

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO**

Civil Action No.

STRAVA, INC.,

Plaintiff,

v.

GARMIN LTD., and GARMIN INTERNATIONAL, INC.,

Defendants.

COMPLAINT AND JURY DEMAND

Strava, Inc. (“Strava” or “Plaintiff”), by and through its undersigned counsel, hereby submits this Complaint for Patent Infringement, Breach of Contract, and Damages against Defendants Garmin Ltd. and Garmin International, Inc. (collectively “Garmin” or “Defendants”):

NATURE OF THE CASE

1. Strava is a pioneer at the intersection of exercise, technology, and community. From its earliest days, Strava has enabled users to log GPS-based activities, analyze performance, discover routes, compete, and participate in a community built around data-driven, innovative features.

2. These features have helped Strava become one of the world’s most popular software platforms relating to fitness, with more than 170 million users worldwide. In 2024 alone, Strava users recorded billions of activities.

3. Strava’s success is due in large part to its sustained investment in original technology. Over more than a decade, Strava designed and refined, among other innovations:

segments—user-defined stretches of road or trail that let users compare performance on the same route; leaderboards—rankings that let users see how their efforts stack up against friends, locals, or the global community; heatmaps—visual depictions aggregating billions of activities to show where people run, ride, or hike most frequently; and specialized routing features—such as recommending popular routes based on community data, prioritizing dirt trails, or maximizing elevation gain between two points rather than simply identifying shortest route between them. These systems power the core features utilized by millions of users across disciplines.

4. Strava owns the inventions that make these features possible, including U.S. Patent Nos. 9,116,922 (defining and matching segments) and 9,297,651 and 9,778,053 (user-preference activity maps and popularity-based routing). These patents protect the techniques that transform raw GPS readings into meaningful performance comparisons and commonly traveled, preference-aware route suggestions.

5. The raw GPS readings on Strava’s platform come either through recording on Strava’s mobile application or through third-party hardware compatible with the Strava platform.

6. The Strava app records GPS directly from a phone’s sensors, but its broader platform also supports activity files and data synced from third-party hardware—such as fitness watches and bike computers—so users can use Strava’s analysis and social features regardless of the device used to capture the activity.

7. Garmin develops, manufactures, and sells a variety of such GPS-enabled devices. It is a leading provider of wearables, bike computers, and other devices that users use to capture their activities.

8. Garmin has tried to leverage its hardware success to establish a social network to

rival Strava. Those efforts have not borne fruit.

9. For instance, in 2014, Garmin rolled out its own “segment” feature within its Garmin Connect web and mobile application, aiming to compete with Strava. But Garmin’s approach did not achieve comparable adoption, engagement, or data quality to Strava’s segment ecosystem.

10. To meet user demand for Strava’s segments on Garmin devices, Garmin approached Strava to collaborate on an official integration of Strava’s segments on Garmin’s devices, culminating in a Master Cooperation Agreement (“MCA”) between the parties in 2015.

11. Pursuant to the MCA, the companies collaborated to deliver a Strava-quality experience on certain Garmin devices while establishing careful guardrails to protect Strava’s intellectual property. The MCA granted Garmin a narrow license to use Strava Segments *only* as required to implement the user experience specified in the agreement.

12. That user experience was explicitly exclusive to Strava users, reserving all other rights to Strava. The MCA further prohibited adaptation, reverse engineering, copying, or distribution of Strava Segments by Garmin except as expressly permitted.

13. Rather than honor the MCA’s limits, Garmin subsequently expanded its own “Garmin segments” feature, apparently relying on Strava’s segment technology and know-how gained through the collaboration, while exceeding the scope of the limited license and restrictions in the MCA.

14. Independent of that breach, Garmin’s products and services—including Garmin Connect and various Garmin fitness devices—practice Strava’s patented segment matching and popularity-based routing inventions claimed in U.S. Patent Nos. 9,116,922; 9,297,651; and

9,778,053.¹

15. Strava brings this action for patent infringement and breach of contract, and seeks damages and injunctive and declaratory relief.

THE PARTIES

16. Plaintiff Strava, Inc. (“Strava”) is a Delaware corporation with its principal place of business at 181 Fremont St, Floor 27, San Francisco, California 94105.

17. Defendant Garmin Ltd. is a company organized under the laws of Switzerland, with U.S. operations through subsidiaries, including Garmin International, Inc. and Garmin USA, Inc.

18. Defendant Garmin International, Inc. (“Garmin International”) is a corporation organized and existing under the laws of Kansas. Garmin International may be served with process through its registered agent, the Corporation Service Company d/b/a CSC-Lawyers Incorporating Service Company.

JURISDICTION AND VENUE

19. This Court has subject-matter jurisdiction over Strava’s patent claims under 28 U.S.C. §§ 1331 and 1338(a). The Court has supplemental jurisdiction over Strava’s contract and related state-law claims under 28 U.S.C. § 1367(a) because they form part of the same case or controversy.

20. Garmin International, Inc. is subject to personal jurisdiction in this District because it conducts continuous and systematic business operations in Colorado, including maintaining offices, facilities, and personnel in this District.

21. The Court also has specific personal jurisdiction over Garmin Ltd. On information

¹ True and correct copies of the Patents-in-Suit are attached as Exhibits 1-3.

and belief, Garmin Ltd. purposefully directed activities at and into this forum by overseeing, authorizing, and benefiting from the design, development, marketing, and sale of the accused products and services carried out through Garmin's U.S.-based operations, including those in Colorado; and by deriving substantial revenue from sales of the accused systems and features to customers in this District. Strava's claims arise out of and relate to those forum-directed contacts.

22. Venue is proper in this District for Strava's contract claims under 28 U.S.C. § 1391(b)(2) because, on information and belief, a substantial part of the events giving rise to those claims occurred here, including Garmin's product-management, engineering, and business-decision activities in Colorado as well as sales and marketing decisions made and/or carried out in this District.

23. Venue is proper in this District for Strava's patent claims against Garmin International, Inc. under 28 U.S.C. § 1400(b) because, on information and belief, it has committed acts of infringement in this District and maintains a regular and established place of business here, including its facilities in Boulder, Colorado.

24. Venue is proper in this District for Strava's patent claims against Garmin Ltd. under 28 U.S.C. § 1391(c)(3) because Garmin Ltd. is an alien corporation and may be sued in any judicial district.

25. Accordingly, this action is properly filed in the United States District Court for the District of Colorado.

FACTUAL BACKGROUND
Strava's platform is built on innovation

26. Strava helps runners, cyclists, and other users track GPS-based activities, analyze performance, discover routes, and compete—together and asynchronously—using features like

leaderboards, heatmaps, suggested routes, training insights, and challenges.

27. Strava is accessed via web, mobile application, and/or wearable device. Users can record physical activities such as running, cycling, hiking, and swimming, either directly through Strava’s mobile application or by syncing data from connected third-party devices and sensors. Strava processes and organizes this data to provide users with detailed analytics on performance metrics such as distance, pace, and elevation.

28. Strava’s systems are device-agnostic; they ingest activity data from phones and third-party devices (*e.g.*, bike computers and fitness watches), apply normalization and error correction, and deliver comparable, repeatable performance metrics for millions of users.

29. Strava was founded in 2009 by Michael Horvath and Mark Gainey, two former Harvard rowing teammates. Swedish for “strive,” Strava embodied from the start a vision of creating a virtual team: an online space where users anywhere could connect, share their efforts, and compete in real time.

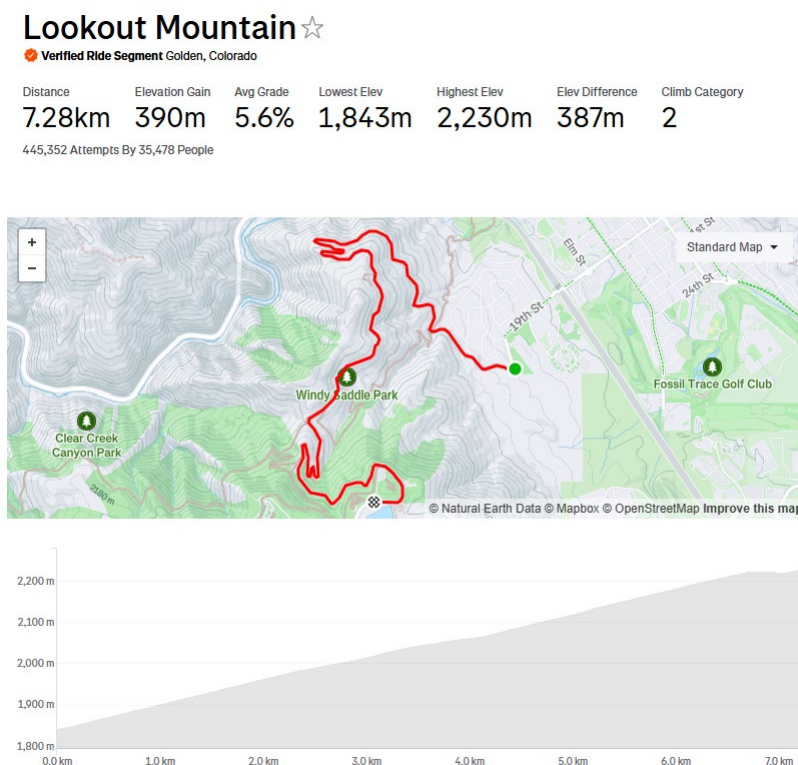
30. Initially, Strava found success with outdoor cyclists and runners. But over time, Strava has added support for dozens more activity types including swimming, hiking, skiing, climbing, and gym workouts—broadening its appeal to a wide spectrum of users.

31. Strava’s success owes in large part to its technological innovations, enabling users not only to record GPS-tracked activities and analyze their performance, but also to compete asynchronously on user-defined segments, to explore user-preference maps, and to design their own routes.

32. “Segments” are user-defined stretches of a GPS-tracked activity—such as a run or ride—delineated by selecting a start and end point on a map or an existing recorded effort. Once

defined, the system converts that geographic track into an abstracted form—*e.g.*, minimum bounding rectangles (MBRs)—and stores it in a spatial index—*e.g.*, an R-tree database—for efficient search and comparison.

33. The following is an image of a segment on the Strava website:



34. When a new user activity (“effort”) is uploaded, the system similarly converts its GPS data into MBRs and queries the segment database to find overlapping segments. If the overlap meets a threshold—determined by how much the effort’s MBRs overlap with the segment’s—it’s identified as a match. Once matched, associated performance data like time, speed, heart rate, and power are aggregated and used to produce leaderboards or visual comparisons. These techniques allow fair, repeatable comparisons on the same piece of ground across devices, time, and conditions. Additionally, by leveraging GPS data, segments can be defined with minimal effort on

the part of the user.

35. The following is an image of the leaderboard for the same segment depicted above on the Strava website:

Overall Leaderboard

Rank	Name	Speed	Power	VAM	Time
1	Drake 	27.6 km/h	381 W 	1466	15:51
2	Gavin 	27.1 km/h	350 W 	1439	16:09
3	Toms 	26.9 km/h	377 W 	1429	16:16
4	Joe 	26.8 km/h	369 W 	1426	16:18
5	Phil 	26.8 km/h	419 W 	1425	16:19
5	Keegan 	26.8 km/h	365 W 	1425	16:19
7	BRAYAN 	26.6 km/h	351 W 	1417	16:24
7	Tyler 	26.6 km/h	351 W 	1417	16:24
9	Eric 	26.5 km/h	381 W 	1410	16:29
10	Neilson 	26.5 km/h	364 W 	1409	16:30
10	Gage 	26.5 km/h	403 W 	1409	16:30

36. To determine whether an individual activity has completed a given segment, Strava developed a proprietary algorithmic process called “segment matching.”

37. Segment matching relies on geometric abstractions of GPS data and threshold-based decision logic to ensure accuracy at scale. Once created, these segments trigger automatic detection when users replay those GPS tracks. Whenever a user’s activity path overlaps with a segment’s coordinates—which can be determined, in part, by defining a virtual starting line—Strava includes that effort on leaderboards that allow the user to compete with their own prior efforts and those of every Strava user ever to attempt the same segment.

38. At the same time, Strava applies user-selected privacy controls to this process: users can limit whether their activities are visible to the public, to followers only, or to no one at all, and can use privacy zones to obscure the GPS start and end points of activities. These privacy settings govern which efforts appear on leaderboards and how location data is displayed, allowing users to

benefit from Strava's segment features without sacrificing control over sensitive personal information.

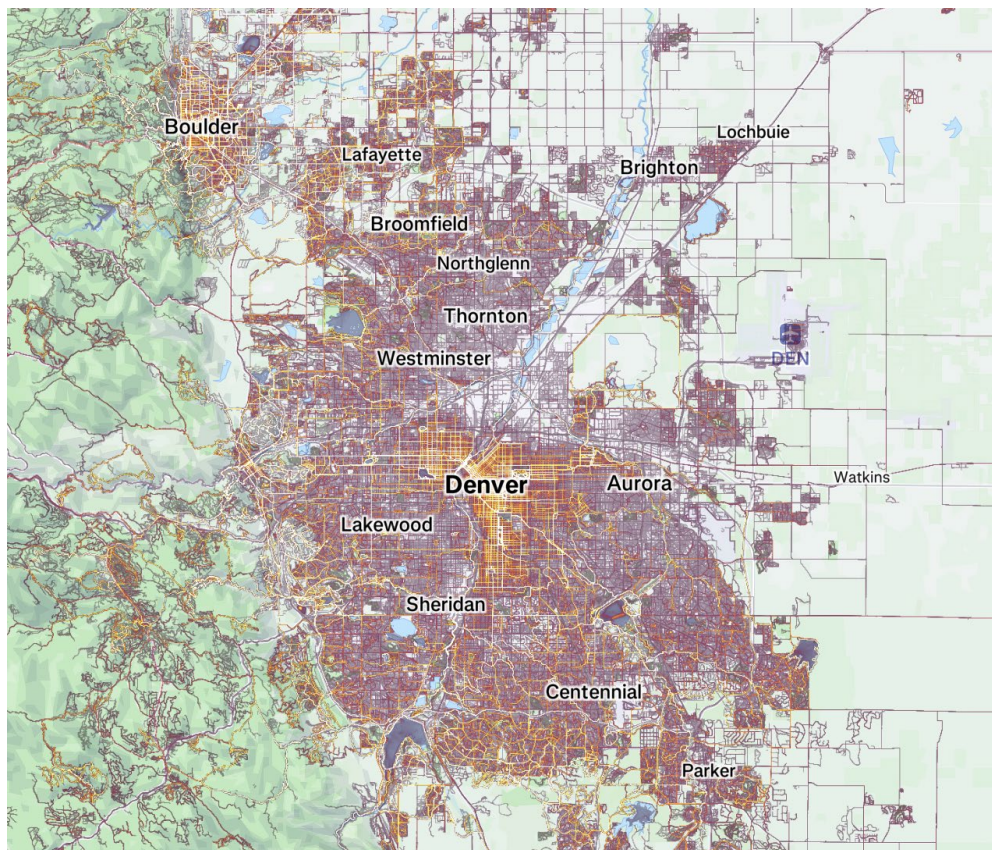
39. These leaderboards drive engagement through friendly rivalry, and Strava rigorously manages the integrity of results by offering both reporting and analytical tools for flagging and removing suspicious or anomalous performances.

40. Strava segments are powered by patented technology, including spatial indexing (to detect overlaps quickly) and temporal sorting and filtering to compare performances accurately across thousands—even millions—of segment attempts.

41. Beyond segments, Strava's patented technology employs other concepts for turning real-world data into software structures, such as traversals and edges. Edges are the core building blocks of Strava's basemap, representing sections of a road, path, or trail. Metadata associated with each edge is aggregated from all the activities that have passed over it, such as trip counts (the number of times people have traveled it), the direction of travel, the time of day, etc. A traversal is a crossing of an edge by a Strava user.

42. Strava has developed large-scale pipelines that process GPS activities, aggregate traversals to a base map, and store per-edge metadata—popularity counts, directionality, traversal-time distributions, and barometrically normalized elevation profiles—while weighting by device accuracy and recency. Those data power heatmaps, suggested routing, and other features.

43. Strava's heatmaps leverage color gradients—*e.g.*, with reds and oranges indicating high-traffic routes, and greens/blues showing lesser-used paths—to communicate usage intensity intuitively. For instance, this image reflects all sports on Strava across the Denver metro area:



44. These visualizations serve multiple purposes. Among other things, they highlight popular paths and act as the backbone of route discovery and route building for users.

45. To counter GPS noise and heterogeneous device quality, Strava assigns confidence scores to traversals based on factors such as reported horizontal accuracy, sampling interval, and the presence of a barometric altimeter. Strava also performs elevation normalization so that edge profiles are comparable across devices and conditions, and rejects outliers (*e.g.*, spurious points or implausible speeds) before any aggregate is computed.

46. From these cleaned traversals, Strava generates a user-preference activity map by aggregating to base-map edges and computing edge-level metadata. That metadata includes, for example, popularity counts (optionally by sport), directionality, typical traversal-time distributions

(with time-of-day and day-of-week slices), and barometrically normalized elevation profiles. The system can apply recency weighting so that emerging usage patterns influence routing sooner than stale ones.

47. When users request a route between endpoints (with preferences such as surface, elevation, or effort), Strava's systems consult the stored user-preference map to produce one or more candidate routes that reflect how users actually move through the world.

Garmin sought out Strava technology to improve its users' experience

48. Strava integrates with major hardware providers in the fitness space—including Garmin—so users can capture activities on the device of their choice and still benefit from Strava's analysis, segments, routing, and social features. To deliver a consistent, high-quality user experience, Strava collaborates with device makers on APIs, data formats, and integration approaches that enable seamless and reliable syncing and presentation of Strava features on third-party hardware.

49. On information and belief, Garmin has long sought to leverage its hardware footprint to build its own social and competitive fitness experiences, but those efforts have failed to match Strava's adoption, engagement, or network effects.

50. Given the low popularity of Garmin's internally-built features, Garmin sought to collaborate with Strava to directly integrate Strava's segments into Garmin's devices.

51. To provide Garmin users with segment features that met Strava's quality bar, the parties cooperated and entered into the MCA on April 8, 2015. The MCA—signed by Garmin, Ltd. and Strava—permitted Garmin to use defined "Strava Segments" solely to implement the user experience set forth in Exhibit A to that agreement.

52. Exhibit A describes a user experience built by Strava and delivered to Strava users through Garmin devices. Among other things, Exhibit A requires a device setting allowing a Strava user to enable real-time competition on either Strava Segments or Garmin segments—not both at once—and forbids commingling results. The MCA and Exhibit A preserve Strava’s control over the segment experience and data, including requirements that the Strava-built experience be identifiable as such and limited to Strava users.

53. The MCA includes strict restrictions and safeguards: Garmin receives a limited, revocable, non-sublicensable license; may not adapt, reverse engineer, use, copy, modify, or distribute Strava Segments except as expressly licensed; and must comply with confidentiality and use-of-materials limits. The MCA also contains remedies and a carve-out from limitations for breaches of these restrictions, along with fee-shifting in specified circumstances. Strava performed under the MCA, including by delivering Strava Segments and integration materials, providing updates, and supporting Garmin’s implementation of the agreed user experience.

54. During the parties’ collaboration, Strava supplied segment definitions and integration materials—including code artifacts, APIs/SDKs, documentation, and test assets—necessary to implement the agreed Strava-built experience.

55. Despite the MCA’s clear limits, Garmin expanded well beyond that agreement’s scope. Garmin built, branded, and widely deployed *Garmin*-branded segments outside the Strava-built experience and to non-Strava users; enabled segment competition and leaderboards across Garmin Connect (web and mobile) and on devices; and surfaced segment results independent of the Exhibit A constraints.

56. Garmin has also rolled out popularity-based routing and heatmap features

(including Trendline/Popularity Routing and related functionality) that practice Strava's patented user-preference map inventions.

57. Representative accused instrumentalities include Garmin Connect (web and mobile); Garmin's Popularity/Trendline routing and heatmaps; and Garmin wearables and bike computers that support segments and popularity routing, including but not limited to the Edge, Forerunner, Fenix, and Epix product lines.

58. Garmin's conduct breached the MCA's express restrictions and, independently, infringed Strava's U.S. Patent No. 9,116,922. Among other things, Garmin's segment implementation performs the claimed techniques for defining segments, generating virtual start/finish lines based on path and orientation, detecting crossings (including via associated performance data), and determining matches.

59. Garmin also infringes Strava's U.S. Patent Nos. 9,297,651 and 9,778,053 through its popularity-based routing and heatmap features.

60. Strava provided written notice of infringement and breach at least by June 30, 2025, and again in July 2025, yet Garmin has continued its conduct, causing ongoing harm to Strava. Additionally, Garmin was on notice, as a result of its collaboration with Strava and the 2015 MCA, that at least Strava's segment technology was protected by Strava's intellectual property rights. Nevertheless, Garmin continued to use Strava's technology in ways that Strava has never authorized or licensed.

61. Strava has complied with 35 U.S.C. § 287(a) with respect to the Asserted Patents, to the extent applicable, or the asserted claims are directed to methods not subject to marking.

COUNT ONE
(Infringement of the '922 Patent)

62. Strava repeats and re-alleges the allegations in the preceding paragraphs as if fully set forth herein.

63. On August 25, 2015, the United States Patent and Trademark Office duly and legally issued the '922 Patent entitled "Defining and matching segments." *See* Exhibit 1. Strava owns all right, title, and interest in and to the '922 Patent, including the right to assert all causes of action under the '922 Patent and the right to sue and obtain any remedies for past, present, or future infringement.

64. The '922 Patent claims a computer-implemented method for matching a previously defined route segment to an effort by receiving a user-submitted definition of the segment, associating the segment with a first set of GPS data, and generating a virtual start line for the segment by determining a path through a user-selected segment start point, determining an orientation of the path, and setting the virtual start line in relation to the orientation. The patent claims specific improvements that include comparing a second set of GPS data associated with an effort to the virtual start line, determining that the second set crosses the virtual start line—including generating an extrapolation from at least a portion of the second set based at least in part on associated data comprising one or more types of performance metrics—determining that the extrapolation crosses the virtual start line, determining that the effort matches the segment based at least in part on the crossing, and accessing information associated with the matched segment.

65. The asserted claims of the '922 Patent recite concrete data-structuring and control logic. For example, the claims require generating a virtual start line for a user-defined segment by deriving a path through the user-selected start point from recorded GPS data, determining the

path's orientation, and setting the start line in relation to that orientation; they then require determining a match by comparing the effort's GPS data to that start line and finding a crossing using an extrapolation computed from associated performance metrics (*e.g.*, speed/time). Those are claim-level, processor-executed steps that constrain how the data is processed and when a match is recorded.

66. The asserted dependent claims further tighten that logic with threshold matching—including a higher second (tight-match) threshold than the first (looser) threshold—and with a finish-line crossing requirement before a tight match is recorded; and the asserted system claim requires performing the matching using a spatially indexed query (*e.g.*, an R-tree) to scale lookups over stored segments. At the time of the invention, these claim-recited techniques—individually and in their ordered combination—were not well-understood, routine, or conventional, and they significantly improve the functioning of GPS devices and matching systems by reducing false positives, tolerating GPS jitter and sampling variability, and scaling server-side processing.

67. Figure 9 of the '922 Patent, reproduced below, is a flow diagram showing an illustrative embodiment of converting a series of GPS information into a set of minimum bounding rectangles ("MBRs") in accordance with some embodiments. As shown in FIG. 9, the system maps a series of GPS points to tiles, optionally fills gaps to ensure a contiguous path, optionally expands the set of tiles, and then groups the tiles into minimum bounding rectangles, which are stored and queried against an R-Tree-indexed segment database to identify overlaps for matching:

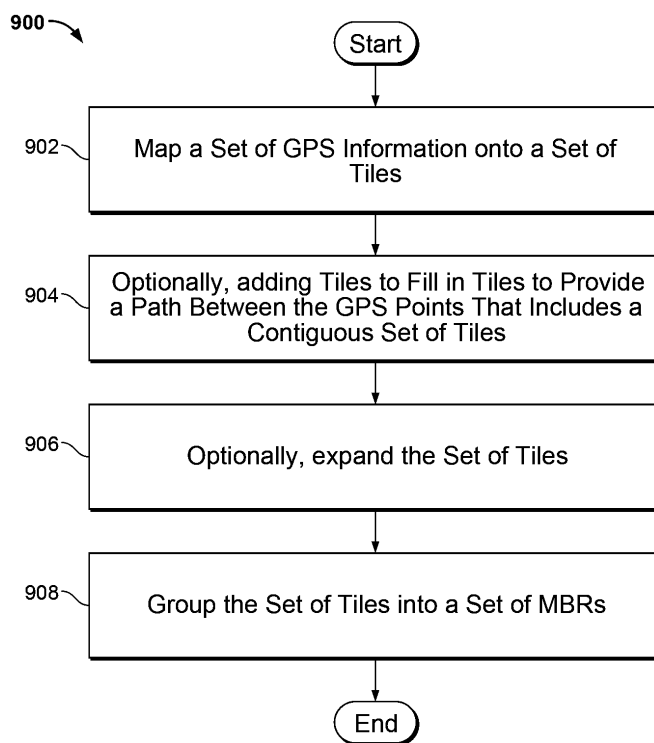


FIG. 9

'922 Patent, Fig. 9.

68. Figure 11B of the '922 Patent, reproduced below, is a flow diagram showing an illustrative embodiment of the segment-matching decision process. The system first determines whether an effort's overlap with a stored segment exceeds a first threshold; if so, it records a loose match. When the overlap exceeds a higher threshold and the effort crosses the segment's virtual start and finish lines, the system records a tight match, operationalizing when a user truly completed the segment.

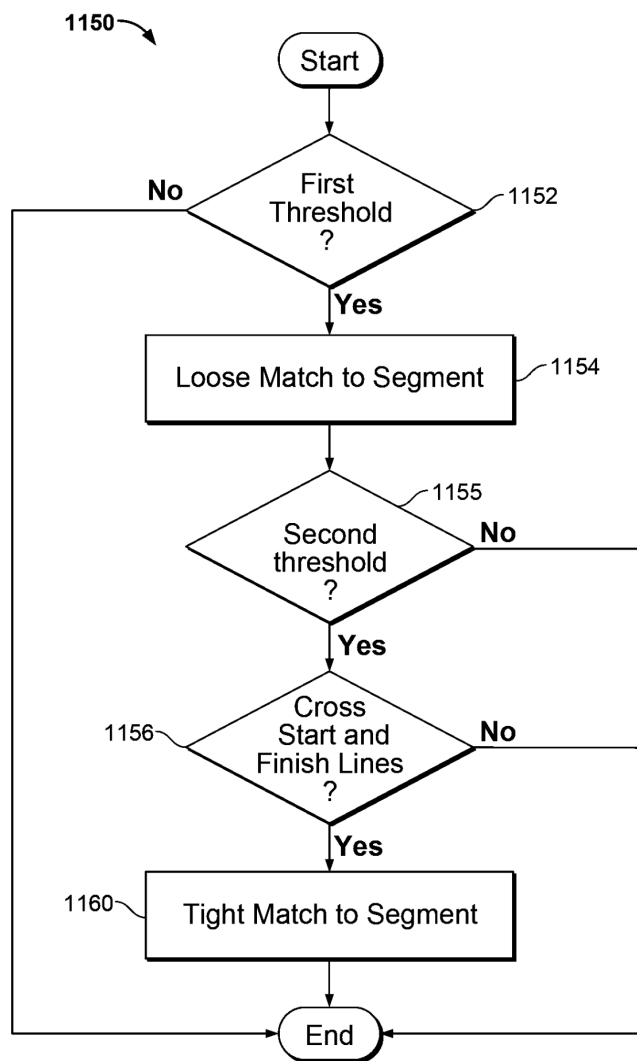


FIG. 11B

'922 Patent, Fig. 11B.

69. Defendants have directly infringed and continue to directly infringe one or more claims of the '922 Patent, including at least Claims 1, 11, 12, and 15 ("Asserted '922 Claims"), by making, using, offering to sell, selling, and importing products and services that perform the patented methods and/or employ the patented systems in the United States, without license or authority, including but not limited to Garmin Connect and Garmin devices—including Edge bike

computers, Forerunner, Fenix, and Epix watches—that support segments (the “’922 Accused Instrumentalities”).

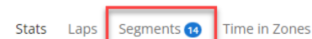
70. Defendants have directly infringed and continue to directly infringe at least one claim of the ’922 Patent, including the Asserted ’922 Claims, in violation of 35 U.S.C. § 271(a).

71. For instance, Defendants’ Garmin Connect platform and Garmin devices practice the steps of the claimed method of defining and matching user-created segments. In particular, Garmin invites users to create segment definitions and stores them for later comparison against users’ recorded efforts. When a user’s path approaches a stored segment, Garmin devices detect the segment start and present a segment screen; when the user’s path crosses the segment start and proceeds along the segment, the device records and reports the result, including automatically signaling completion at the finish. These functionalities satisfy the limitations of Claim 1, including receiving a user-defined segment, generating and using a segment start line aligned to the path, and determining a match by comparing activity GPS data to that start line using performance data the device tracks during the effort. The ’922 Patent describes this method, including generating a virtual start line from the user-selected start and the segment path orientation and then determining a match when the extrapolated effort crosses that start line. The following screenshots from Garmin’s website are illustrative:

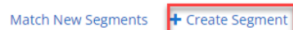
^Creating a Garmin Segment in Garmin Connect Web

NOTE: Activity privacy in Garmin Connect must be set to "Everyone" in order for segment efforts to be included on a segment leaderboard. Also make sure that "Segments" is toggled on in your privacy settings (see [Adjusting Privacy Settings in Garmin Connect](#)).

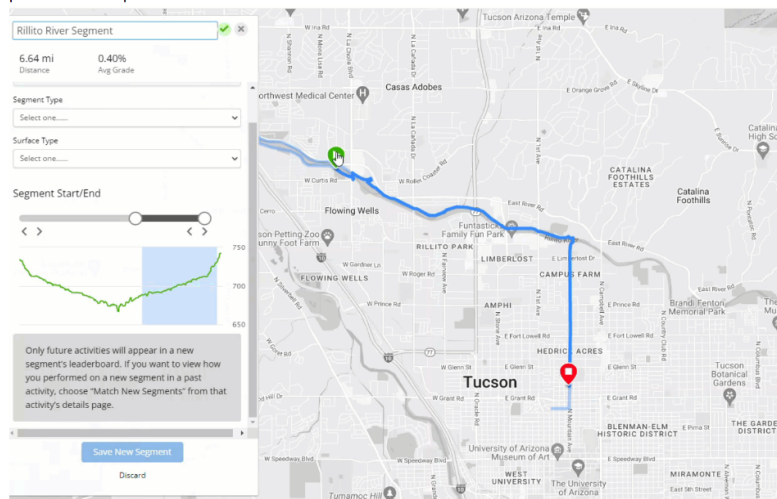
1. From a web browser, sign into your [Garmin Connect](#) account.
2. Select **Activities** from the navigation bar on the left.
3. Select **All Activities**.
4. Open one of your activities.
5. Scroll down below the charts and select the **Segments** tab.



- If there is not a Segments tab, change the activity type to a running or cycling activity type and refresh the page. Ensure that "Segments" is toggled on in your privacy settings (see [Adjusting Privacy Settings in Garmin Connect](#)). Also, ensure that Garmin is set as your segments source. If Strava is set as your segments source you won't have a Segments tab on your activities.
 - You will only be able to create segments in Garmin Connect if you are using Garmin Segments. If you use Strava Segments you will need to create the segment in Strava (see [Strava Support: Create a Segment](#)). To switch between segment sources in Garmin Connect, see the following section.
6. Select **Create Segment** (right corner).



7. Select the segment start and finish points on the map using the **Segment Start/End** slider or by moving the points on the map.



8. Select a segment name, type, and surface.
 - This must be done before saving the segment.
 - If the title of the segment is not edited, it will inherit the name of the activity.
9. Select **Save**.
10. Select **Send to Device**.
11. Select your device.
12. Select **Send to Device**.

After the segment has been sent to the device, while you are recording an activity on it, the watch or Edge will alert you to upcoming segments as you approach the start. Your result will be automatically recorded as part of your activity.

Cycling segments can be created in Garmin Connect from any activity with a GPS track and either a cycling or running activity type. All segments created in Garmin Connect are available for the entire Garmin Connect community to view and compete against and any activities uploaded to Garmin Connect that crossed a segment will qualify.

72. Defendants directly infringe by performing one or more steps of the asserted methods on their servers and devices; alternatively, any steps performed by end users are performed under Defendants' direction or control and/or as part of a joint enterprise, including because Defendants condition participation in and benefits from Garmin Segments on performance of those steps and dictate the manner or timing of such performance through device firmware, defaults, and instructions.

73. On information and belief, Defendants also practice the additional limitations of dependent claims addressing matching thresholds. In particular, Garmin employs distinct tolerances for (i) initial/looser detection used to alert on segment approach and (ii) tighter detection used to record a completed match—satisfying the two-threshold scheme and the requirement that the second threshold exceed the first in Claim 11. Device behavior and documentation reflect this separation between approach alerts and completed-segment determinations.

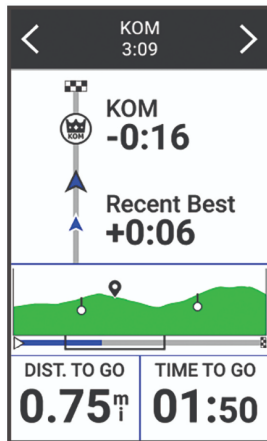
74. Defendants further practice the additional “finish-line” requirement of Claim 12: Garmin devices determine that a tight match occurs only when the user's recorded GPS data traverses the segment from start to finish, and they display a completion message when the finish is crossed. The following screenshot from Garmin's website is illustrative:

Racing a Segment

Segments are virtual race courses. You can race a segment, and compare your performance to past activities, other riders' performance, connections in your Garmin Connect™ account, or other members of the cycling community. You can upload your activity data to your Garmin Connect account to view your segment position.

NOTE: If your Garmin Connect account and Strava™ account are linked, your activity is automatically sent to your Strava account so you can review the segment position.

1. Press  to start the activity timer, and go for a ride.
When your path crosses an enabled segment, you can race the segment.
2. Start racing the segment.
The segment data screen appears automatically.



3. If necessary, use the arrows to change your goal during your race.
You can race against the segment leader, your past performance, or other riders (if applicable). The goal automatically adjusts based on your current performance.

A message appears when the segment is complete.

75. Defendants also infringe the asserted system claim. Garmin's servers and devices comprise a system with processors and memory configured to perform the foregoing matching operations at scale, including storing large numbers of segments and efficiently querying them against uploaded activities to determine matches and populate leaderboards. On information and belief, Garmin implements these queries using a spatial index (*e.g.*, an R-tree or equivalent) as recited in Claim 15, which the '922 Patent discloses for scalable segment matching; Garmin's own materials confirm segment storage and leaderboard operations integral to these queries.

76. To the extent any limitation is not literally present, infringement occurs under the doctrine of equivalents because the Accused Products perform substantially the same function, in

substantially the same way, to achieve substantially the same result.

77. Garmin also indirectly infringes by inducing and contributing to users' infringement, with knowledge of the '922 Patent at least as of June 30, 2025, and specific intent that customers use the '922 Accused Instrumentalities in an infringing manner. Defendants' affirmative acts include, by way of example, providing detailed instructions on their website and in product manuals, showing users how to create and "race" infringing Garmin Segments. Such acts have induced and continue to induce direct infringement of the Asserted Claims.

78. Defendants' infringement has been and continues to be willful. Despite their knowledge of the '922 Patent and their infringement since at least June 30, 2025, Defendants have intentionally or recklessly continued their infringing acts, making this an exceptional case, warranting enhanced damages and reasonable attorneys' fees under 35 U.S.C. §§ 284-285.

79. Plaintiff has complied with 35 U.S.C. § 287. The Asserted '922 Claims include method claims that are not subject to § 287's marking requirement. To the extent § 287 applies to the asserted system claim, Plaintiff has not made, sold, or authorized the sale of any patented articles practicing that claim in the United States prior to suit, or, alternatively, Defendants had actual notice of the '922 Patent and the basis for infringement no later than June 30, 2025; therefore, § 287 does not bar recovery of pre-suit damages.

80. Plaintiff has been damaged by Defendant's infringement in an amount to be proven at trial and is entitled to no less than a reasonable royalty and/or lost profits pursuant to 35 U.S.C. § 284.

81. Monetary relief alone is inadequate. Garmin's continued infringement of the '922 Patent causes irreparable harm to Strava, including loss of network effects, erosion of platform

differentiation and goodwill, and brand loyalty that cannot be fully measured or compensated in money. There is a causal nexus between the accused segment-identification, matching, and ranking and consumer demand for Garmin's devices and services. Strava is therefore entitled to a permanent injunction prohibiting Garmin from making, using, offering to sell, selling, or importing the accused implementations (and any colorable variations) of the patented technology, and Strava has no adequate remedy at law; the balance of hardships and the public interest favor injunctive relief.

COUNT TWO
(Infringement of the '651 Patent)

82. Strava repeats and re-alleges the allegations in the preceding paragraphs as if fully set forth herein.

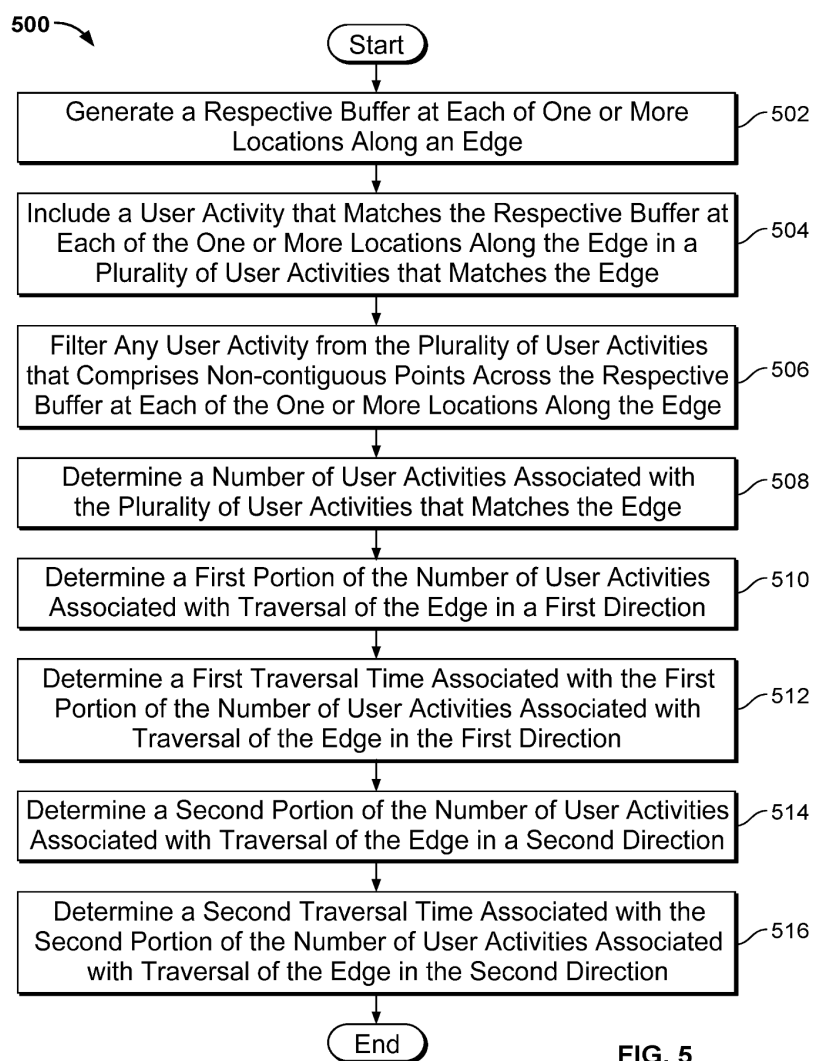
83. On March 29, 2016, the United States Patent and Trademark Office duly and legally issued the '651 Patent entitled "Generating user preference activity maps." See Exhibit 2. Strava owns all right, title, and interest in and to the '651 Patent, including the right to assert all causes of action under the '651 Patent and the right to sue and obtain any remedies for past, present, or future infringement.

84. The '651 Patent claims computer-implemented systems, methods, and computer program products that transform massive GPS activity datasets into a "user-preference map" and use that map to compute route suggestions. The asserted claims recite concrete, processor-executed steps and data structures including (i) mining user activities according to an ordered hierarchy of GPS recording device types to prioritize higher-accuracy sources; (ii) aggregating traversals to edges of a base map and storing edge-level metadata in the user-preference map; and (iii) determining one or more suggested routes between user-input endpoints based at least in part on

the user-preference map, including by receiving user-input route preferences and presenting route candidates. These are claim-recited mechanisms that improve the way computer systems process and query geospatial data at scale, not mere data display.

85. At the time of the invention, the ordered-device mining and edge-level aggregation used to generate and query the user-preference map—individually and in their ordered combination—were not well-understood, routine, or conventional. Implementing the claimed pipelines materially improves functionality by reducing noise from heterogeneous devices, increasing the accuracy and robustness of edge statistics (including barometrically normalized elevation profiles), and enabling efficient server-side route computation across large activity corpora.

86. Figures of the '651 Patent (*e.g.*, Figs. 5 and 10A–10E) depict exemplary flows that match traversals to base-map edges and normalize barometric elevation profiles for storage as edge metadata in the user-preference map; those disclosures support and illustrate, but do not limit, the asserted claims:



'651 Patent, Fig. 5.

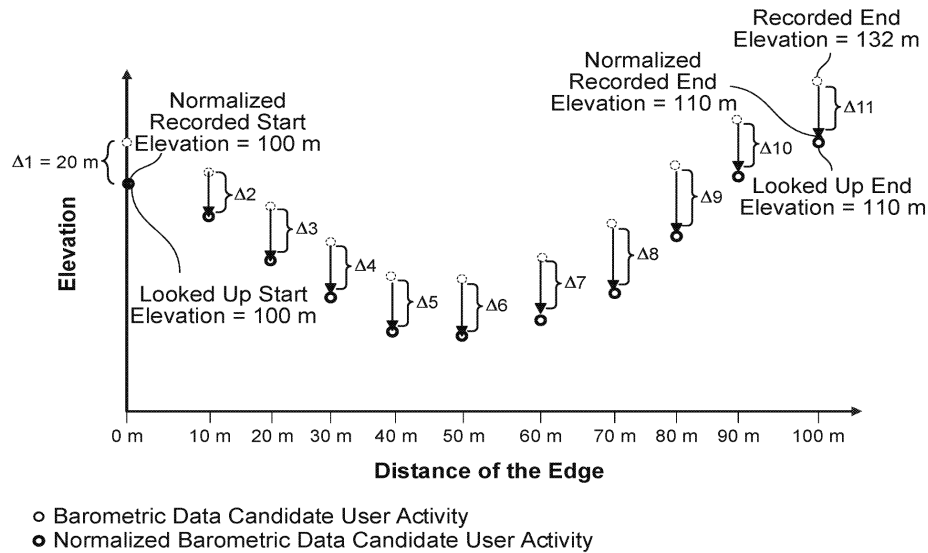


FIG. 10E

'651 Patent, Fig. 10E.

87. Defendants have directly infringed and continue to directly infringe one or more claims of the '651 Patent, including at least Claims 1, 2, 8, 9, 11, 18, and 23 (the "Asserted '651 Claims"), by making, using, offering to sell, selling, and importing products and services that practice the patented technology in the United States, without license or authority, including Garmin Connect and Garmin devices—such as Edge cycling computers and Forerunner, Fenix, and Epix watches—that implement Trendline/Popularity routing, heatmaps, Courses, and related features (the "'651 Accused Instrumentalities").

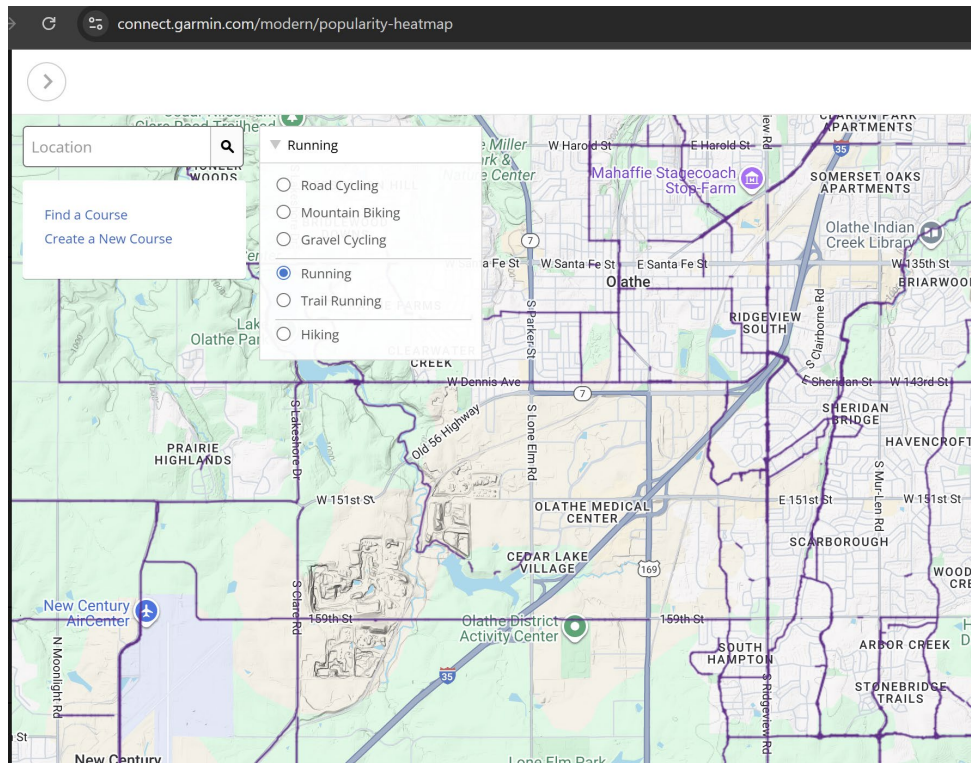
88. By way of non-limiting example, the '651 Accused Instrumentalities collect and prioritize activities recorded on different device types (including settings such as Every-Second Recording), aggregate those activities to a base map to generate a user-preference map (*e.g.*, popularity/heatmap datasets) with edge-level metadata, and determine one or more suggested

routes between user inputs, identifying endpoints based at least in part on that user-preference map—while also receiving user route preferences and presenting route candidates to the user. These implementations satisfy the limitations of at least the Asserted '651 Claims.

89. Defendants directly infringe by performing one or more steps of the asserted methods on their servers and devices; alternatively, any steps performed by end users are performed under Defendants' direction or control and/or as part of a joint enterprise, including because Defendants condition participation in and benefits from the accused features on performance of those steps and dictate the manner or timing of such performance through device firmware, defaults, and instructions.

90. On information and belief, Defendants further practice dependent limitations requiring, for example, that the base map comprise GIS datasets; that the system present a user-preference map and/or the suggested routes at a user interface; that route computation incorporate user-provided preferences; and that the system select barometric-data candidate activities for edges and normalize recorded elevations based on obtained edge elevation data, storing the normalized profile as edge metadata—all as recited in the Asserted '651 Claims.

91. The following screenshots from Defendants' publicly available pages and manuals are illustrative of the accused functionality, including a user-preference map, and allowing users to create routes prioritizing popularity, distance, time, or elevation based on user datasets:



What is Trendline Popularity Routing?

Trendline Popularity Routing utilizes billions of miles from Garmin Connect™ online network data to help you find and follow the best paths for your bike or run activity directly from your Garmin device. Some key points on Trendline Popularity Routing are outlined below:

- Works automatically when a round-trip course is created for a bike or run activity on your Garmin device
- Allows for creating routes based on the frequency of routes taken by the Garmin Connect community
- Helps you find the best on and off-road activity routes traveled by your fellow Garmin users
- Learns from user data that has been uploaded to Garmin Connect to improve the routing abilities on future device map updates
- Does not consider avoidances you may have configured in your bike or run routing settings

MAP THEMES

These maps offer visual popularity support and optimized map themes for various activities, so you see the information that's most relevant to what you're doing. When hiking, view contour lines of your surrounding terrain, including elevation data, summits, parks and geographical points. This gives you much better situational awareness, especially when you're navigating difficult terrain. When skiing, you'll be able to see the difficulty and run names, so you can ski with confidence. During a run, view high-contrast map data with clearly visible trails and navigation areas.

Routing Settings

You can change the routing settings to customize the way the watch calculates routes for each activity.

NOTE: Not all settings are available for all activity types.

Hold **MENU**, select **Activities & Apps**, select an activity, select the activity settings, and select **Routing**.

Activity: Sets an activity for routing. The watch calculates routes optimized for the type of activity you are doing.

Popularity Routing: Calculates routes based on the most popular runs and rides from Garmin Connect.

Courses: Sets how you navigate courses using the watch. Use the Follow Course option to navigate a course exactly as it appears, without recalculating. Use the Use Map option to navigate a course using routable maps, and recalculate the route if you stray from the course.

Calculation Method: Sets the calculation method to minimize the time, distance, or ascent in routes.

Avoidances: Sets the road or transportation types to avoid in routes.

Type: Sets the behavior of the pointer that appears during direct routing.

92. To the extent any limitation is not literally present, infringement occurs under the doctrine of equivalents because the '651 Accused Instrumentalities perform substantially the same function, in substantially the same way, to achieve substantially the same result.

93. Defendants also induce and contribute to infringement of the Asserted '651 Claims, with knowledge of the '651 Patent at least as of July 25, 2025, and specific intent that customers use the '651 Accused Instrumentalities in an infringing manner. Defendants' affirmative acts include, by way of example, publishing user guides, support articles, marketing pages, and in-device prompts instructing users how to enable and use Trendline/Popularity routing, heatmaps, Courses, and related features.

94. Defendants' infringement has been and continues to be willful. Despite their knowledge of the '651 Patent and their infringement since at least July 25, 2025, Defendants have intentionally or recklessly continued their infringing acts, making this an exceptional case and

warranting enhanced damages and reasonable attorneys' fees under 35 U.S.C. §§ 284–285.

95. Plaintiff has complied with 35 U.S.C. § 287. The Asserted '651 Claims include method claims that are not subject to § 287's marking requirement. To the extent § 287 applies to any asserted system or computer-readable-medium claims, Plaintiff has not made, sold, or authorized the sale of any patented articles practicing those claims in the United States prior to suit, or, alternatively, Defendants had actual notice of the '651 Patent and the basis for infringement no later than July 25, 2025; therefore, § 287 does not bar recovery of pre-suit damages.

96. Strava has suffered and will continue to suffer damages as a result of Defendants' infringement of the '651 Patent. Strava is entitled to recover damages adequate to compensate for such infringement, including no less than a reasonable royalty and, where proven, lost profits, together with pre- and post-judgment interest and costs. Monetary relief alone is inadequate; Garmin's continued infringement causes irreparable harm, including loss of network effects, erosion of platform differentiation and goodwill, and brand loyalty. There is a causal nexus between the accused mapping/routing implementations and consumer demand for Garmin's products and services. Strava is therefore entitled to a permanent injunction prohibiting Defendants from making, using, offering to sell, selling, or importing the accused implementations (and any colorable variations) of the patented technology.

COUNT THREE
(Infringement of the '053 Patent)

97. Strava repeats and re-alleges the allegations in the preceding paragraphs as if fully set forth herein.

98. On October 3, 2017, the United States Patent and Trademark Office duly and

legally issued the '053 Patent entitled "Generating user preference activity maps." See Exhibit 3. Strava owns all right, title, and interest in and to the '053 Patent, including the right to assert all causes of action under the '053 Patent and the right to sue and obtain any remedies for past, present, or future infringement.

99. The '053 Patent is a continuation of the '651 Patent and claims concrete, computer-implemented pipelines executed by a processor and memory. The asserted claims require collecting activities recorded by a plurality of GPS devices; mining those activities according to an order associated with device-type accuracy; aggregating the activities to a base map to generate a user-preference map; and, in the same claimed system, receiving user inputs and generating one or more suggested routes between user-specified endpoints based on that user-preference map. These claim-recited techniques significantly improve the functioning of computer systems that process and route over large-scale geospatial datasets, and they are not directed to mere data display.

100. At the time of the invention, the combination of device-type-ordered mining with edge-based aggregation and user-preference-driven routing—implemented as a processor-configured pipeline with memory storing instructions—was not well-understood, routine, or conventional. The claimed architecture reduces noise, increases the accuracy and robustness of the map-derived statistics used for routing, and scales computation of route candidates across large activity corpora. Any contrary contention raises fact issues that cannot be resolved on the pleadings.

101. Defendants have directly infringed and continue to directly infringe one or more claims of the '053 Patent, including at least Claims 1, 3, 9, 10, and 21 (the "Asserted '053 Claims"),

by making, using, offering to sell, selling, and importing products and services that practice the patented technology in the United States, without license or authority, including Garmin Connect and Garmin devices—such as Edge cycling computers and Forerunner, Fenix, and Epix watches—that implement Trendline/Popularity routing, heatmaps, Courses, and related features (the “’053 Accused Instrumentalities”).

102. By way of non-limiting example, the ’053 Accused Instrumentalities collect and prioritize activities recorded on different device types; aggregate those traversals to a base map to generate a user-preference map with edge-level metadata; receive user inputs specifying endpoints and route preferences; and generate one or more suggested routes between those endpoints based at least in part on the user-preference map, presenting the route candidates to the user. These implementations satisfy the limitations of at least the Asserted ’053 Claims.

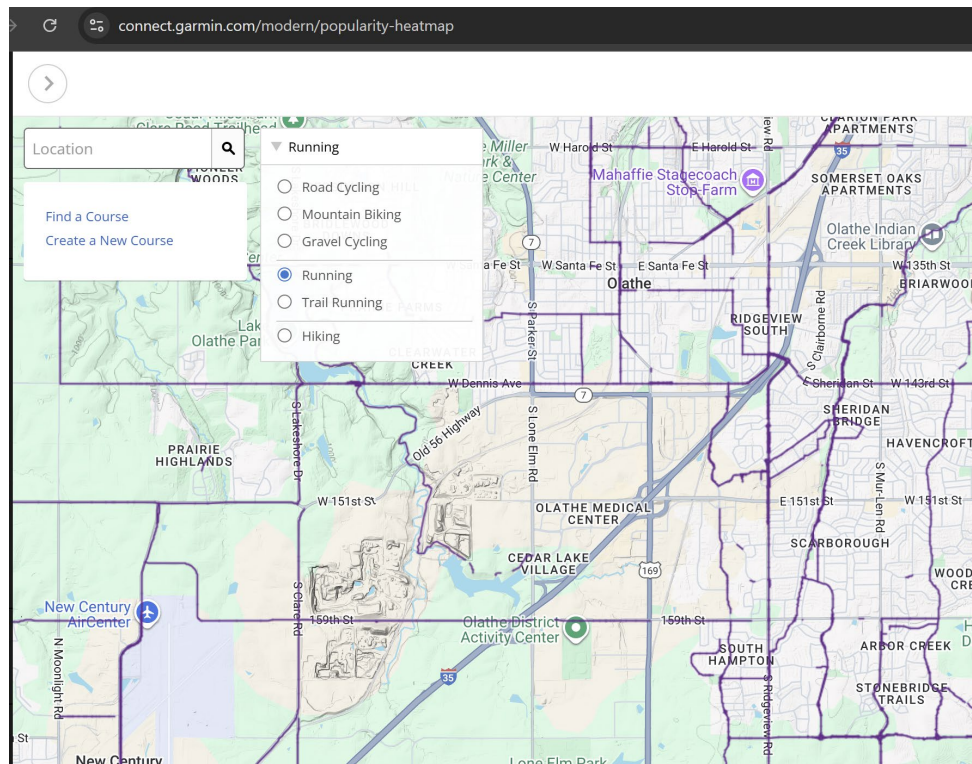
103. Defendants directly infringe by performing one or more steps of the asserted methods on their servers and devices; alternatively, any steps performed by end users are performed under Defendants’ direction or control and/or as part of a joint enterprise, including because Defendants condition participation in and benefits from the accused features on performance of those steps and dictate the manner or timing of such performance through device firmware, defaults, and instructions.

104. The following screenshots from Defendants’ publicly available pages and manuals are illustrative of the accused functionality:

What is Trendline Popularity Routing?

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Hold **MENU**, select **Activities & Apps**, select an activity, select the activity settings, and select **Routing**.

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Courses: Sets how you navigate courses using the watch. Use the Follow Course option to navigate a course exactly as it appears, without recalculating. Use the Use Map option to navigate a course using routable maps, and recalculate the route if you stray from the course.

Calculation Method: Sets the calculation method to minimize the time, distance, or ascent in routes.

Avoidances: Sets the road or transportation types to avoid in routes.

Type: Sets the behavior of the pointer that appears during direct routing.

105. To the extent any limitation is not literally present, infringement occurs under the doctrine of equivalents because the '053 Accused Instrumentalities perform substantially the same function, in substantially the same way, to achieve substantially the same result.

106. Defendants also induce and contribute to infringement of the Asserted '053 Claims, with knowledge of the '053 Patent at least as of July 25, 2025, and specific intent that customers use the '053 Accused Instrumentalities in an infringing manner. Defendants' affirmative acts include, by way of example, publishing user guides, support articles, marketing pages, and in-device prompts instructing users how to enable and use Trendline/Popularity routing, heatmaps, Courses, and related features.

107. Defendants' infringement has been and continues to be willful. Despite their knowledge of the '053 Patent and their infringement since at least July 25, 2025, Defendants have intentionally or recklessly continued their infringing acts, making this an exceptional case and

warranting enhanced damages and reasonable attorneys' fees under 35 U.S.C. §§ 284–285.

108. Plaintiff has complied with 35 U.S.C. § 287. The Asserted '053 Claims include method claims that are not subject to § 287's marking requirement. To the extent § 287 applies to any asserted system or computer-readable-medium claims, Plaintiff has not made, sold, or authorized the sale of any patented articles practicing those claims in the United States prior to suit, or, alternatively, Defendants had actual notice of the '053 Patent and the basis for infringement no later than July 25, 2025; therefore, § 287 does not bar recovery of pre-suit damages.

109. Strava has suffered and will continue to suffer damages as a result of Defendants' infringement of the '053 Patent. Strava is entitled to recover damages adequate to compensate for such infringement, including no less than a reasonable royalty and, where proven, lost profits, together with pre- and post-judgment interest and costs. Monetary relief alone is inadequate; Garmin's continued infringement causes irreparable harm, including loss of network effects, erosion of platform differentiation and goodwill, and brand loyalty. There is a causal nexus between the accused mapping/routing implementations and consumer demand for Garmin's products and services. Strava is therefore entitled to a permanent injunction prohibiting Defendants from making, using, offering to sell, selling, or importing the accused implementations (and any colorable variations) of the patented technology.

COUNT FOUR
(Breach of Contract)

110. Strava repeats and re-alleges the allegations in the preceding paragraphs as if fully set forth herein.

111. The MCA is a valid, enforceable contract between Strava and Garmin Ltd. Strava

performed or was excused from performing all obligations.

112. The MCA grants Garmin a limited, revocable, non-sublicensable license to Strava Segments “solely” to incorporate Strava Segment functionality into compatible Garmin devices and “solely” as required to fulfill the Strava-built user experience described in Exhibit A for Strava users. All other rights were reserved to Strava and the MCA explicitly stated that Garmin could not “modify, adapt, translate, create derivative works of, reverse engineer, decompile, or disassemble” Strava Segments.

113. Garmin breached the MCA by, among other things: (a) building, branding, marketing, and distributing Garmin segments beyond the Strava-built user experience and to non-Strava users; (b) adapting and using Strava Segments and related know-how to develop and deploy Garmin Segments; (c) copying, modifying, and distributing Strava Segments or portions thereof outside the scope of the limited license; and (d) failing to comply with Exhibit A’s constraints on user-choice and non-commingling.

114. Garmin’s breaches caused Strava harm, including lost revenue and market opportunities, erosion of Strava’s competitive differentiation, and unjust gains to Garmin. The MCA provides a carve-out from damages limitations for breaches of the Section 8(E) restrictions, and provides for prevailing-party attorneys’ fees. Strava seeks the full measure of contractual damages and equitable relief, including injunctive relief compelling Garmin’s compliance with the MCA.

115. Garmin’s breaches also conferred unjust benefits on Garmin, including accelerated development and deployment of Garmin Segments and popularity-based routing built on Strava-provided materials and know-how, warranting disgorgement as permitted by law and equity.

COUNT FIVE
(Breach of the Implied Covenant of Fair Dealing)

116. Strava repeats and re-alleges the allegations in the preceding paragraphs as if fully set forth herein.

117. The MCA is a valid and enforceable contract that governs the parties' collaboration and is subject to New York law. Under New York law, every contract includes an implied covenant of good faith and fair dealing that prohibits a party from doing anything that would destroy or injure the other party's right to receive the benefits of the contract.

118. The MCA allocates to Strava the right to control the Strava-built segment experience for Strava users on compatible Garmin devices, reserves to Strava all rights not expressly granted, and restricts Garmin's use of Strava Segments and related materials to what is required to implement the Exhibit A, Strava-built user experience. The benefits of this bargain to Strava include, among other things, maintaining Strava's control and differentiation of the segment experience; protecting Strava's segment technology and goodwill; and avoiding the unauthorized use of collaboration access to replicate Strava functionality in Garmin's own stack.

119. Under the MCA, Garmin possessed some degree of discretion in implementing device features and integrations. However, Garmin exercised that discretion in bad faith and contrary to Strava's justified expectations by, among other things: (a) using collaboration access to implement substantially similar segment functionality in Garmin-branded software and device firmware outside the Strava-built experience and for non-Strava users; (b) surfacing segment competition and leaderboards in Garmin Connect and on devices in ways that bypass, dilute, or undermine the Exhibit A constraints and Strava's control; and (c) leveraging Strava-provided materials and know-how for purposes not required to implement the Exhibit A experience.

120. Even if Garmin's conduct were found not to violate any single express provision of the MCA, Garmin's course of dealing and use of the collaboration access to supplant Strava's segment experience and divert the benefits of the bargain to itself breached the implied covenant by depriving Strava of its fruits under the MCA.

121. As a direct and proximate result of Garmin's breach of the implied covenant, Strava has suffered damages, including lost revenue and business opportunities, erosion of competitive differentiation and network effects, harm to goodwill, and unjust gains to Garmin. Strava is entitled to compensatory damages, equitable relief, and attorneys' fees pursuant to the MCA.

122. This claim is pled in the alternative to, and not as a duplication of, Strava's express breach claim. To the extent the trier of fact concludes that Garmin did not breach any express provision of the MCA, Garmin's conduct nonetheless breached the implied covenant under New York law.

FEES AND COSTS

123. To the extent that Defendants' willful and deliberate infringement or litigation conduct supports a finding that this is an "exceptional case," an award of attorney's fees and costs to Strava is justified pursuant to 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Strava respectfully requests that the Court enter judgment and order:

- A. that Defendants have infringed the '922, '651, and '053 Patents;
- B. that Defendants' infringement has been and is willful;
- C. awarding damages adequate to compensate Strava for Defendants' infringement, with pre- and post-judgment interest, and trebling for willfulness under 35 U.S.C. § 284;

D. permanently enjoining Defendants, their officers, agents, servants, employees, attorneys, and those in active concert or participation with them, from further infringement of the Asserted Patents, including but not limited to permanently enjoining any and all sales of Garmin hardware with functionality that infringes on the Asserted Patents, including but not limited to permanently enjoining any and all sales of Garmin hardware with functionality that infringes on the Asserted Patents and the use of infringing software (*e.g.*, Garmin Connect);

E. awarding Strava its contract damages, including those available for breaches of the MCA's Section 8(E) restrictions, and equitable relief;

F. awarding Strava its costs and reasonable attorneys' fees under 35 U.S.C. § 285 and the MCA; and

G. awarding such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff hereby demands a jury trial on all issues triable by jury.

Dated: September 30, 2025

Respectfully submitted,

/s/ Joel D. Sayres

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