitting said location from said remote server to at least one of said users of said list of users. For example, the remote server system is capable of transmitting the location of a Samsung phone or tablet to at least one of the users of the list of users that are authorized to access the location of the phone or tablet.

198. Each of the '575 Accused Processes comprises determining a second location associated with one of said plurality of wireless telephones. For example, a remote server system determines the location of each Samsung phone or tablet for which location sharing is enabled in Samsung SmartThings Find.

199. Each of the '575 Accused Processes comprises providing directional information to said one of said plurality of wireless telephones, wherein said directional information is representative of directions between said location and said second location.

200. For example, each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find is capable of displaying the locations of the wireless telephones associated with the device user's friends, and upon selection of one of such wireless telephones, displaying an option to receive and display directions from the location of the phone or tablet to the selected wireless telephone. E.g.:





Samsung A54 phone (Screen shots showing the ability to request in Samsung SmartThings Find that directions between the Samsung A54 phone and another user be received and displayed – left (redacted): selectable other user; right: "Navigate" option which, after being selected, launches a map that includes directions between the Samsung A54 phone and the other user's location).

201. Samsung has also indirectly infringed the '575 Patent by actively inducing and contributing to the infringement of the '575 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung had knowledge of the '575 Patent and of its infringement thereof before the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

202. On information and belief, Samsung has specifically induced and intended others, such as customers, resellers, and retailers, to infringe the '575 Patent by, for example, using the '575 Accused Processes, and knew that such others perform acts that constituted direct infringement. For example, Samsung has provided instructions to its customers regarding the infringing use and operation of the '575 Accused Processes. When others have followed such

instructions, they have directly infringed one or more claims of the ’575 Patent. By providing such instructions, Samsung knew and intended that others would follow such instructions, and thereby directly infringe one or more claims of the ’575 Patent. Thus, Samsung knew that its actions actively induced infringement by others.

203. For example, Samsung has instructed end users how to open and use Samsung SmartThings Find, for example, for location sharing with others.[63]

204. Samsung has also contributed to the direct infringement of the ’575 Patent by others because the location-based technologies of the ’575 Accused Processes have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’575 Accused Processes and not infringe the ’575 Patent. Samsung contributes to the direct infringement of the ’575 Patent when, for example, Samsung causes or instructs others to download updates to the programming on at least Samsung phones, tablets, and/or servers, and to use such programming, in a manner that results in infringement of the ’575 Patent by putting the ’575 Accused Processes into use.

205. Plaintiff has suffered damages as a result of Samsung’s infringement of the ’575 Patent in an amount to be proved at trial.

206. On information and belief, Samsung’s infringement of the ’575 Patent has been willful.

207. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung’s infringement of the ’575 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

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[63] E.g., https://smartthingsfind.samsung.com/login?result=true.

COUNT IX
INFRINGEMENT OF U.S. PATENT NO. 11,246,024

208. Plaintiff references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

209. Plaintiff has not licensed or otherwise authorized Samsung to make, use, offer for sale, sell, export, or import any products that embody the inventions of the ’024 Patent.

210. Samsung has directly infringed the ’024 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, exporting from, and/or importing into the United States products, including server systems, that satisfy each and every limitation of one or more claims of the ’024 Patent (the “’024 Accused Products”).

211. Samsung has directly infringed one or more claims of the ’024 Patent including, for example, at least claim 24 of the ’039 Patent. For example, on information and belief, Samsung has directly infringed claim 24 of the ’024 Patent by making, using, offering to sell, selling, and/or importing into the United States the ’024 Accused Products, each of which comprises a remote system that allows Samsung phones and tablets to access location-based services and features. As another example, on information and belief, Samsung has operated, demonstrated, and/or tested at least Samsung phones and/or tablets in the United States, which, in turn, has put into use the ’024 Accused Products that provide location-based services and features in a manner that has infringed the ’024 Patent.[64]

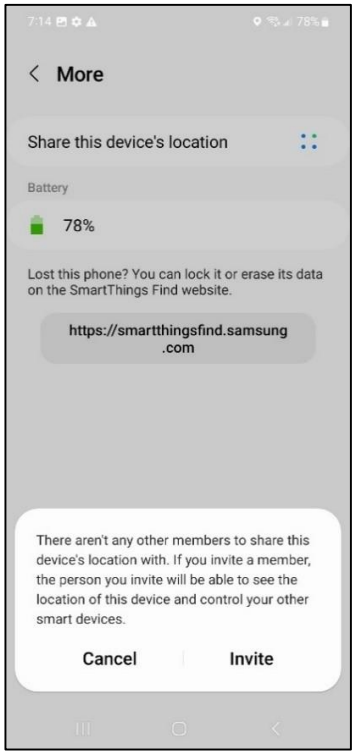
212. Each of the ’024 Accused Products comprises a remote system comprising a server, the remote system capable of communicating with wireless telephones over a communications

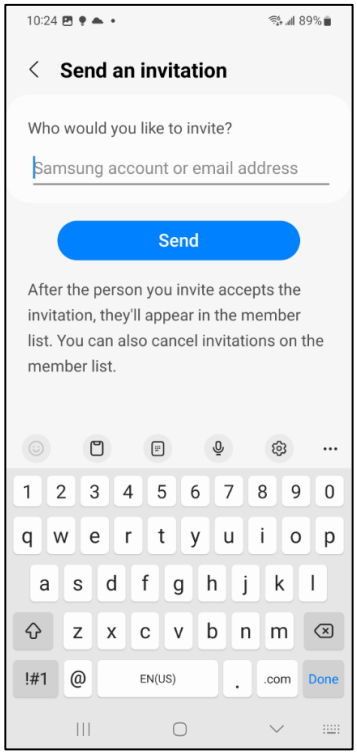
[64] E.g., https://www.zdnet.com/article/how-samsung-tests-its-smartphones-and-hopes-to-win-back-trust/.

network. For example, a remote server system is operable to receive over a communications network a location of each Samsung phone or tablet programmed with Samsung SmartThings Find.

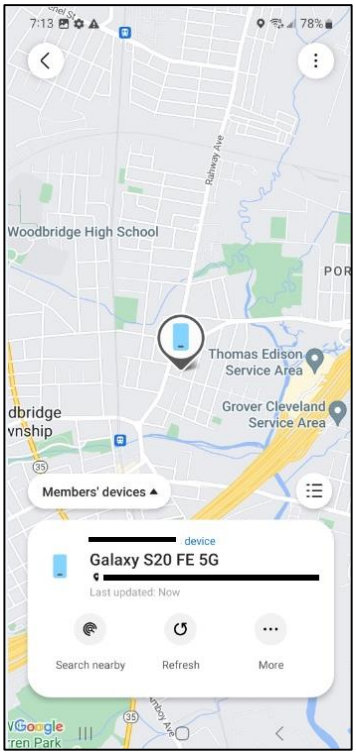
213. Each of the ’024 Accused Products is capable of receiving from a first wireless telephone over said communications network a selection of one of a plurality of users, said selection corresponding to a user of said first wireless telephone manually selecting said one of said plurality of users from a display of said first wireless telephone, wherein each one of said plurality of users is associated to a different one of a plurality of wireless telephones.

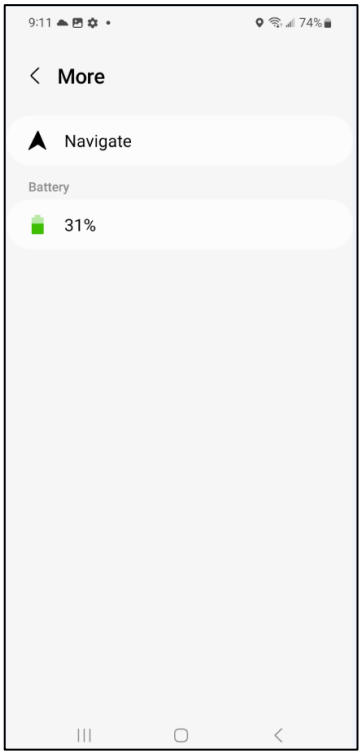
214. For example, each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find includes the capability to display options to select individuals who can access the phone’s or tablet’s location from a remote server system, and/or individuals to which a user of the Samsung phone or tablet wishes to navigate. E.g.:





Samsung A54 phone (Screen shots showing the ability to assign to another user in Samsung SmartThings Find location access rights to allow the other user to see the A54 phone's location).

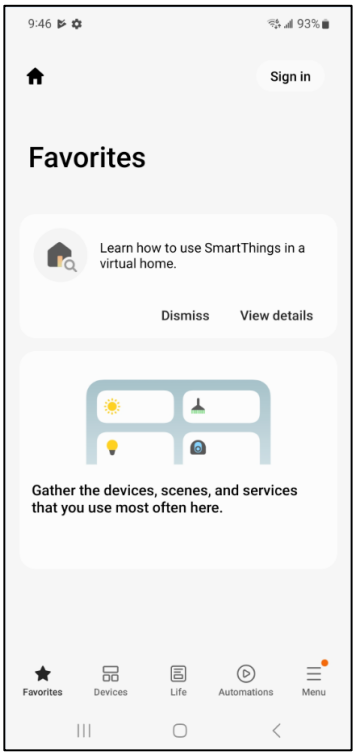




Samsung A54 phone (Screen shots showing the ability in Samsung SmartThings Find to select a another user from a display (left, redacted), after which a "Navigate" option is provided (right) to obtain directions between the Samsung A54 phone and the other user's location).

215. Each of the '024 Accused Products is capable of receiving from said first wireless telephone information indicative of a login and a password.

216. For example, each Samsung phone and tablet programmed with the location-based services and features of Samsung SmartThings Find is capable of receiving an input in a form of a login and a second manual input in a form of a password, and information regarding same is provided to and received by the remote server system. E.g.:



Samsung A54 phone (Screen shot showing that a user must "Sign in" (using a login and password) to access location-based features of Samsung SmartThings Find).

217. Each of the '024 Accused Products is capable of determining whether to allow access of location information for said one of said plurality of wireless telephones associated to said selected one of said plurality of users, wherein said determining includes identifying said user of said first wireless telephone using said information indicative of said login and password and determining whether said selected one of said plurality of users has provided access rights for said location information to said user of said first wireless telephone. For example, each Samsung phone and Samsung tablet programmed with the foregoing location-based services and features is capable of providing information regarding the device user's login and password to a remote server system, which determines on the basis of such information whether the selected one of said plurality of users has provided access rights for said location information to said Samsung phone

or tablet.[65] Only specific authenticated users associated with specific logins and passwords are permitted to access another user's location information.[66]

218. Each of the '024 Accused Products is capable of determining whether said user of said first wireless telephone has assigned location access rights to said one of said plurality of wireless telephones associated with said selected one of said plurality of users for obtaining a location of said first wireless telephone. For example, a user of a Samsung phone or tablet can revoke the location access rights of the one of the plurality of wireless telephones at any time, and/or can provide location access rights to the one of the plurality of wireless telephones for only a specific period of time.[67] Accordingly, before each time that a remote server system provides a location of the first wireless telephone to the one of the plurality of wireless telephones, the remote server system determines whether the user of the first wireless telephone has assigned location access rights to the one of the plurality of wireless telephones.[68]

219. Each of the '024 Accused Products is capable of transmitting over said communications network said location information to said first wireless telephone.

220. For example, when the remote server system determines that the selected one of the plurality of users has provided access rights for the location information, the server system transmits the location information to the first wireless telephone for display in Samsung

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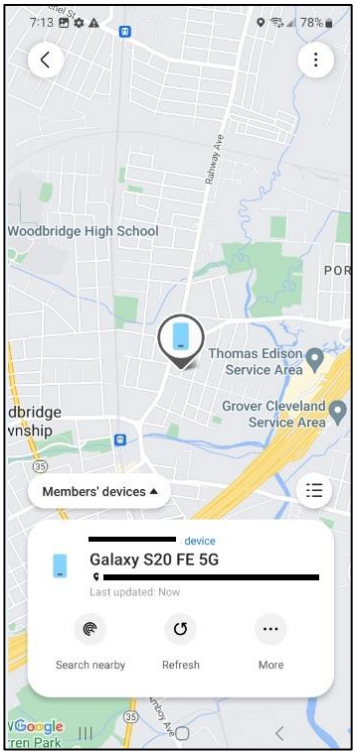
[65] E.g., https://www.samsung.com/us/support/troubleshooting/TSG01110304/#:~:text=The%20SmartThings%20app%20uses%20your,the%20account%20from%20the%20app. ("The SmartThings app uses your Samsung account credentials. To create an account, you simply need to sign in with your Samsung account. To log out, you will need to remove the account from the app.").

[66] *Id.*

[67] E.g., https://support.smartthings.com/hc/en-us/articles/360051931312-Share-Control-of-your-Smart-Devices- (referring to the ability to grant, or remove, access rights of others in Samsung SmartThings Find).

[68] *Id.*

SmartThings Find. E.g.:



Samsung A54 phone (Redacted screen shot showing the display in Samsung SmartThings Find of a location of another user).

221. Samsung has also indirectly infringed the ’024 Patent by actively inducing and contributing to the infringement of the ’024 Patent by others, including customers, resellers, and retailers. On information and belief, Samsung had knowledge of the ’024 Patent and of its infringement thereof before the filing of the present Complaint for at least the reasons described above in paragraphs 9-18.

222. On information and belief, Samsung has specifically induced and intended others, such as customers, resellers, and retailers, to infringe the ’024 Patent by, for example, using the ’024 Accused Products, and knew that such others perform acts that constituted direct infringement. For example, Samsung has provided instructions to its customers regarding the infringing use and operation of the ’024 Accused Products. When others have followed such

instructions, they have directly infringed one or more claims of the ’024 Patent. By providing such instructions, Samsung knew and intended that others would follow such instructions, and thereby directly infringe one or more claims of the ’024 Patent. Thus, Samsung knew that its actions actively induced infringement by others.

223. For example, Samsung has instructed end users how to open and use Samsung SmartThings Find, for example, for location sharing with others.[69]

224. Samsung has also contributed to the direct infringement of the ’024 Patent by others because the location-based technologies of the ’024 Accused Products have no substantial non-infringing use and are a material part of the invention. On information and belief, there is no substantial way to utilize the location-based technologies of the ’024 Accused Products and not infringe the ’024 Patent. Samsung contributes to the direct infringement of the ’024 Patent when, for example, Samsung causes or instructs end users to download updates to the programming on at least Samsung phones and tablets, and to use such programming, in a manner that results in infringement of the ’024 Patent. Samsung also contributes to the direct infringement of the ’024 Patent when, for example, Samsung provides updates to the programming on the ’024 Accused Products that, together with such products’ hardware and/or other software, infringes the ’024 Patent.

225. Plaintiff has suffered damages as a result of Samsung’s infringement of the ’024 Patent in an amount to be proved at trial.

226. On information and belief, Samsung’s infringement of the ’024 Patent has been willful.

[69] E.g., https://smartthingsfind.samsung.com/login?result=true.

227. Plaintiff should be awarded damages in accordance with 35 U.S.C. §§ 271, 281, and 284 in an amount adequate to compensate for Samsung's infringement of the '024 Patent but in no event less than a reasonable royalty for the use made of the inventions by Samsung, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

A. A judgment in favor of Plaintiff that Samsung has infringed, either literally and/or under the doctrine of equivalents, one or more claims of each Patent-in-Suit;

B. A judgment in favor of Plaintiff that Samsung's infringement of each Patent-in-Suit has been willful;

C. An award of damages resulting from Samsung's acts of infringement in accordance with 35 U.S.C. § 284;

D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285, that Plaintiff is entitled to up to treble damages, and awarding to Plaintiff its reasonable attorneys' fees against Samsung; and

E. Any and all other relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Plaintiff requests a trial by jury of all issues so triable.

Dated: January 26, 2024

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