

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

LOGANTREE LP

Plaintiff,

v.

GARMIN INTERNATIONAL, INC.,
GARMIN USA, INC., and GARMIN, LTD.

Defendants.

CIVIL ACTION NO.

JURY DEMAND

PLAINTIFF'S ORIGINAL COMPLAINT

1. Plaintiff LoganTree LP (“LoganTree”) files this, its Original Complaint for patent infringement. Plaintiff asserts claims for patent infringement of U.S. Patent No. 6,059,576 (“the ‘576 Patent”), as reexamined, against Defendants Garmin International, Inc. (“Garmin Int’l”), Garmin USA, Inc. (“Garmin USA”), and Garmin, Ltd. (collectively, “Garmin”), under 35 U.S.C. § 271, *et seq.* In support thereof, LoganTree would respectfully show the Court the following:

PARTIES

2. Plaintiff LoganTree LP (“Plaintiff” or LoganTree”) is a partnership organized under the laws of the state of Nevada. LoganTree’s sole general partner is Gulfstream Ventures, LLC (“Gulfstream”), a limited liability company organized under the laws of the state of Nevada. Theodore and Anne Brann are the owners and sole managing members of Gulfstream, and their address is P.O. Box 2345, Boerne, Texas 78006.

3. Upon information and belief, Defendant Garmin Int’l is a corporation organized and existing under the laws of the State of Kansas, with its principal place of business at 1200

East 151st Street, Olathe, Kansas 66062. Garmin Int'l may be served through its registered agent, David Ayres, at 1200 East 151st Street, Olathe, Kansas 66062.

4. Upon information and belief, Defendant Garmin USA is a corporation organized and existing under the laws of the State of Kansas, with its principal place of business at 1200 East 151st Street, Olathe, Kansas 66062. Garmin Int'l may be served through its registered agent, David Ayres, at 1200 East 151st Street, Olathe, Kansas 66062.

5. Upon information and belief, Defendant Garmin Ltd. is a company organized and existing under the laws of Switzerland with its principal place of business at Muhlenstalstrasse 2, 8200 Schaffhausen, Switzerland, and can be served at that address.

6. Upon information and belief, Garmin Int'l and Garmin USA are wholly-owned subsidiaries of Garmin Ltd.

7. Upon information and belief, Garmin sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

8. This is an action for patent infringement arising under the patent laws of the United States, Title 35, United States Code. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

9. On information and belief, this Court has general and specific personal jurisdiction over each of the Defendants because each Defendant is present within and/or has sufficient minimum contacts with the State of Kansas and the District of Kansas pursuant to the Due Process Clause of the United States Constitution and the law of Kansas; each Defendant has

purposefully availed itself of the privileges of conducting business in the State of Kansas and in the District of Kansas; each Defendant has sought protection and benefit from the laws of the State of Kansas; each Defendant regularly conducts business within the State of Kansas and within the District of Kansas; each Defendant has purposefully and voluntarily placed infringing products in the stream of commerce with the expectation that its products will be purchased by end users in the State of Kansas and in the District of Kansas; each Defendant has committed the tort of patent infringement within the State of Kansas and within the District of Kansas; and Plaintiff's causes of action arise directly from the Defendants' business contacts and other activities in the State of Kansas and in the District of Kansas.

10. More specifically, Garmin directly and/or through intermediaries (including distributors, retailers, and others) ships, distributes, offers for sale, sells, and/or advertises its products in the United States, the State of Kansas, and the District of Kansas, including but not limited to the Accused Products identified below. Garmin solicits customers in the State of Kansas and in the District of Kansas. Garmin has customers who are residents of the State of Kansas and the District of Kansas and who use Garmin's products and services, including the Accused Products, in the State of Kansas and in the District of Kansas. Garmin derives substantial revenue from goods and service provided to individuals in Kansas and in the District of Kansas.

11. Venue is proper in the District of Kansas under 28 U.S.C. § 1400(b). Defendants Garmin Int'l and Garmin USA both reside in Kansas and the District of Kansas because both are incorporated in the State of Kansas. On information and belief, Defendant Garmin Ltd. has committed acts of patent infringement in the State of Kansas and in the District of Kansas and has a regular and established place of business in the State of Kansas and the District of Kansas.

See TC Heartland LLC v. Kraft Foods Grp. Brands LLC, 137 S. Ct. 11514 (2017). Moreover, on information and belief, Garmin has transacted business in this district, and has directly and/or indirectly committed and/or induced acts of patent infringement in this district.

THE PATENT-IN-SUIT

12. On May 9, 2000, the United States Patent and Trademark Office (“PTO”) duly and lawfully issued the ‘576 Patent, entitled “Training and Safety Device, System and Method to Aid in Proper Movement During Physical Activity,” after a full and fair examination. A true and correct copy of the ‘576 Patent is attached hereto as Exhibit A.

13. On March 17, 2015, following a reexamination requested by LoganTree, the PTO issued a reexamination certificate for the ‘576 Patent, bearing U.S. Patent No. 6,059,576 C1 (“the ‘576 Reexamination Certificate”). A true and correct copy of the ‘576 Reexamination Certificate is attached hereto as Exhibit B. The ‘576 Patent as reexamined is referred to as the “Reexamined ‘576 Patent.”

14. The named inventor of the ‘576 Patent is Theodore Brann.

15. Mr. Brann assigned all right, title, and interest in the ‘576 Patent to LoganTree. LoganTree possess all rights of recovery under the ‘576 Patent and the Reexamined ‘576 Patent, including the exclusive right to sue for infringement and recover past damages.

MR. BRANN’S INVENTION

16. The ‘576 Patent generally relates to a device that Mr. Brann invented to measure, analyze, and record data about the wearer’s body movements using an accelerometer, programmable microprocessor, internal clock, and memory. The ‘576 Patent summarizes the invention as follows:

An electronic device, system, and method to monitor and train an individual on proper motion during physical movement. The system employs an electronic

device which tracks and monitors an individual's motion through the use of an accelerometer capable of measuring parameters associated with the individual's movement. The device also employs a user-programmable microprocessor which receives, interprets, stores and responds to data relating to the movement parameters The downloadable, self-contained device can be worn at various positions along the torso or appendages being monitored depending on the specific physical task being performed. The device also detects the speed of movements made while the device is being worn

(Ex. A at 1).

17. As described in the '576 Patent, these basic components of Mr. Brann's patented invention can be physically configured in a number of different ways depending upon the application to which the invention is put, and the device itself is fully user-programmable, such that it can be programmed to detect the occurrence of various different events according to parameters defined by the user as part of the device's programming. (*Id.* at 13-17).

18. The '576 Patent describes in detail, and with reference to the included drawings, how Mr. Brann's invention might function in one possible "Preferred Embodiment."¹ (*Id.* at 13-17). In the Preferred Embodiment, the patented invention consists of a "self-contained movement measuring device" that can be attached to the wearer in a "variety of positions based on the specific movement being observed" and "the particular application in which the device is used." (*Id.* at 13). As illustrated in Figure 4, the Preferred Embodiment of the "self-contained movement measuring device" contains a number of internal components, including principally:

- (1) "a movement sensor which detects movement and measures associated data such as angle, speed, and distance,"
- (2) "a microprocessor" connected to the movement sensor "which receives the signals generated by the movement sensor for analysis and subsequent processing,"

¹ As the patent explicitly states, "the invention is capable of other and different embodiments, and its several details are capable of modifications in various obvious respects, all without departing from the invention." (*Id.* at 17). The patent's description of the "Preferred Embodiment" is thus "to be regarded as illustrative in nature, and not as restrictive." (*Id.*).

(3) “a clock” connected to the microprocessor “which is used as an internal clock for coordinating the functioning of the microprocessor” and “serves as a real time clock to provide date and time information to the microprocessor,” and

(4) “memory” in which to store the “movement data” generated by the movement sensor and microprocessor.

(*Id.* at 7, 13).

19. The ‘576 patent specifically describes how the movement sensor, microprocessor, clock, and memory function together to detect, analyze, and record information about the wearer’s movement:

The microprocessor constantly monitors the movement data received from the movement sensor. The microprocessor analyzes the movement data received from the sensor and, based on its internal programming, responds to the data. If a recordable event occurs, the microprocessor retrieves the date/time stamp from the clock and records the event information along with the date/time stamp in memory.

(*Id.* at 14).²

20. The ‘576 Patent also describes different forms these basic components might take in other possible embodiments of the patented device. For example, the patent notes that in the Preferred Embodiment, the “movement sensor” consists of “an accelerometer which is capable of detecting angels of movement in multiple planes,” but in an alternative embodiment could consist of multiple single-axis accelerometers acting in concert to generate the same information. (*Id.* at 13). Similarly, the Preferred Embodiment shows the microprocessor, clock, memory, and other components housed within a single “self-contained movement measuring device” worn by the user, but the patent notes that other embodiments might make use of wireless technology to “allow the user to wear minimal hardware (consisting primarily of the movement sensor) on the

² The other components shown in Figure 4 and described in the patent include a power source and related components, user inputs, an in/out port, and an output indicator. (*Id.* at 7).

body while transmitting the details of each physical movement to a remote microprocessor for analysis and storage.” (*Id.* at 15).

DIFFERENT WAYS TO PROGRAM MR. BRANN’S INVENTION

21. The ‘576 Patent shows how the invention’s basic components – and the data they generate and record – can be adapted to a wide-variety of applications based upon the different ways in which the microprocessor can be programmed to operate: “[T]he device is completely user programmable,” such that “the user may program the microprocessor with an array of functions for the device to perform” using the movement data collected by the accelerometer. (*Id.* at 15). For example, a user could program the device to detect when the wearer’s motion exceeds a certain angle, provide an alert to the wearer, and make a record of the event in the device’s memory. In that case, the patent explains: “[O]nce a wearer of the device exceeds the first defined angle limit, a notice for that limit is given to the wearer [and] [t]he microprocessor also stores the specific angle limit which was exceeded along with the date/time stamp.” (*Id.*). The recorded data can then be analyzed in any number of ways, for example to determine “the number, date and time” at which the device detected a programmed “event threshold.” (*Id.*).³

22. As the ‘576 Patent explains, the flexible programmability of Mr. Brann’s invention makes it useful in any number of applications, such as the physical rehabilitation of patients, monitoring physical labor by employees, and in sports. (*Id.* at 16). For example, the

³ Both the ‘576 Patent and the ‘576 Reexamination Certificate use the term “user-defined” – as in “user-defined events” or “user-defined operational parameters” – to refer to the device’s programming. (Ex. A at 14-17; Ex. B at 3). A “user-defined event” is simply an occurrence that the device is programmed to recognize, such as a body movement that surpasses a programmed angle-limit. (Ex. A at 14). Likewise, a “user-defined parameter” simply refers to a variable (such as the wearer’s height) that the device is programmed to incorporate into its analysis of data generated by the accelerometer. (*Id.* at 16).

patent specifically describes how the device could be used to monitor, analyze, and correct a golfer's swing:

[The device] may be worn by a golfer in order to monitor torso, waist, shoulder and arm movement during various drives and putts. The data collected by the device may then be used as a tool to aid in the analysis and improvement of the individual's stroke technique.

23. (*Id.* at 16-17). The patent also notes that the invention could be useful “for any number of sports, including football, baseball, basketball, or tennis ... due to the unique programmability of the device.” (*Id.*).

THE REEXAMINATION

24. The ‘576 Patent sets forth three independent claims – one each for the device, system, and method of the invention described above – along with twenty-six dependent claims. (*Id.* at 17-18). On March 17, 2015, following a reexamination requested by LoganTree, the PTO issued a reexamination certificate for the ‘576 Patent (“the ‘576 Reexamination Certificate”) reaffirming the patentability of all of the ‘576 Patent claims, as amended, and further determining that an additional 156 dependent claims are patentable, for a total of 185 patented claims. (Ex. B). Claims 1, 13, and 20 of the Reexamined ‘576 Patent are independent claims, and the remaining 182 claims are dependent on Claims 1, 13, or 20.

25. As stated in Claim No. 1 of ‘576 Reexamination Certificate, the patented “device” consists of:

A portable, self-contained device for monitoring movement of body parts during physical activity, said device comprising:

a movement sensor capable of measuring data associated with unrestrained movement in any direction and generating signals indicative of said movement;

a power source;

a microprocessor connected to said movement sensor and to said power source, said microprocessor capable of receiving, interpreting, storing and responding to

said movement data based on user-defined operational parameters, *detecting a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data, and storing first event information related to the selected first user-defined event along with the first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred;*

at least one user input connected to said microprocessor for controlling the operation of said device;

a real-time clock connected to said microprocessor; memory for storing said movement data; and

an output indicator connected to said microprocessor for signaling the occurrence of user-defined events;

wherein said movement sensor measures the angle and velocity of said movement.

(*Id.* at 3).⁴

26. The primary purpose of the language added to the patented claims during reexamination (italicized above) was to clarify that the patented device detects and records the occurrence of user-defined events *automatically*, according to the user-defined parameters of the device's programming. This distinguishes the patented device from prior art that required the user to take some affirmative action in order to mark and record the occurrence of an event, such as pressing a button on the device. The added language thus specifies that the microprocessor is "capable of ... detecting a first user-defined event based on the movement data and at least one of the user-defined operational parameters" and recording that event in memory along with a time-stamp. (Ex. B at 3). The additional language does not change in any way the components or operation of the invention as described in the '576 Patent: the device's microprocessor continuously monitors data generated by the motion sensor and, as programmed by the user,

⁴ The text in italics "indicates additions made to the patent" as a result of the reexamination. (*Id.* at 3).

detects the occurrence of user-defined events and records those events in the device's memory along with a time-stamp generated by the device's real-time clock. (Ex. A at 14).

27. Claim 13 (the "System Claim") defines the patented "system" to comprise the Claim 1 device when connected via a "download device" to "a computer running a program capable of interpreting" the data gathered by the Claim 1 device.

28. Claim 13 of the Reexamined '576 Patent is for: "A system to aid in training and safety during physical activity, said system comprising:

A portable, self-contained movement measuring device, said movement measuring device further comprising:

A movement sensor capable of measuring data associated with unrestrained movement in any direction and generating signals indicative of said movement;

A power source;

A microprocessor connected to said movement sensor and to said power source, said microprocessor capable of receiving, interpreting, storing and responding to said movement data based on user-defined operational parameters, detecting a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data, and storing first event information related to the selected first user-defined event along with the first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred;

At least one user input connected to said microprocessor for controlling the operation of said device;

A real-time clock connected to said microprocessor; memory for storing said movement data; and

At least one input/output port connected to said microprocessor for downloading said data and uploading said operational parameters;

An output indicator connected to said microprocessor;

A computer running program capable of interpreting and reporting said movement data based on said operational parameters; and

A download device electronically connected to said movement measuring device and said computer for transmitting said movement data and operational

parameters between said movement measuring device and said computer for analysis, reporting and operating purposes;

Wherein said movement sensor measures the angle and velocity of said movement.

29. Claim 20 (the “Method Claim”) provides a parallel definition for the patented “method.”

30. Claim 20 is for: “A method to monitor physical movement of a body part comprising the steps of:

Attaching a portable, self-contained movement measuring device to said body part for measuring unrestrained movement in any direction;

Measuring data associated with said physical movement; interpreting, using a microprocessor included in the portable, self-contained measuring device, said physical movement data based on user-defined operational parameters and a real-time clock; [and]

Storing said data in memory;

Detecting, using the microprocessor, a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data; and

Storing, in said memory, first event information related to the detected first user-defined event along with first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred.

COUNT ONE: INFRINGEMENT OF THE REEXAMINED ‘576 PATENT

31. Plaintiff realleges paragraphs 1 through 30 herein.

32. On information and belief, Garmin, directly or through intermediaries, makes, made, has made, used, imported, manufactured, provided, supplied, distributed, sold, and/or offered for sale to customers within the United States accelerometer-based activity monitoring devices that infringe the Reexamined ‘576 Patent, including but not limited to the following models of wearable accelerometer-based activity tracker (collectively “Accused Products”): vivofit model family (vivofit 3, vivofit jr., etc.), vivosmart model family, vivoactive model

family, vivomove model family, Fenix model family, Forerunner model family, Epix model family, Tactix model family, Quatix model family, D2 model family, Approach model family, Foretrex model family, TruSwing model family, and the Swim model family.

33. On information and belief, the Accused Products infringe the Reexamined '576 Patent because each of the accused products is a portable, self-contained device that uses an accelerometer to measure the angle and velocity of body movements, a user-programmable microprocessor capable of recognizing and analyzing data generated by the accelerometer, and internal memory and a clock for storing the data along with the time at which the detected events occurred.

34. On information and belief, the Accused Products infringe the Device Claim of the Reexamined '576 Patent, and other claims dependent on the Device Claim, in that each of the Accused Products:

- a. Is a portable, self-contained devices for monitoring body movements during physical activity;
- b. Contains a movement sensor – specifically, an accelerometer – capable of measuring data associated with body movements and generating signals indicative of such movements, and which measures the angle and velocity of such movements;
- c. Contains a power source – specifically, a rechargeable internal battery;
- d. Contains a microprocessor connected to the movement sensor and power source capable of receiving, interpreting, storing, and responding to movement data generated by the accelerometer based on user-defined operational parameters (*e.g.*, a goal of 10,000 steps, the user's height, the

angle or speed of the wearer's golf swing, distance traveled, calories burned, etc.);

- e. Contains user inputs (*e.g.*, buttons, touch screen, etc.) connected to the microprocessor for controlling the device;
- f. Contains a real-time clock and memory for storing movement data; and
- g. Includes an output indicator (*e.g.*, screen, LED readout, colored lights, etc.) connected to said microprocessor for signaling the occurrence of user-defined events.

35. As reflected in the chart attached hereto as Exhibit C, the information Garmin makes public about the Accused Products further demonstrates how they infringe the Device Claim of the Reexamined '576 Patent. (Ex. C). While Exhibit C demonstrates the element-by-element infringement of three specific Accused Products (*i.e.*, the "Forerunner 35," "vivoactive HR," and "Fenix 5" model watches), on information and belief, all of Garmin's Accused Products incorporate equivalent body motion-tracking technology and design, and all infringe the Reexamined '576 Patent.

36. Garmin even markets products that constitute specific applications of the patented invention foreseen in the '576 Patent itself. As noted, the '576 Patent specifically contemplates an application for the invention to help golfers improve their swing:

The device also has application in the area of sports. For example, it may be worn by a golfer in order to monitor torso, waist, shoulder, and arm movement during various drives and putts. The data collected by the device may then be used as a tool to aid in the analysis and improvement of the individual's stroke technique.

Garmin now manufactures and markets exactly such a product using the patented accelerometer-based technology, the TruSwing device, which Garmin's website describes as follows:

For golfers who want to improve their shot-making consistency, the easy-to-use TruSwing sensor provides the accurate metrics needed to identify and correct any faulty swing mechanics.

37. On information and belief, each of the Accused Products is designed to be and is cable of being connected to an external computer (such as a laptop or smart phone) and/or computer network operating software capable of accessing and downloading stored data from the Accused Products, analyzing that data, and presenting the data to the user in different forms. When so connected, each of the Accused Products infringes the System Claim in of the Reexamined '576 Patent, and other claims dependent on the System Claim, in that the Accused product so connected:

- a. Is a system to aid in training and safety during physical activity;
- b. Contains a portable, self-contained movement measuring device of the kind described in Paragraph 25, *supra* (e.g., the Accused Product itself);
- c. Contains a computer (e.g., a personal computer or smart phone) running a program capable of interpreting and reporting movement data collected by the device;
- d. Contains a download device (e.g., cord, USB dongle, Bluetooth transmitter, etc.) electronically connected to the movement measuring device and the computer for transmitting data between the movement device and the computer for analysis.

38. On information and belief, when used as intended and instructed by Garmin, each of the Accused Products infringes the Method Claim of the Reexamined '576 Patent, and other claims dependent on the Method Claim, in that the Accused Product, so used:

- a. Is a method to monitor physical movement of a body part comprising the steps of:

- b. Attaching a portable, self-contained movement measuring device (e.g., the Accused Product itself) to said body part;
- c. Measuring data associated with physical movement of the body part (using the accelerometer described above);
- d. Interpreting said data using a microprocessor contained in the movement measuring device based on user-defined parameters and a real-time clock;
- e. Storing said data in memory;
- f. Detecting, using the microprocessor, a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data; and
- g. Storing, in said memory, first event information related to the detected first user-defined event along with first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred.

39. The infringing actions of Garmin are and have at all times been without the consent of, authority of, or license from Plaintiff.

40. As a direct and proximate result of the infringement of the Reexamined '576 Patent by Garmin, Plaintiff has suffered damages in an amount that cannot yet be fully ascertained, which will be proven at trial.

41. Garmin's infringement of Logantree's exclusive rights under the Reexamined '576 Patent will continue to damage LoganTree, causing irreparable harm for which there is no adequate remedy at law. Unless enjoined by this Court, Garmin will continue to infringe the Reexamined '576 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff LoganTree requests that the Court grant the following relief:

- a) enter judgment that Defendants infringe and have directly infringed the Reexamined '576 Patent under 35 U.S.C. § 271(a);
- b) order Defendants to pay damages adequate to compensate Plaintiff for Defendants' infringement of the Reexamined '576 Patent pursuant to 35 U.S.C. § 284, together with pre-judgment and post-judgment interests, in an amount according to proof;
- c) enter a permanent injunction enjoining Defendants and their officers, agents, servants, employees, and attorneys, and all other persons and entities acting in concert or participation with them, from infringing the Reexamined '576 Patent.
- d) in the event a permanent injunction is not granted, determine the conditions for future infringement or grant such other relief as the Court deems appropriate;
- e) enter judgment that this case is exceptional under 35 U.S.C. § 285 and award Plaintiffs reasonable attorneys' fees and costs incurred in this action; and
- f) award such other and further relief, at law or in equity, as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Plaintiff respectfully requests a trial by jury on all issues so triable, pursuant to Fed. R. Civ. P. 38.

DESIGNATION OF TRIAL

Plaintiff respectfully requests, pursuant to D. Kan. R. 40.2, that the trial be held in Wichita, Kansas.

DATED: August 23, 2017

Respectfully submitted by:

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