UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/531,072	06/22/2012	Michael D. Prstojevich	215127.01662	7563

11333 7590 06/13/2013

Banner & Witcoff, Ltd.
Attorneys for client 215127 & 315127
10 South Wacker Drive
Suite 3000
Chicago, IL 60606

EXAMINER	
STICE, PAULA J	
ART UNIT	PAPER NUMBER
3766	

MAIL DATE	DELIVERY MODE
06/13/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 13/531,072	Applicant(s) PRSTOJEVICH ET AL.	
	Examiner PAULA J. STICE	Art Unit 3766	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2 May 2013*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☒ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some * c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Interim copies:

a)☐ All b)☐ Some c)☐ None of the: Interim copies of the priority documents have been received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Specification

The amendment to the specification has been entered into the record; however the specification, first paragraph, needs to further be amended to recite that the 11/690,766 application is *now abandoned.*

Response to Arguments

1. Applicant's arguments filed 05/02/2013 have been fully considered but they are not persuasive.

2. Applicant argues, with respect to the newly amended claim language, that the Lubell reference dose not disclose; prompting the user to exercise at multiple exertion levels and determining multiple heart rate zones. However, claim 1 of the Lubell disclosure clearly claims a "means for establishing" an exercise protocol which is considered to read directly on the prompting of the user to exercise at multiple levels. Furthermore, the zones disclosed by Lubell clearly read on the multiple exertion levels (see Col. 8, lines 23-60). Furthermore, the claims as written (i.e. amended) are confusing and indefinite as will be discussed below with the 112 rejections.

Claim Rejections - 35 USC § 112

3. The following is a quotation of 35 U.S.C. 112(b):

(B) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

5. Regarding claims 1, 12 and 17: the claims recites "prompt a user to exercise at multiple exertion levels; determine a plurality of heart rate zones based on first heart rate measurements received from a sensor while the user exercises at the multiple exertion levels". It is first unclear how a user can exercise "at multiple exertion levels" and heart rate measurements be recorded based on "first rate measurements"…this language is confusing. It is possible to prompt the user to exercise at a first level, get a first heart rate zone, second level and get a second heart rate zone etc., however it is unclear how a user can exercise at multiple exertion levels as the claim recites. This would apparently require that the user is at one instant exercising at multiple levels. The language is unclear and indefinite.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 12 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lubell et al. US 4,566,461 in the IDS (cited previously).

3. Regarding claims 1, 12 and 17: Lubell discloses a processor 55 (Fig. 6) and memory 55a storing non-transitory computer readable medium instructions ("algorithm", Col. 12, line 5, fig. 5 also shows the program in a graphical form); the processor instructs the user to exercise at various exertion levels (claim 1, "means for providing indication to said subject of a level of training exercise") determines a plurality of heart rate zones based on first rate measurements received from a sensor (the processor determines a resting heart rate 9, fig. 5 as well as a maximum heart rate, Col. 4, lines 1-3 and Col. 9, lines 5-10; the heart rate zones are determined to be 60% and 80% of the max Vo2 which is also determined in part by the heart rate); a prompt is generated instructing the user to maintain a heart rate within a chosen zone (Col. 10, lines 25-43); the processor monitors a second heart rate as the individual exercise, which is a heart rate subsequent to the prompt (Col. 10, lines 25-43) and determines if the heart rate is within the designated zone.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-5, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubell et al. US 4,566,461 in view of Yoshimura et al. US 2003/0073911 (cited previously).

6. Regarding claims 2-4, 13 and 18: Lubell discloses the claimed invention. However, Lubell is silent as to the use of encoded messages with identification data related to the heart rate measurements and decoding the message downstream using identification information for the sensor. Yoshimura however teaches of a similar device (Fig. 1) in which two sensor signals are monitored 13/14 (Fig. 4), each sensor signal is encoded using an ID coded protocol (pg. [0017]) and then decoded and the opposite end of the transmission (also pg. [0017]);as shown in Fig. 3 the device has bit information related to the specific sensor. It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubell to include encoding signals with an ID coded protocol in order to transmit more than one signal at a time and then identify between the signals once decoded using bit information as in fig. 3, as taught by Yoshimura.

7. Regarding claim 5: Lubell/Yoshimura discloses the claimed invention, Yoshimura further teaches of a speed sensor (broadly interpreted to be an accelerometer 13, Fig. 4), and the message comprises speed information (pg. [0018]). It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubell/Yoshimura to include a speed sensor that sends a message comprising speed information, as taught by Yoshimura in order to measure workout paces during exercise.

8. Claims 6-11, 14-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubell et al. US 4,566,461 in view of Yoshimura et al. US 2003/0073911 and further in view of Flach et al. US 2001/0023315 (cited previously).

9. Regarding claims 6-10, 14-15 and 19: Lubell/Yoshimura discloses the claimed invention, however Lubell/Yoshimura is silent as to the use of a designated time channel for either sensor for communicating the associated data and distinguishing between the sensor signals based on the time in which the signals were sent. Flach however, teaches of a time division multiple access protocol, in which data from specific sensors is sent during designated timeslots (pgs. [0016-0017]). It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubell/Yoshimura to include designated time channels for either sensor to communicate the associated signal, as taught by Flach, in order to distinguish between sensor signals.

10. Regarding claims 11, 16 and 20: Lubell/Yoshimura discloses the claimed invention however Lubell/Yoshimura is silent as to the use of different frequencies to distinguish the signals. Flach however teaches that frequency channels can be specific and used to distinguish between signals (pg. [0015]), as well as using both frequency and time diversity to distinguish between signals to be transmitted (pg. [0018]). It therefore would have been obvious to one of ordinary skill in the art at the time the inventions was made to modify Lubell/Yoshimura to include the use of different frequencies for transmitted signals, as taught by Flach, in order to distinguish between signals.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAULA J. STICE whose telephone number is (571)270-1478. The examiner can normally be reached on Monday - Friday 8AM-5PM, Mst., alternating Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAULA J. STICE/
Examiner, Art Unit 3766

/CARL H LAYNO/
Supervisory Patent Examiner, Art Unit 3766