

**IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
(ALEXANDRIA DIVISION)**

Erik B. Cherdak
149 Thurgood Street
Gaithersburg, Maryland 20878
Ph. 202.330.1994

Plaintiff,

v.

Fitbit, Inc.
150 Spear Street
San Francisco, California 94105

Defendant.

Case No. 1:12-CV-1394

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Erik B. Cherdak (hereinafter "Plaintiff" or "Cherdak"), *Pro Se*, and in and for his Complaint against the above-named Defendant, states as follows:

PARTIES

1. Plaintiff is an individual residing in Gaithersburg, Maryland at the address listed above. At all times relevant herein, Plaintiff has been and is the named inventor and owner of U.S. Patent Nos. 5,343,445 and 5,452,269 (the "patents-in-suit").
2. On information and belief, Defendant Fitbit, Inc. ("Fitbit") is a privately held company having a principal place of business as specified in the caption of this Complaint. Fitbit regularly sells infringing products and solicits business in this judicial district of Virginia, USA, such as through its vast sales and distribution network that includes such well-know retailers as the AT&T Store (e.g., such as the AT&T Store located at 3165 Duke Street, Alexandria, Virginia). Fitbit also owns and operates a website accessible at www.fitbit.com, 24 hours per day, 7 days per week, and 365 days

per year by citizens of this judicial district. As such, Fitbit's infringing products as specified herein are regularly advertised and marketed, offered for sale and sold to citizens in this judicial district.

JURISDICTION AND VENUE

3. This is an action for Patent Infringement of U.S. Patent Nos. 5,343,445 and 5,452,269 to Cherdak under the Laws of the United States of America and, in particular, under Title 35 of the United States Code (Patents – 35 USC § 1, *et seq.*). Accordingly, Jurisdiction and Venue are properly based in accordance with Sections 1338(a), 1391(b) and (c), and/or 1400(b) of Title 28 of the United States Code.

4. Defendant, has in the past engaged in the design, importation, distribution, sale, and offering for sale of products including, but not limited to, those which incorporate technologies and the use of methods covered by the patents-in-suit. At all times relevant herein, Defendant has engaged in the infringement of and/or induced the infringement of and/or committed contributory infringement of the patents-in-suit patent throughout the United States, including, but not limited to, in this judicial district of Virginia, USA.

FACTS

5. On July 6, 1993, Plaintiff filed a patent application entitled "Athletic Shoe with Timing Device" which resulted in the issuance of the U.S. Patent 5,343,445 on August 30, 1994. On August 29, 1994, Plaintiff filed a Continuation-type application also entitled "Athletic Shoe with Timing Device" which resulted in the issuance of the U.S. Patent No. 5,452,269 on September 19, 1995. The patents-in-suit have successfully gone through the USPTO's expert review on three (3) occasions: First, in the early 1990's during initial examination proceedings; second, during *ex parte* reexamination proceedings in the 2007-2008 time-frame; and third, during *ex parte* reexamination proceedings in 2012. It is beyond dispute that the patents-in-suit are valid *ipso facto*.

Said first reexamination proceedings resulted, *inter alia*, in the confirmation of many claims without amendment. Said second reexamination proceedings resulted in the confirmation of all claims of both the patents-in-suit without any amendment and the addition of claims. Copies of the patents-in-suit along with their respective reexamination certificates are attached hereto at **Exhibits 1-6**.

6. Fitbit has in the past imported, distributed, sold and offered for sale, and continues to import, distribute, market, sell and offer for sale, infringing products under the Fitbit, Fitbit Ultra, Fitbit Zip, Fitbit One and other trademarks/trade identifiers.

7. The patents-in-suit are marked in connection with products that utilize substantially similar technology and processes as those found in the Defendant's products. Such patent marking may be found, for example, at www.pearsports.com in relation to its activity tracking devices and foot pod products.

COUNT I – PATENT INFRINGEMENT

Paragraphs 1 through 7 are hereby incorporated by reference as though completely set forth herein.

8. Given the validity and enforceability of the patents-in-suit against past, present, and future infringing acts and other activities prohibited under the U.S. Patent Act (35 USC § 1, *et seq.*), Plaintiff, *inter alia*, possesses the right to pursue claims against Fitbit for its past, present, and future design, use, manufacture, importation, sale, offer for sale, and distribution of infringing products under 35 USC § 271(a) (direct infringement), (b) (induced infringement), and (c) (contributory infringement). Fitbit has infringed, contributed to the infringement of, and/or induced the infringement of the patents-in-suit in violation of 35 USC § 271(a), (b), and/or (c) by its design, use, manufacture, importation, distribution, sale, and offer for sale of products currently sold under the under the Fitbit, Fitbit ULTRA, Fitbit ZIP, Fitbit ONE and other trademarks/trade

identifiers. Defendant refers to the Fitbit ULTRA, Fitbit ONE, and the Fitbit ZIP as “activity trackers.”

9. The patents-in-suit are publically marked on materials used in connection with selling other products that operate in substantially similar ways to that of Defendant Fitbit’s infringing products. For example, the patents-in-suit are marked on website materials used in connection with selling products sold by Pear Sports, LLC at www.pearsports.com which includes the following patent marking: “Products may be covered by one or more of the following patents until their expiration: USP 5,343,445 and USP 5,452,269. Products sold under license.”

10. Fitbit’s activity trackers are advertised by Fitbit as each device including a motion sensor that “measures the intensity and duration of your physical activities, calories burned, steps taken, distance traveled...” **Exhibit 7**. The intensity of a step relates to the pressure (force over area) imparted to a shoe during that step, for example, to make a shoe move when worn by a person during an activity being evaluated (e.g., during steps taken such as during running step (a series of jumps), a walking step, a jump, etc.). The duration of a step directly correlates to the time that a shoe is off the ground and in the air such as during a step or jump taken by a person wearing one of the Defendant’s activity monitors. This Court held in collateral litigation that “The 445 patent senses when a shoe leaves and returns to the ground.” *See* Case No. 1:11-cv-01311-LO-JFA at ECF 112, p. 6. This Court also held that “Cherdak’s 445 patent senses pressure imparted to a shoe at different intervals.” *Id.* Trusted technology evaluators have summed the inner workings of the Fitbit device as follows: “The linchpin of FitBit is its **three-dimensional accelerometer system**...In plain language, that just means it tracks motion, *as well as the intensity of that motion*.” *See Exhibit 8* at p. 2 (emphasis supplied).

11. Plaintiff's pre-filing investigation¹ reveals *at least* the following information related to Defendant's infringement of the patents in suit as presented herein in claim-chart form:

Claim 10 of U.S. Patent No. 5,343,445 C1	Fitbit Products - <i>Exemplary</i> Infringement Fitbit ULTRA, ZIP and ONE Products Collectively, the "Fitbit Products"
10. A method for measuring and indicating hang time off the ground and in the air during a jump by a person wearing an athletic shoe, said method comprising the steps of:	The Fitbit Products operate to measure and indicate hang time off the ground and in the air during a jump by a person wearing an athletic shoe. All of the Fitbit products may be attached to apparel worn by a user including, but not limited to, an article of clothing, a shoe, a woman's bra, a pocket, etc. through use of a clip supplied by Fitbit with each of the Fitbit Products.
(a) measuring in the shoe elapsed time between the shoe leaving the ground and returning to the ground;	This method step as written literally reads on the Fitbit Products. When a Fitbit Product is attached to a shoe using the clip supplied by Fitbit, for example, the device measures time between the shoe leaving the ground and returning to the ground during a step or jump. Elapsed time is measured between the shoe leaving the ground and returning to the ground.
(b) from the elapsed time measured in step (a), determining in said shoe whether said person has jumped off the ground or taken a walking or running step; and	This method step as written literally reads on the Fitbit Products. In order to determine a step count, for example, the Fitbit Products and the algorithms programmed therein discern among movement types and characteristics. Movement of a person and his or her shoe is directly related to pressure (force over area) imparted to that person's shoe during a step or jump (i.e., the intensity of the person's motions – See Exhibit 8 at p. 2).
(c) upon determining in step (b) that the person has jumped off the ground, providing	This claimed method step literally reads on the Fitbit Products. Upon determining

¹ The infringement charts presented in this Complaint are preliminary and have been prepared based only on publicly available information. Due discovery in this case will reveal information directly from the Defendant or elsewhere that further details the structural and operational features of the Fitbit Products. Plaintiff reserves the right to change the charts found herein based on information that will be made available during discovery. The charts found herein satisfy all pleading requirements under the FRCP.

<p>an indication at said shoe, perceptible to said person, of the elapsed time measured in step (a).</p>	<p>in step (b) that the person has jumped off the ground (e.g., during a running sequence, etc.), the Fitbit Products, when one of same is mounted on a person's shoe, for example, will provide an indication at (in, on or near) the shoe of the elapsed time measured in step (a). The infringing Fitbit Products also can utilize radio frequency technologies to communicate sensed and processed data. Visual indications are provided at (in, on, near) the shoe (e.g., via LED or LCD arrangements) and/or remotely such as via a corresponding remotely located web site.</p>
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Claim 12 of U.S. Patent No. 5,452,269 C1	Fitbit Products - <i>Exemplary</i> Infringement Fitbit ULTRA, ZIP and ONE Products Collectively, the "Fitbit Products"
12. The method of measuring hang time off the ground and in the air of an individual, said method comprising the steps of:	The Fitbit Products operate to measure and indicate hang time off the ground and in the air during a jump by a person wearing an athletic shoe. All of the Fitbit products may be attached to apparel worn by a user including, but not limited to, an article of clothing, a shoe, a woman's bra, a pocket, etc. through use of an integrated or device-attachable clip supplied by Fitbit with each of the Fitbit Products.
(a) providing in an athletic shoe a selectively actuatable timing device;	This claimed method step literally reads on the Fitbit Products and their integral and packaged clip assemblies. The Fitbit Products are selectively actuatable with switching assemblies to operate timing and other circuitry and displays within those products. The ULTRA, for example, includes a momentary contact switch. The ZIP, for example, operates by sensing finger taps directly to the device to scroll through various pieces of information (steps, distance, calories burned). Such pieces of information all relate to sensing steps (when a shoe leaves and later returns to the ground and how long it takes to do the same). The ULTRA is advertised as including timing circuitry. Tapping (i.e., applying pressures or forces over areas) of the surface of the ZIP demonstrate that it is responding to pressure (force over area) imparted to the device itself and/or to or by the person and his body parts.
(b) actuating said timing device to measure elapsed time in response to said athletic shoe leaving the ground and elevating into the air;	This claimed method step literally reads on the Fitbit Products. Timing circuitry/processes within the Fitbit Products are actuated to measure elapsed time in response to an athletic shoe leaving the ground and elevating into the air such as occurs during an activity under review (e.g., steps taken, etc.).

<p>(c) deactuating said timing device in response to said athletic shoe returning to the ground; and</p>	<p>This claimed method step literally reads on the Fitbit Products. Timing circuitry/processes within the Fitbit Products deactuate a time measurement period between a shoe leaving the ground and the shoe returning to the ground as sensed in steps (b) and (c), respectively.</p>
<p>(d) providing an indication at said athletic shoe representing the time interval between actuation of said timing device in step (b) and deactuation of said timing device in step (c).</p>	<p>This claimed method step literally reads on the Fitbit Products. The Fitbit Products provide an indication (e.g., of one or more steps, etc.) at (in, on or near) the athletic shoe especially when one of the Fitbit Products is clipped to a person's article of clothing such as his/her pant's pocket, a shoe and worn during an activity like a stepping or jumping sequence. The indication is a visible indication and represents and relates to the time interval between actuation and deactuation of timing device circuitry. The visible indication includes presentation of numeric displays, graphic images (smiley faces, etc.) and other non-literal elements (e.g., growing and shrinking flowers to graphically depict a particular progress level over time).</p>

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Claim 10 of U.S. Patent No. 5,343,445 C1	Fitbit Products - <i>Exemplary</i> Infringement Fitbit ULTRA, ZIP and ONE Products Collectively, the "Fitbit Products"
10. A method for measuring and indicating hang time off the ground and in the air during a jump by a person wearing an athletic shoe, said method comprising the steps of:	The Fitbit Products operate to measure and indicate hang time off the ground and in the air during a jump by a person wearing an athletic shoe. All of the Fitbit products may be attached to apparel worn by a user including, but not limited to, an article of clothing, a shoe, a woman's bra, a pocket, etc. through use of a clip supplied by Fitbit with each of the Fitbit Products.
(a) measuring in the shoe elapsed time between the shoe leaving the ground and returning to the ground;	When a Fitbit Product is attached to a shoe using the clip supplied by Fitbit, the device measures time between the shoe leaving the ground and returning to the ground during a step or jump. Elapsed time is measured between the shoe leaving the ground and returning to the ground.
(b) from the elapsed time measured in step (a), determining in said shoe whether said person has jumped off the ground or taken a walking or running step; and	In order to determine a step count, for example, the Fitbit Products discern movement types. Movement of a person and his or her shoe is directly related to pressure (force over area) imparted to that person's shoe during a step or jump.
(c) upon determining in step (b) that the person has jumped off the ground, providing an indication at said shoe, perceptible to said person, of the elapsed time measured in step (a).	This claimed method step literally reads on the Fitbit Products. Upon determining in step (b) the person has jumped off the ground (e.g., during a running sequence, etc.), the Fitbit Products mounted on a person's shoe, for example, will provide an indication at (in, on or near) the shoe of the elapsed time measured in step (a). The infringing devices utilize radio frequency to transmit data for remote display/analysis. Visual indications also are provided at (in, on, near) the shoe and remotely such as via a web site. Visual indications are provided by the Fitbit products through use of integrated LED/LCD arrangements (numerical displays, graphic arrangements to depict success level, step counts, etc.).

<p>Claims 25 and 27 of U.S. Patent No. 5,343,445 C2</p>	<p>Fitbit Products – <i>Exemplary</i> Infringement Fitbit ULTRA, ZIP and ONE Products Collectively, the “Fitbit Products”</p>
<p>25. A method for indicating time off the ground and in the air during an activity including a jump, a walking step, a running step, or a skating lift by a person wearing an athletic shoe suitable to said activity, said method comprising the steps of:</p>	<p>The preamble of claim 25 literally reads on the Fitbit Products. The Fitbit Products operate to indicate time off the ground and in the air during an activity by a person wearing an athletic shoe. All of the Fitbit Products may be attached to apparel worn by a user including, but not limited to, an article of clothing, within the laces of a shoe, to a woman’s bra, to in pocket, etc. through use of a clip supplied by Fitbit with each of the Fitbit Products. Fitbit encourages people to attach the Fitbit Products to an article of clothing.</p>
<p>(a) sensing, within said shoe, pressure imparted to said shoe when said shoe leaves the ground during said activity;</p>	<p>This claimed method step literally reads on the Fitbit Products. When a Fitbit Product is attached to a shoe using the clip supplied by Fitbit, an accelerometer in the Fitbit Products senses pressure (force over area) imparted to the shoe to make it move such as when the shoe leaves the ground during an activity like a walking step. The presence of an accelerometer (e.g., a micro-electro-mechanical-system accelerometer or “MEMS accelerometer”) is advertised by Fitbit. The sensor within the Fitbit Products sense activity intensity See Exhibit 8 at p. 2 (“The linchpin of FitBit is its three-dimensional accelerometer system...In plain language, that just means it tracks motion, as well as the intensity of that motion.”).</p>
<p>(b) sensing, within said shoe, pressure imparted to said shoe when said shoe returns to the ground at the end of said activity; and</p>	<p>This claimed method step literally reads on the Fitbit Products. When a Fitbit Product is attached to a shoe’s laces using the clip supplied by Fitbit, an accelerometer in the Fitbit Products senses pressure (force over area) imparted to the shoe to make the shoe move such as when the shoe returns to the ground during an activity like a walking step. The presence of an accelerometer (e.g., a micro-electro-mechanical-system accelerometer or “MEMS accelerometer”) is advertised by Fitbit. Fitbit also advertises that its ZIP product responds to direct taps such as finger taps to the surfaces of the ZIP device (or to its case) to scroll through data computed in the ZIP device. Such taps demonstrate that the accelerometer sensor in the Fitbit products is</p>

	directly responding to pressure (force over area) imparted to the device and to the body (i.e., to an article of clothing, a shoe, etc.) to which they are attached through use of a clip member. The sensor in the Fitbit Products demonstrates the operational characteristic of sensing when a step is taken so that steps can be counted and tracked over time even if clipped to a person's shirt, his shoe, or elsewhere on the person.
(c) activating, within said shoe, a messaging device in relation to the time interval between said shoe leaving and returning to the ground as sensed in steps (a) and (b), respectively, said messaging device providing an indication related to said time interval in a manner perceptible to said person.	This claimed method step literally reads on the Fitbit Products. The Fitbit Products include on-board visual display arrangements comprised of either LEDs or LCD messaging devices. When clipped to a shoe, for example, each Fitbit Product and, more particularly, the on-board messaging devices thereof provide indications related to the interval sensed between the time the shoe leaves the ground and later returns to the ground such as during a walking step. Some of the messaging device arrangements present numerical displays of a step count, (e.g., from 1 to many) and others display graphic images (e.g., growing flowers) to illustrate progress toward a goal.
27. The method according to claim 25, wherein said messaging device activated during said activating step (c) is located remotely from said shoe.	This claim literally reads on the Fitbit Products and, more particularly, on the website views presented to registered users of such products. A website view on a display screen is remotely located from a shoe on which a Fitbit Product may be attached via a clip. This claim demonstrates that the activating step of Claim 25 may be carried out to activate a remotely located messaging device and that the messaging device need not be disposed in or on the shoe. Of course, Claim 25, from which Claim 27 depends, covers both situations in which the activation step may occur at the shoe while the actual manifestation of a message may occur there and/or remotely elsewhere.

12. The above-listed claim charts are exemplary and have been prepared based on publicly available information. Discovery will likely reveal additional materials that inform the infringement inquiry now before the Court. Discovery in this case likely also

will reveal additional instances of infringement such as may be related to additional products and claims of the patents-in-suit.

13. On information and belief, Defendants have infringed the patents-in-suit in violation of 35 USC § 271(b) by actively inducing distributors, customers, and/or other retailers to infringe that patent.

14. On information and belief, Defendants have made and continue to make (and/or have had made on their behalf) infringing products (e.g., the aforementioned Fitbit Products and possibly others) and have and continue to market the same throughout the U.S. and, in particular, in this judicial district of Virginia, USA.

15. On information and belief, Defendant Fitbit markets and sells its infringing products through numerous channels including retail sales channels such through well-known stores like and/or similar to the AT&T Store, BEST BUY, and others.

16. Because of Defendant's infringing activities in the marketplace, Plaintiff and his patents have been and continue to be injured. Thus, the U.S. Patent Act mandates that Plaintiff be granted remedies including, but not limited to, equitable relief to inhibit prospective infringement and damages for past infringement in an amount of no less than a reasonable royalty.

17. Because of the subjectively willful nature of Defendants' infringing activities and Defendant's reckless indifference to the rights of the Plaintiff in violation of 35 USC § 271 (a), (b) and (c), Plaintiff is entitled to enhanced damages of no less than trebled damages as permitted by the U.S. Patent Act (35 USC § 1, *et. seq.*), along with attorneys fees and costs of suit.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment and relief against Defendants Fitbit, Inc. as follows:

- A. For a judgment that the patents-in-suit are infringed by Defendant (including, but not limited to, its subsidiaries, predecessors-in-interest and business units however and wherever formed, etc.) in that Defendant has in the past and continues to act in unauthorized ways to bring to market and encourage the infringing use of products within the Fitbit product family;
- B. That a permanent injunction be issued against continued infringement of the patents-in-suit by Defendant and its parents, subsidiaries, officers, directors, employees, affiliates, representatives and agents, and all those acting in concert with or through Defendant, directly or indirectly, including, but not limited to, distributors, customers, and other retailers;
- C. That an accounting be had for damages caused to Plaintiff Cherdak by Defendant's acts in violation of the U.S. Patent Act (35 USC § 1, *et seq.*) together with pre-judgment and post-judgment interest;
- D. That damages be assessed at no less than a reasonable royalty in regard to the acts of infringement by Defendant Fitbit as complained of herein;
- E. That any damages awarded in accordance with any prayer for relief be enhanced and, in particular, trebled in accordance with the U.S. Patent Act (35 USC § 1, *et seq.*) for Defendant's acts which are found to be willful acts of patent infringement; and
- F. Such other and further relief as this Court shall deem just and proper.

DEMAND FOR TRIAL BY JURY

The Plaintiff hereby demands a TRIAL BY JURY on all issues so triable.

Respectfully submitted,



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Gaithersburg, Maryland 20878
(202) 330-1994
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November 29th, 2012

Exhibits:

- Exhibit 1 U.S. Patent No. 5,343,445
- Exhibit 2 Reexamination Certificate for U.S. Patent No. 5,343,445 (C1)
- Exhibit 3 Reexamination Certificate for U.S. Patent No. 5,343,445 (C2)
- Exhibit 4 U.S. Patent No. 5,452,269
- Exhibit 5 Reexamination Certificate for U.S. Patent No. 5,452,269 (C1)
- Exhibit 6 Reexamination Certificate for U.S. Patent No. 5,452,269 (C2)
- Exhibit 7 Internet Website Printout from www.fitbit.com (Help on How Fitbit Works) as published by Fitbit, Inc. and printed on November 26, 2012.
- Exhibit 8 Internet Article entitled "How FitBit Works," www.howstuffworks.com published by Discovery Communications, printed from the Internet on November 26, 2012.
- Exhibit 9 Printout from www.fitbit.com depicting The Fitbit ULTRA and ZIP infringing products.