UNITED STATES DISTRICT COURT
DISTRICT OF MARYLAND

Erik B. Cherdak
149 Thurgood Street
Gaithersburg, Maryland 20878

Plaintiff,

v.

NextTec International, Inc.
9000 W. Sheridan Street, Ste 140
Pembroke Pines, FL 333024

Defendant.

SERVE ON:

Registered Agent for Nexttec Int'l, Inc.
Michael Drapluk
4055 Sanderling Lane
Weston, FL 33331

No. _____

COMPLAINT FOR PATENT INFRINGEMENT

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Erik B. Cherdak ("Cherdak"), by and through undersigned counsel and in and for his Complaint against Defendant NextTec International, Inc. (also referred to herein as "NEXTTEC"), alleges the follows:

JURISDICTION AND VENUE

1. This is an action for patent infringement under the laws of the United States and, in particular, under Title 35 of the United States Code (Patents). Jurisdiction and venue are based on Sections 1338(a), 1391(b) and (c), and/or 1400(b) of Title 28, United States Code.

2. Plaintiff Erik B. Cherdak is an individual who resides in Gaithersburg, Maryland. At all times relevant herein, Mr. Cherdak has been and is the named inventor and owner of

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United States Patent Nos. 5,343,445 ("the '445 patent") and 5,452,269 ("the '269 patent") (hereinafter collectively referred to as "the Cherdak patents"), which were duly and legally issued by the U.S. Patent and Trademark Office on August 30, 1994 and September 19, 1995, respectfully. True and correct copies of each of the Cherdak patents, both entitled "Athletic Shoe with Timing Device," are attached hereto at Exhibits A & B. Mr. Cherdak is the owner of the entire rights, title, and interests in and to the '445 and '269 patents and has the right to recover for past infringement of the Cherdak patents.

3. Defendant NEXTTEC is, on information and belief, a Florida corporation with its principal place of business at 9000 W. Sheridan Street, Suite 140, Pembroke Pines, FL 33024.

4. NEXTTEC is presently and has in the past engaged in the design, manufacture, import, distribution, licensing, sale, and offering for sale, of what are commonly referred to as light up shoes. At certain relevant times for purposes of this Complaint, NEXTEC engaged in the infringement of, and/or induced the infringement of and/or committed contributory infringement of, the Cherdak patents throughout the United States, including, but not limited to, in the District of Maryland.

FACTUAL ALLEGATIONS

5. On July 6, 1993, Mr. Cherdak filed a patent application entitled "Athletic Shoe with Timing Device" that resulted in the issuance of the '445 patent on August 30, 1994. On August 29, 1994, as a continuation of the '445 patent application, Mr. Cherdak filed a continuation patent application entitled "Athletic Shoe with Timing Device" that resulted in the issuance of the '269 patent on September 19, 1995. The Cherdak patents are directed to shoe products and, more particularly, shoes containing lighting systems.

6. NEXTTEC has in the past imported, made, distributed, sold and offered for sale, and

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continues to import, make, distribute, sell and offer for sale, infringing light up shoes either directly or via branded channels such as those bearing the STREET LIGHTS trademark. One exemplary infringing lighted shoe product marketed, sold and/or otherwise placed in U.S. commerce by the Defendant is the STREET LIGHTS lighted shoe product having a tongue label bearing numbers 025465114673 and 76015 and which product is marketed via K-Mart Stores. That exemplary lighted shoe product also includes a lighting module having U.S. patent number 5,709,464 marked thereon.

COUNT ONE

PATENT INFRINGEMENT UNDER 35 U.S.C. § 271

7. Paragraphs 1 through 6 are hereby incorporated by reference as though completely set forth herein.

8. On August 30, 1994, the '445 patent was duly and legally issued by the U.S. Patent and Trademark Office. On September 19, 1995, the '269 patent was duly and legally issued by the U.S. Patent and Trademark Office. Plaintiff Cherdak is the owner of the '445 and '269 patents.

9. On information and belief, NEXTTEC has infringed, contributed to the infringement of, and/or induced the infringement of one or more claims of the '445 and '269 patents in violation of U.S.C. § 271 (a), (b) and (c) by Defendant's manufacturer, importation, distribution, sales and offers for sale of infringing light up shoe products including, but not limited to, the light up shoe products identified in paragraph 6 hereof.

10. Upon information and belief, NEXTTEC has infringed one or more claims of the '445 and '269 patents in violation of U.S.C. § 271(b) by actively inducing its distributors, customers, and/or retailers to infringe one or more claims of the '445 and '269 patents.

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PRAYER FOR RELIEF

WHEREFORE, Plaintiff Cherdak prays for judgment and relief against NEXTTEC as follows:

1. For a judgment that the '445 and '269 patents are valid and infringed by Defendant including, but not limited to, its subsidiaries, predecessors-in-interest and business units however and wherever formed;

2. That a permanent injunction issue against continued infringement of the '445 and '269 patents 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 retailers;

3. That an accounting be had for damages caused to Plaintiff Cherdak by Defendant's infringement, together with pre-judgment and post-judgment interest;

4. Such other further relief as the Court shall deem just and proper.

DEMAND FOR TRIAL BY JURY

Plaintiff demands a trial by jury on all issues so triable.

Respectfully submitted,

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November 22, 2005

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US005343445A

United States Patent [19]

Cherdak

[11] Patent Number: 5,343,445

[45] Date of Patent: Aug. 30, 1994

[54] **ATHLETIC SHOE WITH TIMING DEVICE**

[75] Inventor: **Erik B. Cherdak**, Silver Spring, Md.

[73] Assignees: **David Stern; James Thompson**, both of Rockville, Md.

[21] Appl. No.: **85,936**

[22] Filed: **Jul. 6, 1993**

[51] **Int. Cl.**[5] **G04B 47/00**; A43B 3/00; G04F 8/00

[52] **U.S. Cl.** **368/10**; 368/110; 36/132; 36/137

[58] **Field of Search** 368/10, 9, 107–113; 36/132, 136, 137, 114

[56] **References Cited**

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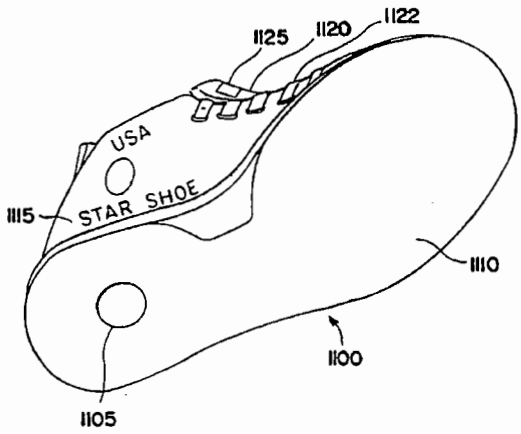
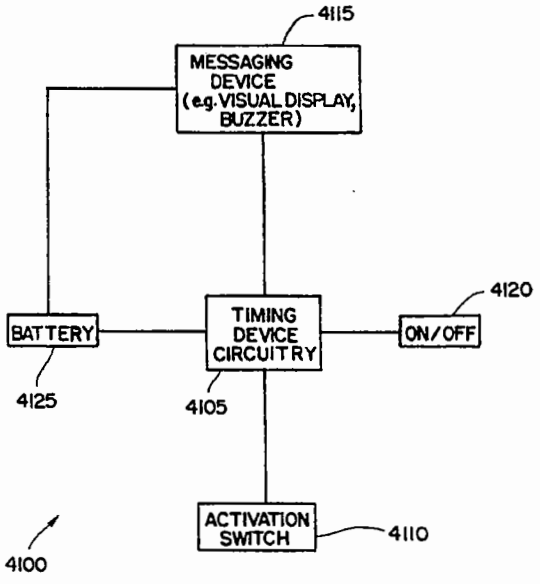
Primary Examiner—Vit W. Miska

[57] **ABSTRACT**

An athletic shoe which includes a timing device for measuring the amount of time the athletic shoe is off the ground and in air. The athletic shoe can also include a notification device which can be operatively coupled to the timing device for notifying a wearer of the athletic shoe of a message. The message can include information related to the amount of time the athletic shoe is off the ground and in the air.

23 Claims, 3 Drawing Sheets





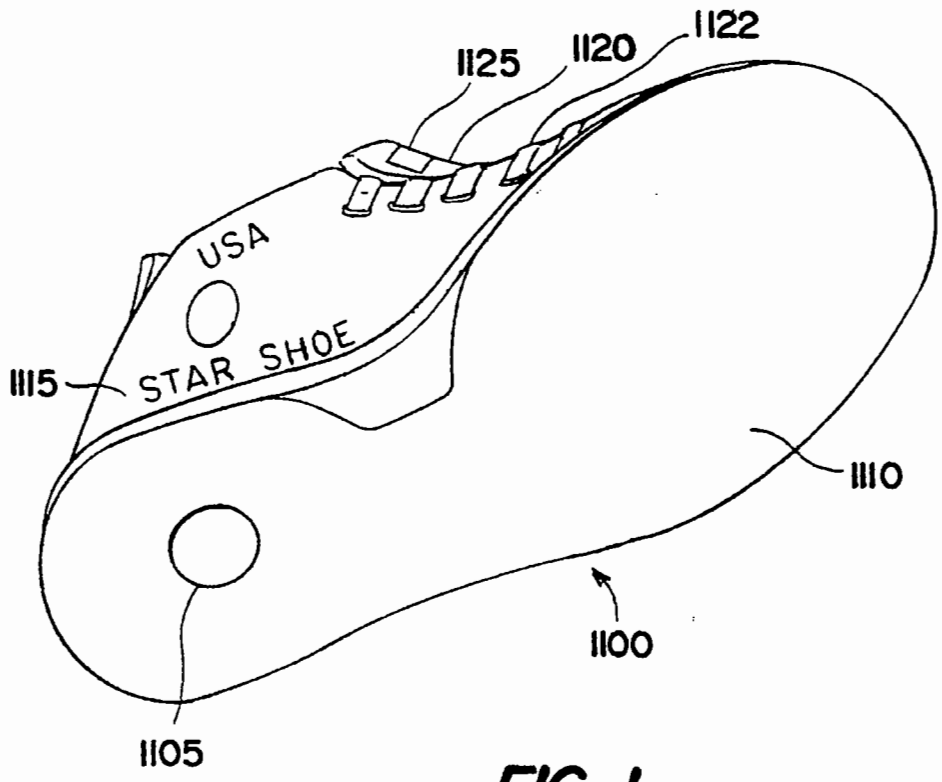


FIG. 1

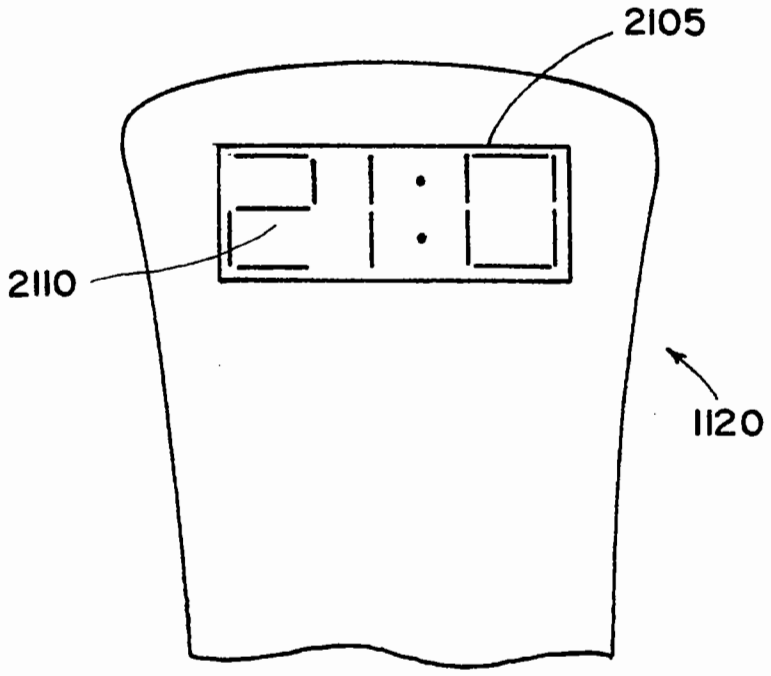


FIG. 2

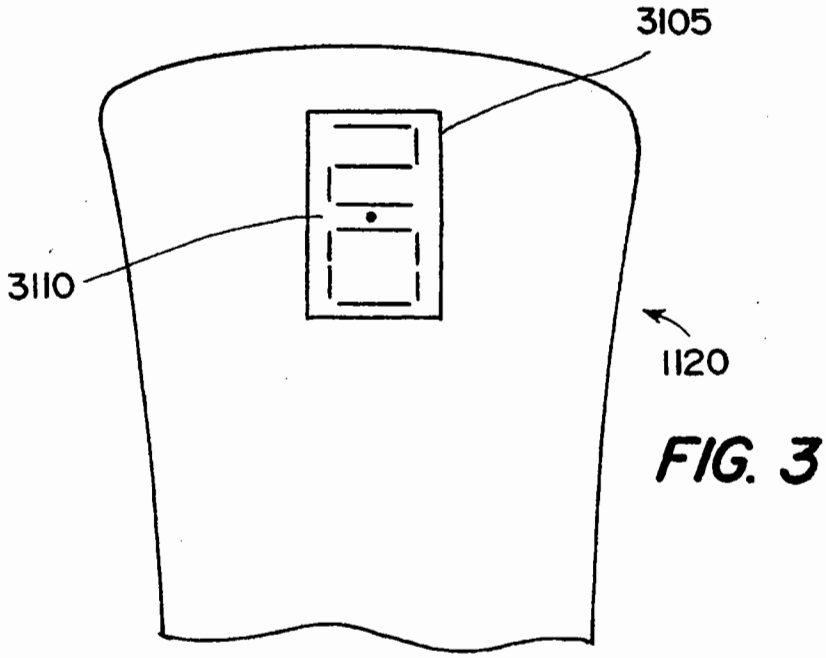


FIG. 3

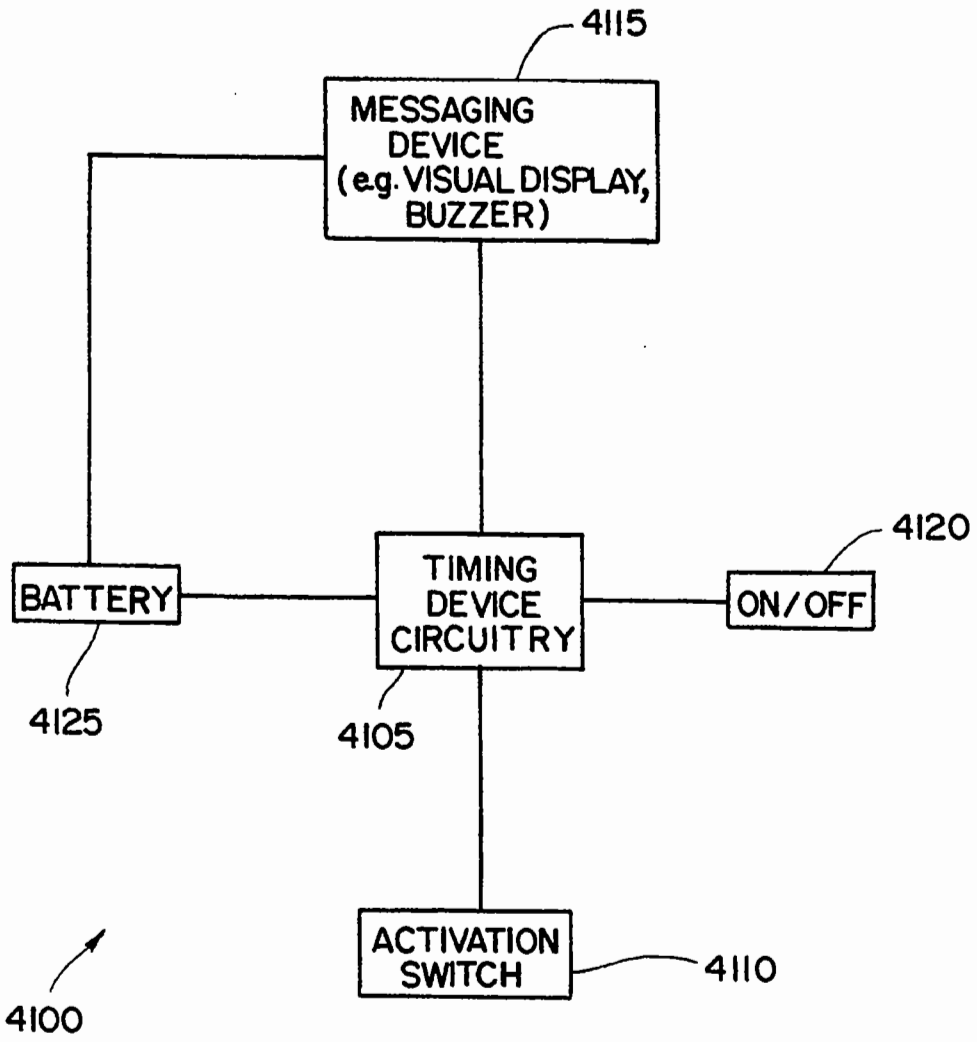


FIG. 4

ATHLETIC SHOE WITH TIMING DEVICE

BACKGROUND OF THE INVENTION

1. Technical Field

The present invention relates to athletic shoes.

2. Background Information

It is well known that basketball, volleyball, and other sports activities players often try to stay in the air for relatively long periods of time while they attempt to perform a particular action. For example, basketball players often attempt to stay or "hang" in the air for as long as possible as they try to slam-dunk a basketball into a basketball net. The amount of time a basketball player hangs in the air is commonly referred to as his or her "hang time." Hang time has become so popular that basketball players often compete with each other as to who can hang in the air the longest (i.e. the player with the longest "hang time" wins). Moreover, many great professional basketball players have become quite popular for their "hang times" (e.g. Michael Jordan of the Chicago BULLS).

While hang time has become a popular measure of a player's abilities, there has not heretofore been proposed an accurate and objective way to calculate the amount of time a player remains in the air while performing a sport related activity. Moreover, there has not heretofore been proposed a way or a device which can be used to calculate a player's hang time and which may be manufactured, marketed, and sold in consumer-appealing ways at effective price points.

The present invention solves these problems.

SUMMARY OF THE INVENTION

It is an object of the present invention to solve the above-listed problems.

It is another object of the present invention to provide wearers of athletic shoes with the ability to keep track of the amount of time they spend in the air and off the ground when participating in an athletic activity such as basketball for example.

These and other objects of the present invention are achieved in an athletic shoe which includes an athletic shoe configuration and a timing device for measuring the amount of time the athletic shoe is off the ground and in the air.

Finally, the present invention provides for a timing device which is integrated into an athletic shoe which has a messaging device such as a visual display.

As already stated, and as stated throughout the remaining sections of this patent document, the terminology "off the ground and in the air" is used to define and describe the structure and operation of the present invention. Moreover, the word "ground" is meant to include the ground, the surface of a basketball court, the floor, and any other surface on which a sports related activity takes place.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is described by way of example and in regard to the drawing Figures in which:

FIG. **1** is a diagram of an athletic shoe which is equipped with a timing device;

FIG. **2** is a front view of a tongue of an athletic shoe which has been equipped with a visual display;

FIG. **3** is a front view of a tonue of an athletic shoe with has been equipped with a visual display;

FIG. **4** is block schematic diagram of an exemplary embodiment of the present invention.

The following section will refer to the above-listed drawing Figures. Where appropriate, like structures will be referenced with like numerals.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is described by way of example and in regard to the drawing Figures which were briefly described above and which are discussed in detail below.

Referring now to FIG. **1**, therein depicted is an athletic shoe **1100** which has been equipped with a timing device. Athletic shoe **1100** is a basketball type shoe similar to those manufactured by LA GEAR, REEBOK, NIKE, BRITISH KNIGHTS, CONVERSE, and NEW BALANCE. Athletic shoe **1100** has a rubber type sole **1110** in which a contact dimple **1105** has been formed during manufacture. Contact dimple **1105** can be similar to that implemented in LA GEAR's LA TECH LIGHT GEAR shoes. Shoe upper **1115** is mounted to rubber sole **1110** in a conventional manner and will be apparent to those skilled in the art of athletic shoe construction. Tongue **1120** is also mounted to shoe upper **1115** in a conventional manner and is held against a wearer's foot (not shown) by fastening arrangement **1122** in the usual way. While tongue **1120** is shown as an actual tongue **1120** in the conventional sense, other structures such as now-popular sock-type vamp members may be used. Such sock-type vamp members will be apparent to those skilled in the art and may be seen in such shoes as those manufactured by NIKE (i.e. the AIR HURACHE line of cross-training shoes). While laces are shown as providing fastening arrangement **1122**, other fastening arrangements such as hook and loop, straps, and button fasteners may be used as such fasteners will be apparent to those skilled in the art.

Tongue **1120** includes a message device **1125**. A message is meant to include a visual and/or audible notification which is meant to notify a wearer of athletic shoe **1100** of at least one particular piece of information such as, for example, the amount of time athletic shoe **1100** is off the ground and in the air and time of day, and alphanumeric textual and/or verbal expressions. In this embodiment, message device **1125** is a visual display in the form of a liquid crystal display which will be apparent to those skilled in the art. Flexible visual displays can also be used as can light emitting diode (LED) arrangements. While message device **1125** is a visual display, other messaging type devices such as buzzers and noise makers, flashing bulbs and the like may also be used. Also, voice provision devices may also be used to provide messages to the wearer of athletic shoe **1100**. Such structures will be apparent to those skilled in the art. Moreover, message device **1125** can include combinations of both visual and audible devices. Such audible devices can include piezo-electric buzzers, speakers, bells, and the like which will be apparent to those skilled in the art. Finally, while message device is shown as part of tongue **1120**, other parts of athletic shoe **1100** could also house the such a display. For example, message device **1125** could also be located on the back of athletic shoe **1100**, on the sides of athletic shoe **1100**, on the toe portion of athletic shoe **1100**, or any other place on athletic shoe **1100** which is practically possible and is commercially advantageous.

Referring now to FIGS. 2 and 3, therein depicted are different preferred embodiments of tongue **1120**. As shown in FIG. 2, tongue **1120** includes a horizontally readable message device **1125** in the form of a visual display **2105** of the liquid crystal display (LCD) variety. The numbers **2110** displayed on visual display **2105** are shown upside down so that a wearer of an athletic shoe which is equipped with tongue **1120** will be able to read the display merely by looking down at his shoes. Three numeric positions are shown on visual display **2105** to display seconds, tenths of seconds, and hundredths of seconds. Timing device **4110** will be configured to provide the aforementioned timing accuracy. While three numeric characters are shown as displayed on visual display **2105**, more than three or less than three may be displayed depending on the design requirements chosen and the selected timing accuracy desired. Moreover, while only numeric characters are shown on visual display **2105**, other characters such as alpha and graphic characters could also be displayed on visual display **2105**. The display of alpha, numeric, and graphic characters on visual display **2105** will be apparent to those skilled in the art.

Numbers **2110** are shown as displayed on visual display **2105** in normal video but may configured to appear in "reverse video" fashion (i.e. unlit digits against a dark background—no illumination against an illuminated background). While visual display **2105** is ergonomically placed on the front of tongue **1120** (i.e. the side that faces away from a wearer's foot), it is quite possible to select a visual display which may be mounted on the top part of tongue **1120** or on the back of tongue **1120** (i.e. on the side that faces the wearer's foot). It is believed that tongue **1120** presents the best place for mounting visual display **2105** since wiring will be least complicated and so that the ergonomics of reading visual display **2105** are maximized.

In FIG. 3, message device **1125** is in the form of a visual display **3105** of the liquid crystal display (LCD) variety. In contrast to visual display **2105**, visual display **3105** is oriented in a vertical fashion. Visual display **3105** is shown as displaying only two numbers which represent seconds and tenths of seconds. It should be understood that the message length may be longer than the physical dimension of the display and may therefore be scrolled in a conventional manner. The vertical nature of Visual display **3105** allows messages to be read in a vertical fashion.

Referring now to FIG. 4, therein depicted is a block schematic diagram of an exemplary embodiment of the present invention and which is of the type used in athletic shoe **1100** as shown in FIG. 1. Timing system **4100** includes timing device circuitry **4105**, an activation switch **4110**, a messaging device **4115**, a battery **4125**, and a system ON/OFF switch **4120**.

Timing device circuitry **4105** is connected to battery **4125**, messaging device **4115**, system ON/OFF switch **4120**, and activation switch **4110**. Timing device circuitry **4105** preferably includes readily available and well known clocking circuits which may be found in consumer electronics goods such as digital stop watches, digital timers, digital wristwatches, digital cooking timers, and digital thermometers which include timers used to measure the amount of time needed to calculate a person's body temperature. While dedicated timing devices and circuits may be used, other custom logic devices which include microprocessors and/or microcomputers may also be used. For example, a microprocessor (e.g. a 4 BIT or 8 BIT microprocessor) may be configured with the necessary support circuitry (e.g. ROM, RAM, etc.) and programmed via software to achieve timer and timing operation. Such use of a microprocessor to achieve timer and timing operation will be apparent to those skilled in the art. Additionally, the use of microprocessors and associated support circuitry to achieve timer and timing functionality can result in providing designers with the ability to provide more elaborate messages beyond those which merely a time value. That is, messages may be formed by timing device circuitry which provide motivational sayings which are dependant on the amount of time a person's shoe is off the ground and in the air (e.g. "novice," "HANGER," "ACE," "NUMBER '1,' "POOR," "OK," "GOOD," "AVERAGE," or "GREAT!") In the event that messages are desired which include strings of characters which are longer than a display width, such messages may be scrolled in a conventional manner.

Timing device circuitry **4105** preferably must be able to calculate and measure a period of time with accuracy of at least tenths of a second. That is, timing device circuitry **4105** should be able to calculate and measure the passage of time in units as small as tenths of seconds, but preferably would be able to calculate and measure time in units as small as hundredths of a second.

Connected to timing device circuitry **4105** is messaging device **4115**. The connection of timing device circuitry **4105** to messaging device **4115** is done in a conventional way (e.g. much like the connection of an LCD display to the calculation circuitry of a hand-held calculator or to the stop-watch timing circuitry of a digital wristwatch). Messaging device **4115** is preferably a visual display of the liquid crystal display (LCD) variety (e.g. wristwatch LCDs, hand-held calculator LCDs, illuminated LCDs found on wristwatches and portable cellular telephones), but may also include light emitting diode (LED) arrangements. Such LCD and LED displays will be apparent to those skilled in the art. As mentioned above, messages may include alpha, numeric, and graphic characters and may be smaller than, equal to, and larger than the physical display size of massaging device **4115**. In the case where messages are larger than the display size of massaging device **4115**, such messages may be scrolled in the conventional manner.

Messaging device **4115** preferably is able to display a message which can include a time value (e.g. 1:50 seconds) but may also be configured to display a message formed from alpha characters, numeric characters, graphic characters, or any combination thereof. Preferably, messaging device **4115** will be able to display seconds measured, tenths of seconds measured, and hundredths of seconds measured by timing device circuitry **4105**. Messaging device can be configured to display a constant running time (e.g. like a wristwatch stop-watch display) or can only display time after activation switch **4110** has been triggered.

While a visual display such as an LCD display is preferred, other messaging devices such as buzzers, speakers, bells, speech devices, and combinations thereof may also be used to provide a message to the wearer of an athletic shoe which is equipped with such a messaging system.

As mentioned above, connected to timing device circuitry **4105** is activation switch **4110**. Activation switch **4110** is preferably similar in construction to LA

GEAR, INC.'s LIGHT GEAR system (LA TECH) wherein a battery is maintained in a custom designed plastic switch carrier. The sole of a shoe in which LA GEAR's switch carrier resides is formed with a contact dimple which, when pressed upon contact of the shoe sole with the ground, causes the switch carrier to become compressed to thereby cause the battery to come in operative contact with the leads of a single light emitting diode (LED). While activation switch **4110** is preferably like that of the LA GEAR design other switching systems including contact switches, tape switches, pressure switches, and any other well known switching system would also work in the present invention.

Timing system ON/OFF switch **4120** is a conventional on-off switch and is used to turn timing system **4100** on and off so as to conserve battery life during periods of non-use. The connection of timing system ON/OFF switch **4120** will be apparent to those of ordinary skill in the art.

Power is supplied to timing system **4100** via battery **4125**. Preferably, battery **4125** is of similar specification to that of the battery used by LA GEAR, INC. in its LA TECH line of athletic shoes. The connection of battery **4125** to the other components of timing system **4100** will be apparent to those of ordinary skill in the art.

Timing system **4100** is preferably mounted in an athletic shoe similar to the one depicted in FIG. **1** in the following ways: Timing device circuitry **4105** is preferably mounted in the tongue of the athletic shoe as is system ON/OFF switch **4120**. Messaging device **4115** is preferably mounted on the front of the tongue of the athletic shoe so that a wearer may read the display easily. Activation switch **4110** is preferably mounted along with battery **4125** in a switch pack which is housed in the heel of the athletic shoe (e.g. as in LA GEAR INC.'s LIGHT GEAR—LA TECH design). While these configuration specifications are preferred, other arrangements may be maintained so as to effectuate particular design requirements.

In use, timing system **4100** is placed into operation by placing system ON/OFF switch **4120** into an "ON" state. When system ON/OFF switch **4120** is placed into an "ON" state an audible tone may be sounded if timing system **4100** is equipped with an audible sounding device. Such "beeping" during initialization will be apparent to those skilled in the art. Moreover, if timing system **4100** is equipped with a proper circuitry, a message can appear on display which indicates such things as "ON" state, shoe manufacturer and various other indicia.

Next, timing device circuitry **4105** should be initialized (i.e. clock circuits reset and zeroed). Preferably, timing device circuitry will begin to measure a time period whenever the shoe in which the system resides is off the ground and in the air. While such operation may seem cumbersome, messaging device will only be able to display and/or sound a message after timing device circuitry **4105** has measured a threshold time period. In this manner, times will not be displayed each time a person walks, but only after a person performs a jump or other action in which he or she is in the air and off the ground for an extended period of time (e.g. during a slam-dunking action while playing basketball).

The threshold time period just mentioned is the amount of time an average person takes to make one step during a walking regimen. That is, the threshold time period was analyzed to be in the range of at least 0.2 seconds to about 0.55 seconds. Only after timing device circuitry measures a period of time equal to some threshold amount should timing device circuitry **4105** allow messaging device **4115** display a time based message. More specifically, only after timing device circuitry **4105** has measured a period of time of say at least 0.3 seconds will messaging device **4115** be given a message to display and/or sound. While the threshold time was determined to be between 0.2 and 0.55 seconds on average across a sampling of people and trials, the present invention should not be so limited. Moreover, the threshold time may change depending on what activity is chosen to provide the benchmark for determining an average threshold time (e.g. walking was the chosen benchmark activity whereas running, skipping, and skating could also have been used). The threshold time feature will allow timing system **4100** to display and/or sound time-based messages only when a person performs a "hang" type activity for period of time beyond a threshold period. It is important to note that timing system **4100** could also be configured to provide structure which will allow user selection and/or input of a given time period to effectuate more personal and accurate threshold time period benchmarks.

The threshold time feature solves the "reset" problem (i.e. the problem of knowing when to start and stop measuring a time period). The reset problem is solved in that the timing system **4100** will always measure the amount of time an athletic shoe is off the ground and in the air, but will only cause the display or sounding a time-based message when the amount of time measured by timing device circuitry is beyond a certain threshold.

A period of time is measured, as suggested above, by the action of bringing the shoe off the ground and then returning the shoe to the ground (i.e. causing activation switch to trip). In this manner a time period is measured when a shoe equipped with timing system **4100** is off the ground and in the air.

Timing system may also be equipped with a "lock-in" switch which can be configured to hold a present value on the display so that no other timing messages may be displayed until the lock-in switch is disengaged. Conventional latching of massaging device **4115** can be used to achieve this functionality.

While the above structures and operation were discussed with reference to the embodiments shown in the drawings, other features can be incorporated into the present invention. Such features do not present difficult design problems and will be apparent to those skilled in the art. For example, the present invention utilizes a single shoe system. A two-shoe timing system may be configured which incorporates radio-frequency and/or infra-red technology between shoes so as to allow the measurement of time only when both shoes are off the ground and in the air. Such RF and IR technology will be apparent to those skilled in the art.

Also, a shoe can be configured which incorporates an RF transmitter which transmits to a central location so that a player's "hang-time" (i.e. his time of the ground and in the air) can be displayed on a score board at publicly viewed games. In this fashion, "hang-time" can become a carefully measured and followed statistic whereas presently it is only speculated. Such RF technology and scoreboard technology will be apparent to those skilled in the art.

Finally, while timing information was primarily the driving force behind the present invention other infor-

Case 8:05-cv-0[illegible]-RWT Document 1 Filed 11/[illegible]/05 Page 8 of 9

mation may be determined, sensed, and/or measured. Such other information, which can be displayed and/or sounded in the form of a message, can include, but is not limited to, speed, distance traveled, alpha-numeric messages, elevation, activity time or duration, stride length, cadence, foot pressure, acceleration, and various other activity information. The technology necessary to provide these pieces of information will be apparent to those skilled in the art. The present invention now makes possible the provision of such information in easy, marketable, and cost effective manners.

Having now fully described the present invention, it will be apparent to one of ordinary skill in the art that many changes and modifications can be made thereto without departing from the spirit and scope of the present invention as defined by the appended claims.

I claim:

1. A method for 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:

(a) sensing, within said shoe, when said shoe leaves the ground during said jump;

(b) sensing, within said shoe, when said shoe returns to the ground at the end of said jump; and

(c) activating a hang time indicator on said shoe during the time interval between said shoe leaving and returning to the ground as sensed in steps (a) and (b), respectively, said indicator providing an indication of hang time in a manner perceptible to said person.

2. The method of claim **1** wherein step (c) comprises illuminating a light emitting device on said shoe throughout said time interval.

3. The method of claim **1** wherein step (c) comprises flashing a plurality of flashing lights on said shoe throughout said time interval.

4. The method of claim **1** wherein step (c) comprises providing an audible sound from said shoe.

5. The method of claim **4** wherein the audible sound provided in step (c) is an enunciation of elapsed time of said time interval.

6. The method of claim **1** wherein step (c) comprises providing a visibly readable message on said shoe of elapsed time in said time interval.

7. The method of claim **6** further comprising the step of inhibiting said visibly readable message during walking and running steps by said person.

8. The method of claim **7** wherein said step of inhibiting comprises inhibiting said visibly readable message unless said elapsed time exceeds a predetermined minimum time.

9. The method of claim **8** wherein said predetermined minimum time is at least 0.2 seconds.

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:

(a) measuring in the shoe elapsed time 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

(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).

11. The method of claim **10** wherein step (b) comprises determining that said person has jumped off the ground when the measured elapsed time is at least 0.2 seconds.

12. The method of claim **10** wherein step (c) comprises providing a visibly readable indication on said shoe of the measured elapsed time.

13. An athletic shoe comprising:

a sole;

a shoe upper mounted on said sole;

pressure responsive means mounted on said shoe for providing a signal in said shoe in response to said shoe leaving the ground when on the foot of a person, and for removing said signal in response to said shoe returning to the ground;

a timer in said shoe actuable in response to said signal for measuring elapsed time; and

an elapsed time display at said shoe for providing a visible reading of the elapsed time measured by said timer.

14. The athletic shoe of claim **13** further comprising:

means in said shoe for inhibiting said visible reading unless the elapsed time measured by said timer exceeds a predetermined time corresponding to the time a shoe is normally off the ground during running and walking steps.

15. The athletic shoe of claim **14** wherein said predetermined time is at least 0.2 seconds.

16. The athletic shoe of claim **13** wherein said elapsed time display is a liquid crystal numerical display.

17. The athletic shoe of claim **13** further comprising a tongue secured to said upper, and wherein said elapsed time display is mounted on said tongue.

18. The athletic shoe of claim **17** wherein said means is a switch mounted in said sole and actuable in response to compressive force urging said sole against the ground.

19. An athletic shoe comprising:

a sole;

a shoe upper mounted on said sole;

pressure responsive means on said shoe for providing a signal in response to said shoe leaving the ground when on the foot of an individual, and for removing said signal in response to said shoe returning to the ground;

circuit means in said shoe actuable in response to said signal; and

indicator means at said shoe responsive to actuation of said circuit means for providing a perceptible indication related to the time said shoe is off the ground.

20. The athletic shoe of claim **19** wherein said indicator means comprises at least one device responsive to actuation of said circuit means for emitting light while said shoe is off the ground.

21. The athletic shoe of claim **19** wherein said indicator means comprises a device responsive to actuation of said circuit means for providing an audible signal while said shoe is off the ground.

22. In an athletic shoe having an upper member secured to a sole member, the sole member having a heel portion with a cavity in which circuitry is housed, apparatus for indicating the time that the athletic shoe is off the ground and in the air during a jump by a person wearing the athletic shoe, said apparatus comprising:

a pressure responsive switch producing a signal when said athletic shoe is off the ground and in the air,

said switch being disposed in the sole member of said athletic shoe;

a plurality of light emitting diodes (LEDs) disposed on the athletic shoe, said plurality of light emitting diodes (LEDs) emitting light during the period of time when the athletic shoe is off the ground and in the air during said jump to provide a visual indication of the amount of time that the athletic shoe is off the ground and in the air;

a controller disposed in the sole member of the athletic shoe and connected to said switch and to said plurality of light emitting diodes (LEDs), wherein said controller is responsive to said signal to cause said plurality of light emitting diodes (LEDs) to emit said light during said period of time that said athletic shoe is off the ground and in the air; and

a power source connected to said switch, to said plurality of light emitting diodes (LEDs) and to said controller, said power source disposed in the sole member of said athletic shoe.

23. The apparatus of claim **22** wherein said switch, said plurality of LEDs, said controller and said power source are disposed in the heel portion of the sole member of said athletic shoe.

* * * * *

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US005452269A

United States Patent [19]

Cherdak

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[45] Date of Patent: Sep. 19, 1995

[54] **ATHLETIC SHOE WITH TIMING DEVICE**

[75] Inventor: **Erik B. Cherdak**, Silver Spring, Md.

[73] Assignees: **David Stern; James Thompson**, both of Rockville, Md.

[21] Appl. No.: **297,470**

[22] Filed: **Aug. 29, 1994**

Related U.S. Application Data

[63] Continuation of Ser. No. 85,936, Jul. 6, 1993, Pat. No. 5,343,445.

[51] **Int. Cl.**[6] **G04B 47/00**; A43B 3/00; G04F 8/00

[52] **U.S. Cl.** **368/10**; 368/110; 36/132; 36/137

[58] **Field of Search** 368/9,10,107–113; 36/132, 136, 137, 114

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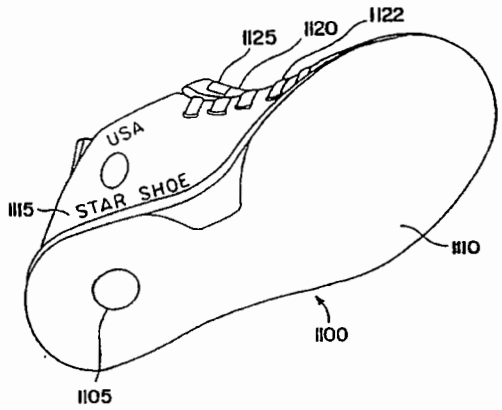
Primary Examiner—Vit W. Miska

[57] **ABSTRACT**

An athletic shoe which includes a timing device for measuring the amount of time the athletic shoe is off the ground and in air. The athletic shoe can also include a notification device which can be operatively coupled to the timing device for notifying a wearer of the athletic shoe of a message. The message can include information related to the amount of time the athletic shoe is off the ground and in the air.

20 Claims, 3 Drawing Sheets



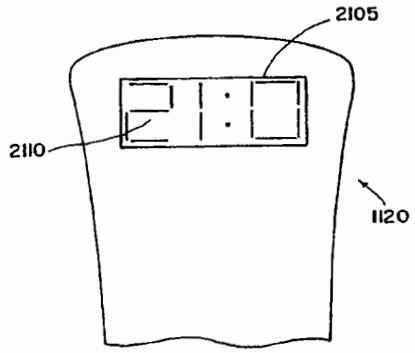


EXHIBIT B

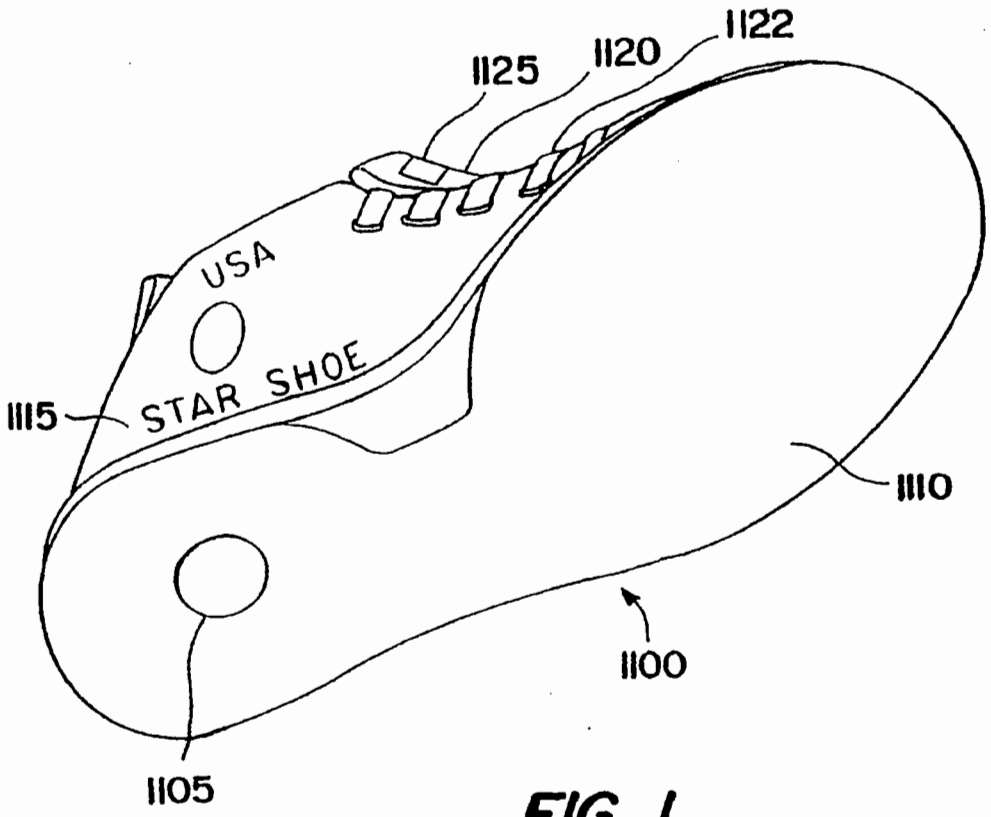


FIG. 1

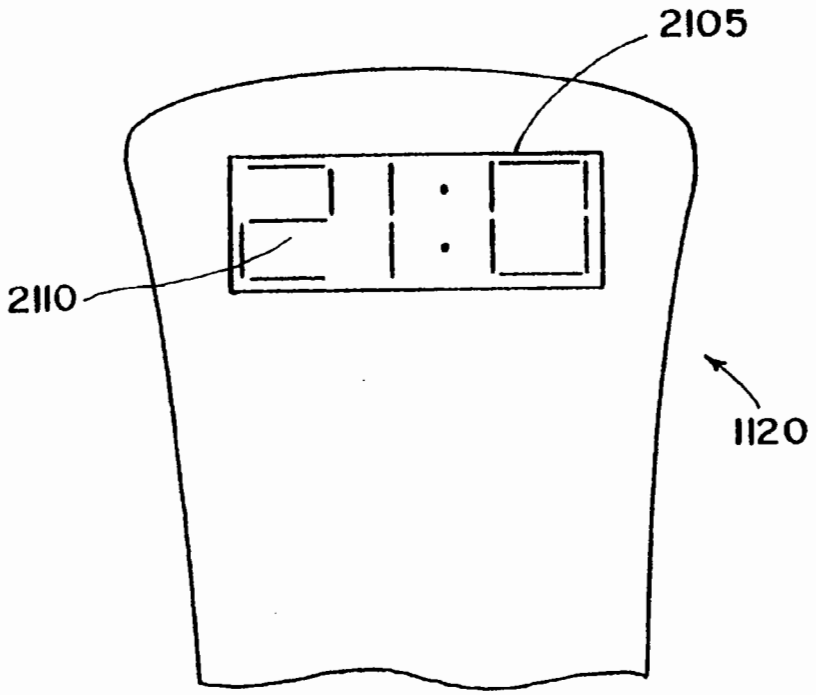


FIG. 2

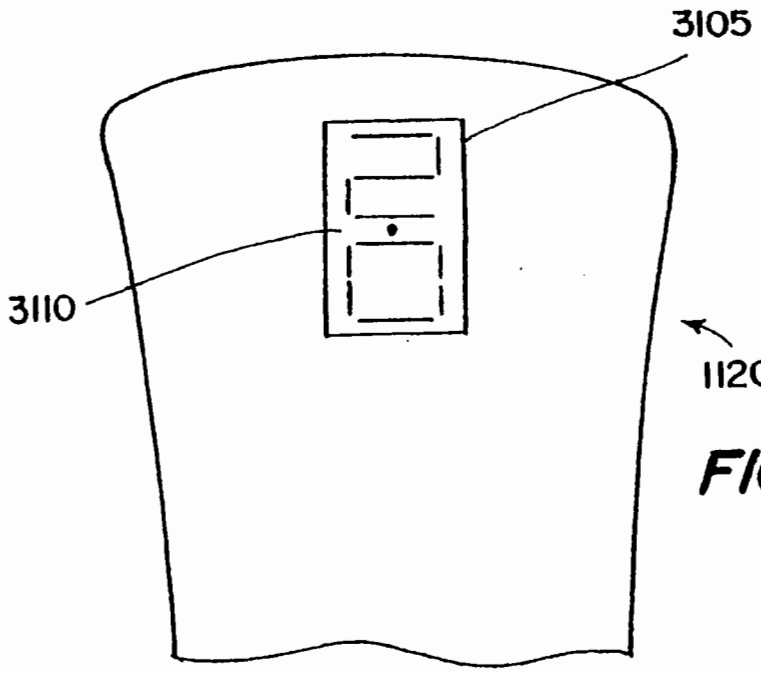


FIG. 3

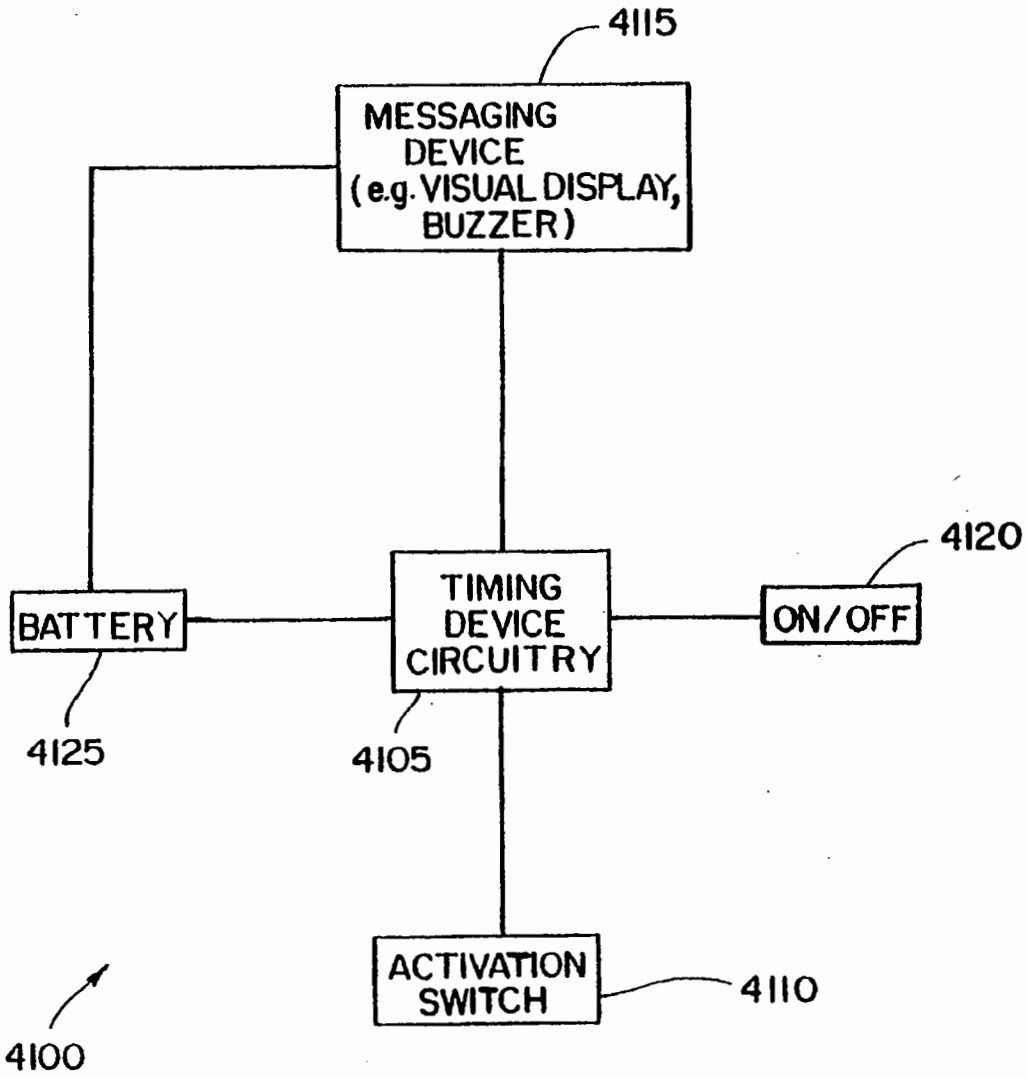


FIG. 4

ATHLETIC SHOE WITH TIMING DEVICE

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. patent application Ser. No. 08/085,936, filed Jul. 6, 1993 and entitled "Athletic Shoe with Timing Device", now U.S. Pat. No. 5,343,445.

BACKGROUND OF THE INVENTION

1. Technical Field

The present invention relates to athletic shoes.

2. Background Information

It is well known that basketball, volleyball, and other sports activities players often try to stay in the air for relatively long periods of time while they attempt to perform a particular action. For example, basketball players often attempt to stay or "hang" in the air for as long as possible as they try to slam-dunk a basketball into a basketball net. The amount of time a basketball player hangs in the air is commonly referred to as his or her "hang time." Hang time has become so popular that basketball players often compete with each other as to who can hang in the air the longest (i.e. the player with the longest "hang time" wins). Moreover, many great professional basketball players have become quite popular for their "hang times" (e.g. Michael Jordan of the Chicago BULLS).

While hang time has become a popular measure of a player's abilities, there has not heretofore been proposed an accurate and objective way to calculate the amount of time a player remains in the air while performing a sport related activity. Moreover, there has not heretofore been proposed a way or a device which can be used to calculate a player's hang time and which may be manufactured, marketed, and sold in consumer-appealing ways at effective price points.

The present invention solves these problems.

SUMMARY OF THE INVENTION

It is an object of the present invention to solve the above-listed problems.

It is another object of the present invention to provide wearers of athletic shoes with the ability to keep track of the amount of time they spend in the air and off the ground when participating in an athletic activity such as basketball for example.

These and other objects of the present invention are achieved in an athletic shoe which includes an athletic shoe configuration and a timing device for measuring the amount of time the athletic shoe is off the ground and in the air.

Finally, the present invention provides for a timing device which is integrated into an athletic shoe which has a messaging device such as a visual display.

As already stated, and as stated throughout the remaining sections of this patent document, the terminology "off the ground and in the air" is used to define and describe the structure and operation of the present invention. Moreover, the word "ground" is meant to include the ground, the surface of a basketball court, the floor, and any other surface on which a sports related activity takes place.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is described by way of example and in regard to the drawing Figures in which:

FIG. **1** is a diagram of an athletic shoe which is equipped with a timing device;

FIG. **2** is a front view of a tongue of an athletic shoe which has been equipped with a visual display;

FIG. **3** is a front view of a tongue of an athletic shoe with has been equipped with a visual display;

FIG. **4** is block schematic diagram of an exemplary embodiment of the present invention.

The following section will refer to the above-listed drawing FIGS. Where appropriate, like structures will be referenced with like numerals.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is described by way of example and in regard to the drawing Figures which were briefly described above and which are discussed in detail below.

Referring now to FIG. **1**, therein depicted is an athletic shoe **1100** which has been equipped with a timing device. Athletic shoe **1100** is a basketball type shoe similar to those manufactured by LA GEAR, REEBOK, NIKE, BRITISH KNIGHTS, CONVERSE, and NEW BALANCE. Athletic shoe **1100** has a rubber type sole **1110** in which a contact dimple **1105** has been formed during manufacture. Contact dimple **1105** can be similar to that implemented in LA GEAR's LA TECH LIGHT GEAR shoes. Shoe upper **1115** is mounted to rubber sole **1110** in a conventional manner and will be apparent to those skilled in the art of athletic shoe construction. Tongue **1120** is also mounted to shoe upper **1115** in a conventional manner and is held against a wearer's foot (not shown) by fastening arrangement **1122** in the usual way. While tongue **1120** is shown as an actual tongue **1120** in the conventional sense, other structures such as now-popular sock-type vamp members may be used. Such sock-type vamp members will be apparent to those skilled in the art and may be seen in such shoes as those manufactured by NIKE (i.e. the AIR HURACHE line of cross-training shoes). While laces are shown as providing fastening arrangement **1122**, other fastening arrangements such as hook and loop, straps, and button fasteners may be used as such fasteners will be apparent to those skilled in the art.

Tongue **1120** includes a message device **1125**. A message is meant to include a visual and/or audible notification which is meant to notify a wearer of athletic shoe **1100** of at least one particular piece of information such as, for example, the amount of time athletic shoe **1100** is off the ground and in the air and time of day, and alphanumeric textual and/or verbal expressions. In this embodiment, message device **1125** is a visual display in the form of a liquid crystal display which will be apparent to those skilled in the art. Flexible visual displays can also be used as can light emitting diode (LED) arrangements. While message device **1125** is a visual display, other messaging type devices such as buzzers and noise makers, flashing bulbs and the like may also be used. Also, voice provision devices may also be used to provide messages to the wearer of athletic shoe **1100**. Such structures will be apparent to those skilled in the art. Moreover, message device **1125** can include combinations of both visual and audible devices. Such audible devices can include piezo-electric buzzers, speakers,

bells, and the like which will be apparent to those skilled in the art. Finally, while message device is shown as part of tongue **1120**, other parts of athletic shoe **1100** could also house the such a display. For example, message device **1125** could also be located on the back of athletic shoe **1100**, on the sides of athletic shoe **1100**, on the toe portion of athletic shoe **1100**, or any other place on athletic shoe **1100** which is practically possible and is commercially advantageous.

Referring now to FIGS. **2** and **3**, therein depicted are different preferred embodiments of tongue **1120**. As shown in FIG. **2**, tongue **1120** includes a horizontally readable message device **1125** in the form of a visual display **2105** of the liquid crystal display (LCD) variety. The numbers **2110** displayed on visual display **2105** are shown upside down so that a wearer of an athletic shoe which is equipped with tongue **1120** will be able to read the display merely by looking down at his shoes. Three numeric positions are shown on visual display **2105** to display seconds, tenths of seconds, and hundredths of seconds. Timing device **4110** will be configured to provide the aforementioned timing accuracy. While three numeric characters are shown as displayed on visual display **2105**, more than three or less than three may be displayed depending on the design requirements chosen and the selected timing accuracy desired. Moreover, while only numeric characters are shown on visual display **2105**, other characters such as alpha and graphic characters could also be displayed on visual display **2105**. The display of alpha, numeric, and graphic characters on visual display **2105** will be apparent to those skilled in the art.

Numbers **2110** are shown as displayed on visual display **2105** in normal! video but may configured to appear in "reverse video" fashion (i.e. unlit digits against a dark background—no illumination against an illuminated background). While visual display **2105** is ergonomically placed on the front of tongue **1120** (i.e. the side that faces away from a wearer's foot), it is quite possible to select a visual display which may be mounted on the top part of tongue **1120** or on the back of tongue **1120** (i.e. on the side that faces the wearer's foot). It is believed that tongue **1120** presents the best place for mounting visual display **2105** since wiring will be least complicated and so that the ergonomics of reading visual display **2105** are maximized.

In FIG. **3**, message device **1125** is in the form of a visual display **3105** of the liquid crystal display (LCD) variety. In contrast to visual display **2105**, visual display **3105** is oriented in a vertical fashion. Visual display **3105** is shown as displaying only two numbers which represent seconds and tenths of seconds. It should be understood that the message length may be longer than the physical dimension of the display and may therefore be scrolled in a conventional manner. The vertical nature of visual display **3105** allows messages to be read in a vertical fashion.

Referring now to FIG. **4**, therein depicted is a block schematic diagram of an exemplary embodiment of the present invention and which is of the type used in athletic shoe **1100** as shown in FIG. **1**. Timing system **4100** includes timing device circuitry **4105**, an activation switch **4110**, a messaging device **4115**, a battery **4125**, and a system ON/OFF switch **4120**.

Timing device circuitry **4105** is connected to battery **4125**, messaging device **4115**, system ON/OFF switch **4120**, and activation switch **4110**. Timing device circuitry **4105** preferably includes readily available and well known clocking circuits which may be found in consumer electronics goods such as digital stop watches, digital timers, digital wristwatches, digital cooking timers, and digital thermometers which include timers used to measure the amount of time needed to calculate a person's body temperature. While dedicated timing devices and circuits may be used, other custom logic devices which include microprocessors and/or microcomputers may also be used. For example, a microprocessor (e.g. a 4 BIT or 8 BIT microprocessor) may be configured with the necessary support circuitry (e.g. ROM, RAM, etc.) and programmed via software to achieve timer and timing operation. Such use of a microprocessor to achieve timer and timing operation will be apparent to those skilled in the art. Additionally, the use of microprocessors and associated support circuitry to achieve timer and timing functionality can result in providing designers with the ability to provide more elaborate messages beyond those which merely a time value. That is, messages may be formed by timing device circuitry which provide motivational sayings which are dependant on the amount of time a person's shoe is off the ground and in the air (e.g. "novice," "HANGER," "ACE," "NUMBER 1," "POOR," "OK," "GOOD," "AVERAGE," or "GREAT!") In the event that messages are desired which include strings of characters which are longer than a display width, such messages may be scrolled in a conventional manner.

Timing device circuitry **4105** preferably must be able to calculate and measure a period of time with accuracy of at least tenths of a second. That is, timing device circuitry **4105** should be able to calculate and measure the passage of time in units as small as tenths of seconds, but preferably would be able to calculate and measure time in units as small as hundredths of a second.

Connected to timing device circuitry **4105** is messaging device **4115**. The connection of timing device circuitry **4105** to messaging device **4115** is done in a conventional way (e.g. much like the connection of an LCD display to the calculation circuitry of a hand-held calculator or to the stop-watch timing circuitry of a digital wristwatch). Messaging device **4115** is preferably a visual display of the liquid crystal display (LCD) variety (e.g. wristwatch LCDs, hand-held calculator LCDs, illuminated LCDs found on wristwatches and portable cellular telephones), but may also include light emitting diode (LED) arrangements. Such LCD and LED displays will be apparent to those skilled in the art. As mentioned above, messages may include alpha, numeric, and graphic characters and may be smaller than, equal to, and larger than the physical display size of messaging device **4115**. In the case where messages are larger than the display size of messaging device **4115**, such messages may be scrolled in the conventional manner.

Messaging device **4115** preferably is able to display a message which can include a time value (e.g. 1:50 seconds) but may also be configured to display a message formed from alpha characters, numeric characters, graphic characters, or any combination thereof. Preferably, messaging device **4115** will be able to display seconds measured, tenths of seconds measured, and hundredths of seconds measured by timing device circuitry **4105**. Messaging device can be configured to display a constant running time (e.g. like a wristwatch stop-watch display) or can only display time after activation switch **4110** has been triggered.

While a visual display such as an LCD display is preferred, other messaging devices such as buzzers, speakers, bells, speech devices, and combinations thereof may also be used to provide a message to the wearer of an athletic shoe which is equipped with such a messaging system.

As mentioned above, connected to timing device circuitry **4105** is activation switch **4110**. Activation switch **4110** is preferably similar in construction to LA GEAR, INC.'s LIGHT GEAR system (LA TECH) wherein a battery is maintained in a custom designed plastic switch carrier. The sole of a shoe in which LA GEAR's switch carrier resides is formed with a contact dimple which, when pressed upon contact of the shoe sole with the ground, causes the switch carrier to become compressed to thereby cause the battery to come in operative contact with the leads of a single light emitting diode (LED). While activation switch **4110** is preferably like that of the LA GEAR design other switching systems including contact switches, tape switches, pressure switches, and any other well known switching system would also work in the present invention.

Timing system ON/OFF switch **4120** is a conventional on-off switch and is used to turn timing system **4100** on and off so as to conserve battery life during periods of non-use. The connection of timing system ON/OFF switch **4120** will be apparent to those of ordinary skill in the art.

Power is supplied to timing system **4100** via battery **4125**. Preferably, battery **4125** is of similar specification to that of the battery used by LA GEAR, INC. in its LA TECH line of athletic shoes. The connection of battery **4125** to the other components of timing system **4100** will be apparent to those of ordinary skill in the art.

Timing system **4100** is preferably mounted in an athletic shoe similar to the one depicted in FIG. **1** in the following ways: Timing device circuitry **4105** is preferably mounted in the tongue of the athletic shoe as is system ON/OFF switch **4120**. Messaging device **4115** is preferably mounted on the front of the tongue of the athletic shoe so that a wearer may read the display easily. Activation switch **4120** is preferably mounted along with battery **4125** in a switch pack which is housed in the heel of the athletic shoe (e.g. as in LA GEAR INC.'s LIGHT GEAR—LA TECH design). While these configuration specifications are preferred, other arrangements may be maintained so as to effectuate particular design requirements.

In use, timing system **4100** is placed into operation by placing system ON/OFF switch **4120** into an "ON" state. When system ON/OFF switch **4120** is placed into an "ON" state an audible tone may be sounded if timing system **4100** is equipped with an audible sounding device. Such "beeping" during initialization will be apparent to those skilled in the art. Moreover, if timing system **4100** is equipped with a proper circuitry, a message can appear on display which indicates such things as "ON" state, shoe manufacturer and various other indicia.

Next, timing device circuitry **4105** should be initialized (i.e. clock circuits reset and zeroed). Preferably, timing device circuitry will begin to measure a time period whenever the shoe in which the system resides is off the ground and in the air. While such operation may seem cumbersome, messaging device will only be able to display and/or sound a message after timing device circuitry **4105** has measured a threshold time period. In this manner, times will not be displayed each time a person walks, but only after a person performs a jump or other action in which he or she is in the air and off the ground for an extended period of time (e.g. during a slam-dunking action while playing basketball).

The threshold time period just mentioned is the amount of time an average person takes to make one step during a walking regimen. That is, the threshold time period was analyzed to be in the range of at least 0.2 seconds to about 0.55 seconds. Only after timing device circuitry measures a period of time equal to some threshold amount should timing device circuitry **4105** allow messaging device **4115** display a time based message. More specifically, only after timing device circuitry **4105** has measured a period of time of say at least 0.3 seconds will messaging device **4115** be given a message to display and/or sound. While the threshold time was determined to be between 0.2 and 0.55 seconds on average across a sampling of people and trials, the present invention should not be so limited. Moreover, the threshold time may change depending on what activity is chosen to provide the benchmark for determining an average threshold time (e.g. walking was the chosen benchmark activity whereas running, skipping, and skating could also have been used). The threshold time feature will allow timing system **4100** to display and/or sound time-based messages only when a person performs a "hang" type activity for period of time beyond a threshold period. It is important to note that timing system **4100** could also be configured to provide structure which will allow user selection and/or input of a given time period to effectuate more personal and accurate threshold time period benchmarks.

The threshold time feature solves the "reset" problem (i.e. the problem of knowing when to start and stop measuring a time period). The reset problem is solved in that the timing system **4100** will always measure the amount of time an athletic shoe is off the ground and in the air, but will only cause the display or sounding a time-based message when the amount of time measured by timing device circuitry is beyond a certain threshold.

A period of time is measured, as suggested above, by the action of bringing the shoe off the ground and then returning the shoe to the ground (i.e. causing activation switch to trip). In this manner a time period is measured when a shoe equipped with timing system **4100** is off the ground and in the air.

Timing system may also be equipped with a "lock-in" switch which can be configured to hold a present value on the display so that no other timing messages may be displayed until the lock-in switch is disengaged. Conventional latching of messaging device **4115** can be used to achieve this functionality.

While the above structures and operation were discussed with reference to the embodiments shown in the drawings, other features can be incorporated into the present invention. Such features do not present difficult design problems and will be apparent to those skilled in the art. For example, the present invention utilizes a single shoe system. A two-shoe timing system may be configured which incorporates radio-frequency and/or infra-red technology between shoes so as to allow the measurement of time only when both shoes are off the ground and in the air. Such RF and IR technology will be apparent to those skilled in the art.

Also, a shoe can be configured which incorporates an RF transmitter which transmits to a central location so

that a player's "hang-time" (i.e. his time of the ground and in the air) can be displayed on a score board at publicly viewed games. In this fashion, "hang-time" can become a carefully measured and followed statistic whereas presently it is only speculated. Such RF technology and scoreboard technology will be apparent to those skilled in the art.

Finally, while timing information was primarily the driving force behind the present invention other information may be determined, sensed, and/or measured. Such other information, which can be displayed and/or sounded in the form of a message, can include, but is not limited to, speed, distance traveled, alpha-numeric messages, elevation, activity time or duration, stride length, cadence, foot pressure, acceleration, and various other activity information. The technology necessary to provide these pieces of information will be apparent to those skilled in the art. The present invention now makes possible the provision of such information in easy, marketable, and cost effective manners.

Having now fully described the present invention, it will be apparent to one of ordinary skill in the art that many changes and modifications can be made thereto without departing from the spirit and scope of the present invention as defined by the appended claims.

I claim:

1. An athletic shoe comprising:

a sole;

a shoe upper mounted on said sole;

a timing device disposed at least partly in said sole for measuring an amount of time the athletic shoe is off the ground and in the air; and

a notification device operatively coupled to said timing device and disposed in said upper for notifying a wearer of the athletic shoe of a message, said message including information related to said amount of time the athletic shoe is off the ground and in the air.

2. The athletic shoe according to claim 1 wherein said notification device notifies said wearer of the athletic shoe of said message only after said timing device has measured a period of time at least equal to an amount of time an average person's shoe is off the ground and in the air when said person takes a single step during a walking regimen.

3. The athletic shoe according to claim 2 wherein said period of time is at least 0.2 seconds.

4. The athletic shoe according to claim 1 wherein said notification device includes a visual display for displaying said message.

5. The athletic shoe according to claim 4 wherein said visual display is a liquid crystal display (LCD).

6. The athletic shoe according to claim 4 wherein said visual display is comprised of a series of light emitting components.

7. The athletic shoe according to claim 1 wherein said message is visual.

8. The athletic shoe according to claim 1 wherein said message is audible.

9. The athletic shoe according to claim 1 wherein said message is comprised of visual and audible components.

10. The athletic shoe of claim 1 wherein said upper includes a tongue, and wherein said notification device is mounted on said tongue.

11. The athletic shoe of claim 1 wherein said timing device includes a switch mounted on said sole to contact the ground and detect when the athletic shoe is off the ground and in the air.

12. The method of measuring hang time off the ground and in the air of an individual, said method comprising the steps of:

(a) providing in an athletic shoe a selectively actuable timing device;

(b) actuating said timing device to measure elapsed time in response to said athletic shoe leaving the ground and elevating into the air;

(c) deactuating said timing device in response to said athletic shoe returning to the ground; and

(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).

13. The method of claim 12 wherein step (d) includes providing said indication as a visible indication.

14. The method of claim 13 wherein step (d) includes providing an alpha-numeric display on said athletic shoe of said time interval.

15. The method of claim 14 further comprising the step of inhibiting the step of providing said display unless said time interval exceeds a predetermined elapsed time.

16. The method of claim 13 wherein step (b) includes illuminating a light emitting device disposed on said shoe during said time interval.

17. The method of claim 12 wherein said step (d) includes providing said indication as an audible indication.

18. The method of claim 17 wherein step (d) comprises providing said audible indication as an enunciation of said time interval.

19. The method of claim 17 wherein step (d) includes providing said audible indication as a sound emanating from said shoe during said time interval.

20. The method of claim 12 further comprising the steps of:

(e) transmitting to a location remote from both said shoe and said individual a signal representing said time interval; and

(f) displaying at said remote location said time interval for viewing by multiple people.

* * * * *

JS 44 (Rev. 11/04)

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON THE REVERSE OF THE FORM.)

I. (a) PLAINTIFFS

Eric Cherdak

(b) County of Residence of First Listed Plaintiff Montgomery County
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorney's (Firm Name, Address, and Telephone Number)

Jay P. Holland & Lawrence R. Holzman, Joseph, Greenwald & Laake, P. A.; 6404 Ivy Lane, Suite 400, Greenbelt, MD 20770; (240) 553-1199

DEFENDANTS

E.S. Originals, Inc.

County of Residence of First Listed Defendant New York, NY
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)
(For Diversity Cases Only)

	PTF	DEF		PTF	DEF
Citizen of This State	☒ 1	☐ 1	Incorporated *or* Principal Place of Business In This State	☐ 4	☐ 4
Citizen of Another State	☐ 2	☒ 2	Incorporated *and* Principal Place of Business In Another State	☐ 5	☒ 5
Citizen or Subject of a Foreign Country	☐ 3	☐ 3	Foreign Nation	☐ 6	☐ 6

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS		FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
☐ 110 Insurance	PERSONAL INJURY	PERSONAL INJURY	☐ 610 Agriculture	☐ 422 Appeal 28 USC 158	☐ 400 State Reapportionment
☐ 120 Marine	☐ 310 Airplane	☐ 362 Personal Injury - Med. Malpractice	☐ 620 Other Food & Drug	☐ 423 Withdrawal 28 USC 157	☐ 410 Antitrust
☐ 130 Miller Act	☐ 315 Airplane Product Liability	☐ 365 Personal Injury - Product Liability	☐ 625 Drug Related Seizure of Property 21 USC 881	PROPERTY RIGHTS	☐ 430 Banks and Banking
☐ 140 Negotiable Instrument	☐ 320 Assault, Libel & Slander	☐ 368 Asbestos Personal Injury Product Liability	☐ 630 Liquor Laws	☐ 820 Copyrights	☐ 450 Commerce
☐ 150 Recovery of Overpayment & Enforcement of Judgment	☐ 330 Federal Employers' Liability	PERSONAL PROPERTY	☐ 640 R.R. & Truck	☒ 830 Patent	☐ 460 Deportation
☐ 151 Medicare Act	☐ 340 Marine	☐ 370 Other Fraud	☐ 650 Airline Regs.	☐ 840 Trademark	☐ 470 Racketeer Influenced and Corrupt Organizations
☐ 152 Recovery of Defaulted Student Loans (Excl. Veterans)	☐ 345 Marine Product Liability	☐ 371 Truth in Lending	☐ 660 Occupational Safety/Health		☐ 480 Consumer Credit
☐ 153 Recovery of Overpayment of Veteran's Benefits	☐ 350 Motor Vehicle	☐ 380 Other Personal Property Damage	☐ 690 Other		☐ 490 Cable/Sat TV
☐ 160 Stockholders' Suits	☐ 355 Motor Vehicle Product Liability	☐ 385 Property Damage Product Liability	LABOR	SOCIAL SECURITY	☐ 810 Selective Service
☐ 190 Other Contract	☐ 360 Other Personal Injury		☐ 710 Fair Labor Standards Act	☐ 861 HIA (1395ff)	☐ 850 Securities/Commodities/ Exchange
☐ 195 Contract Product Liability			☐ 720 Labor/Mgmt. Relations	☐ 862 Black Lung (923)	☐ 875 Customer Challenge 12 USC 3410
☐ 196 Franchise			☐ 730 Labor/Mgmt.Reporting & Disclosure Act	☐ 863 DIWC/DIWW (405(g))	☐ 890 Other Statutory Actions
REAL PROPERTY	CIVIL RIGHTS	PRISONER PETITIONS	☐ 740 Railway Labor Act	☐ 864 SSID Title XVI	☐ 891 Agricultural Acts
☐ 210 Land Condemnation	☐ 441 Voting	☐ 510 Motions to Vacate Sentence	☐ 790 Other Labor Litigation	☐ 865 RSI (405(g))	☐ 892 Economic Stabilization Act
☐ 220 Foreclosure	☐ 442 Employment	Habeas Corpus:	☐ 791 Empl. Ret. Inc. Security Act	FEDERAL TAX SUITS	☐ 893 Environmental Matters
☐ 230 Rent Lease & Ejectment	☐ 443 Housing/ Accommodations	☐ 530 General		☐ 870 Taxes (U.S. Plaintiff or Defendant)	☐ 894 Energy Allocation Act
☐ 240 Torts to Land	☐ 444 Welfare	☐ 535 Death Penalty		☐ 871 IRS—Third Party 26 USC 7609	☐ 895 Freedom of Information Act
☐ 245 Tort Product Liability	☐ 445 Amer. w/Disabilities - Employment	☐ 540 Mandamus & Other			☐ 900Appeal of Fee Determination Under Equal Access to Justice
☐ 290 All Other Real Property	☐ 446 Amer. w/Disabilities - Other	☐ 550 Civil Rights			☐ 950 Constitutionality of State Statutes
	☐ 440 Other Civil Rights	☐ 555 Prison Condition			

V. ORIGIN (Place an "X" in One Box Only)

☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from another district (specify) ☐ 6 Multidistrict Litigation ☐ 7 Appeal to District Judge from Magistrate Judgement

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (**Do not cite jurisdictional statutes unless diversity**): 35 USC § 271

Brief description of cause: patent infringement

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER F.R.C.P. 23

DEMANDS injunction, accounting, monetary award

CHECK YES only if demanded in complaint:
JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY (See instructions): JUDGE Roger Titus DOCKET NUMBER CV 00-445 & CV 00-765

DATE 11/09/2005

SIGNATURE OF ATTORNEY OF RECORD

FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFP _____ JUDGE _____ MAG. JUDGE _____

Jennifer M. Rice

From: MDD_CM-ECF_Filing@mdd.uscourts.gov
Sent: Thursday, November 10, 2005 4:03 PM
To: MDDdb_ECF@mdd.uscourts.gov
Subject: Activity in Case 8:05-cv-03051-RWT Cherdak v. E.S. Originals, Inc. "Complaint"

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U.S. District Court

District of Maryland

Notice of Electronic Filing

The following transaction was received from Lawrence Roger Holzman entered on 11/10/2005 at 4:03 PM EST and filed on 11/10/2005

Case Name: Cherdak v. E.S. Originals, Inc.
Case Number: 8:05-cv-3051
Filer: Erik B. Cherdak
Document Number: 1

Docket Text:
COMPLAINT against E.S. Originals, Inc. (Filing fee $ 250 receipt number 84637003370.), filed by Erik B. Cherdak. (Attachments: #(1) Exhibit A #(2) Exhibit B #(3) Civil Cover Sheet)(elt, Deputy Clerk)

The following document(s) are associated with this transaction:

Document description: Main Document
Original filename:n/a
Electronic document Stamp:
[STAMP dcecfStamp_ID=1046883720 [Date=11/10/2005] [FileNumber=934770-0
] [45c9a434f90776ec133d5e5e386a97e3e140f271e4a6971c9ed4b44425d8d78b597
7c843ed93d60e353d5a584598a1cf8d8100347f297cb777e1fb147a5ba260]]
Document description: Exhibit A
Original filename:n/a
Electronic document Stamp:
[STAMP dcecfStamp_ID=1046883720 [Date=11/10/2005] [FileNumber=934770-1
] [2e07bb7e505c043a69a6751c34d5028459681ee8b2e2a80ddfc806be63e44d66d6d
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Document description: Exhibit B
Original filename:n/a
Electronic document Stamp:
[STAMP dcecfStamp_ID=1046883720 [Date=11/10/2005] [FileNumber=934770-2
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Document description: Civil Cover Sheet
Original filename:n/a
Electronic document Stamp:
[STAMP dcecfStamp_ID=1046883720 [Date=11/10/2005] [FileNumber=934770-3
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254b200f4529b375ca7d1b5c82d19e6db524e164a7a597fe31f3b16f9dd67]]

8:05-cv-3051 Notice will be electronically mailed to:

Jay Paul Holland jholland@jgllaw.com, jrice@jgllaw.com

Lawrence Roger Holzman lholzman@jgllaw.com, rlcooley@jgllaw.com

8:05-cv-3051 Notice will be delivered by other means to: