UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON ATHLETICA CANADA INC. and LULULEMON USA INC. Petitioners

v.

NIKE, INC. Patent Owner

Case IPR2023-00189 Patent 9,278,256

PATENT OWNER'S PRESENTATION FOR ORAL ARGUMENT

United States Patent and Trademark Office Before the Patent Trial and Appeal Board

lululemon athletica inc. et al. v. Nike, Inc

IPR2023-00189 U.S. Pat. No. 9,278,256

Patent-Owner's Presentation February 14, 2023

lululemon athletica inc. et al. v. Nike, Inc. IPR2023-00189
Patent No. 9,278,256
Demonstrative Ex. 2014

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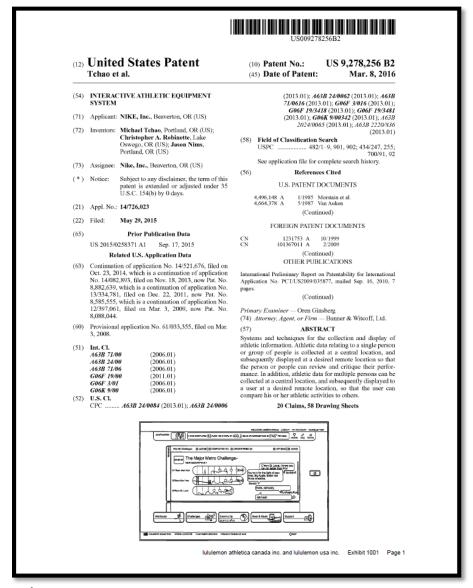
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Overview of the '256 patent





'256 Patent, Ex. 1001 at Cover

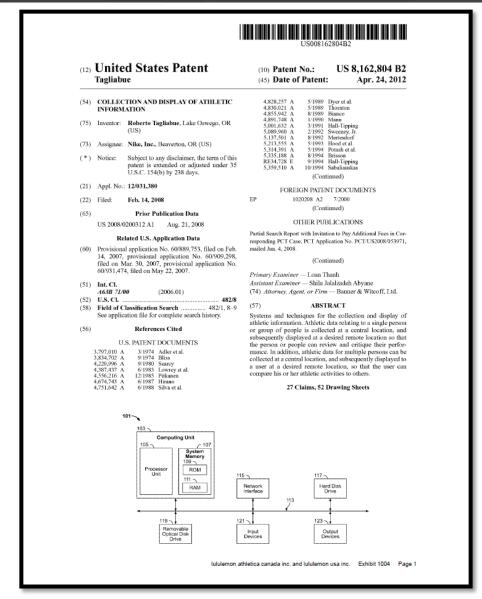
Overview of grounds



Ground	35 U.S.C. §	Claims	Reference(s)
1	102	1–20	Tagliabue
2	102	1–4, 7, 8, 11–16	Arrasvuori
3	103	1–4, 7, 8, 11–16	Arrasvuori
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Overview of Tagliabue

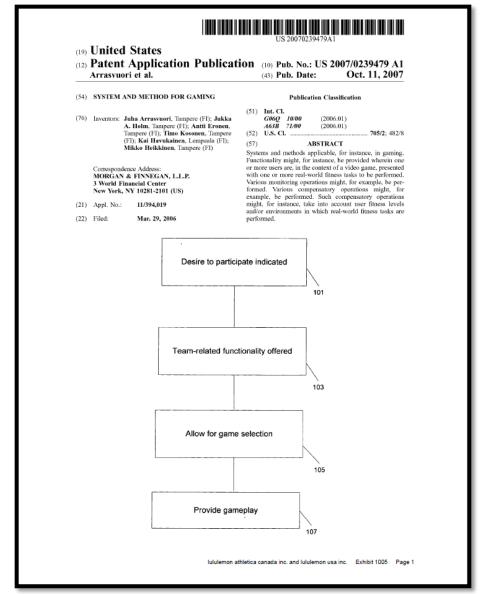




Tagliabue, Ex. 1004 at Cover

Overview of Arrasvuori





Overview of Watterson





(12) United States Patent

Watterson et al.

(10) Patent No.: US 6,458,060 B1

(45) Date of Patent: Oct. 1, 2002

(54) SYSTEMS AND METHODS FOR INTERACTION WITH EXERCISE DEVICE

- (75) Inventors: Scott R. Watterson, Logan, UT (US); William T. Dalebout, Logan, UT (US); Darren C. Ashby, Richmond, UT (US)
- (73) Assignee: Icon IP, Inc., Logan, UT (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 30 days.
- (21) Appl. No.: 09/641,220
- (22) Filed: Aug. 18, 2000

Related U.S. Application Data

- (63) Continuation-in-part of application No. 09/496,560, filed on Feb. 2, 2000, and a continuation-in-part of application No. 09/349,608, filed on Jul. 8, 1999.
- (51) Int. Cl.7 A63B 21/00 . 482/54; 482/4; 482/51 (52) U.S. Cl.
- 482/51, 54, 1-9, (58) Field of Search 482/900-902

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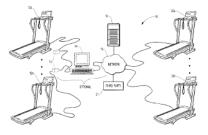
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Primary Examiner-Glenn E. Richman (74) Attorney, Agent, or Firm-Workman, Nydegger &

An exercise device is configured to enable a user to interact with a trainer in real-time communication. The exercise device includes an exercise mechanism having a movable element for movement in performance of exercise by a user. Communicating with the exercise mechanism is an interface adapted for gathering a first real-time signal from the user. The interface communicates with a communication system for receiving a packetized second real-time signal including a synchronized control signal from the trainer. The exercise device includes an output device configured to reproduce the second real-time signal. The control signals carried by the second signal are used to control the operating parameters of the exercise mechanism in real-time.

34 Claims, 20 Drawing Sheets



lululemon athletica canada inc. and lululemon usa inc. Exhibit 1006 Page 1





Limitations 1[G]/11[E]



What is claimed is:

1. A system comprising:

an athletic performance module configured to receive athletic activity data from a wirelessly-connected sensor worn on an appendage of a first user, wherein the first user is performing athletic activities at a first location; and

a challenge module configured to:

receive information specifying a challenge, wherein the challenge includes a competition between the first user, and a second user performing athletic activities at a second location, different to, and remote from, the first location;

determine, from the received athletic activity data, a first amount of athletic activity performed by the first user;

receive data from a second sensor indicating a second amount of athletic activity performed by the second user;

determine whether the challenge has been met by the first user based on a comparison of the first amount of athletic activity performed by the first user and a second amount of athletic activity performed by the second user; and

continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

^{&#}x27;256 patent, Ex. 1001 at 40:41-67

Board ordered parties to submit proposed constructions



UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON ATHLETICA CANADA INC. AND LULULEMON USA INC., Petitioner.

V

NIKE, INC., Patent Owner.

IPR2023-00189 Patent 9,278,256 B2

Before MITCHELLG. WEATHERLY, CARL M. DEFRANCO, and STEPHEN E. BELISLE, *Administrative Patent Judges*.

 ${\tt BELISLE}, {\it Administrative Patent Judge}.$

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

Nevertheless, we order the parties as provided below (see infra Section V) to submit proposed constructions for the limitation "continuously generat[e] and simultaneously communicat[e] in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met," as recited in independent claims 1 and 11 (see limitations 1[G] and 11[E]).

Institution Decision, Paper 11 at 16

Nike's construction



Limitations 1[G]/11[E]

"continuously generat[e] and simultaneously communicat[e] in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met"

'256 patent, Ex. 1001 at 40:41-67

Nike's Proposed Construction

generating and communicating to the first user at the first location and the second user at the second location, at the same time and **without interruption** or perceived **delay**, an interface indicating whether the challenge has been met

lululemon agrees with Nike's construction

For this proceeding, lululemon does not dispute Nike's proposal to swap some of Limitation 1[G]/11[E]'s terms for synonyms: "without interruption" for "continuously"; "at the same time" for "simultaneously"; and "without ... perceived delay" for "real time." (See Paper 18 ("POR"), 28; Ex. 2005, ¶35.)

Petitioner's Reply, Paper 22 at 2

"continuous generation" = without interruption

. Under the ordinary and

customary meaning of these limitations, it is my opinion that a POSITA would have understood continuous generation of the interface to first and second users to mean that the interface is generated without perceived interruption.

Toney-Bolger Declaration, Ex. 2005 at ¶49

"real time" = without delay; contemporaneous

In my opinion, a POSITA at the relevant time would have understood generating the interface in real-time to mean that current updates regarding user performance, i.e., updates contemporaneous with a user's performance in the challenge, are provided to the interface.

Toney-Bolger Declaration, Ex. 2005 at ¶47

The Board ordered the parties to answer four questions

- (a) What specifically is generated and communicated in real-time?
- (b) Whether "indicating whether the challenge has been met" requires anything more than a mere yes/no-type indication?
- (c) If a party contends that the scope of this limitation and claim as a whole includes first and second users performing tasks at different times, what "in real-time" in this limitation means in that context?
- (d) What it means to "continuously generate" and to "simultaneously communicate" "an interface" to first and second users, particularly where such users are performing tasks at different times?

Institution Decision, Paper 11 at 16

Question (a)



(a) What specifically is generated and communicated in real-time?

An interface indicating whether the challenge has been met is generated and communicated in real-time. Ex. 2005, ¶¶36–37.

Question (b)



(b) Whether "indicating whether the challenge has been met" requires anything more than a mere yes/no-type indication?

No. Indicating whether the challenge has been met does not require anything other than a "yes/no-type indication." Ex. 2005, ¶40.

Question (c)

(c) If a party contends that the scope of this limitation and claim as a whole includes first and second users performing tasks at different times, what "in real-time" in this limitation means in that context?

The scope of the claims do, however, encompass users performing athletic

tasks at different times over the duration of a challenge.

Question (d)

(d) What it means to "continuously generate" and to "simultaneously communicate" "an interface" to first and second users, particularly where such users are performing tasks at different times?

Similar to the meaning of "in real-time" discussed above in Section VII.C, the meaning of "continuously generate" and "simultaneously communicate" "an interface" does not change whether the users are completing athletic tasks in the challenge at the same or different times. Ex. 2005, ¶49.

lululemon does not dispute Nike's answers to questions (a)–(d)

For the same reason, the Board also does not need to resolve the four questions it posed to the parties. Nonetheless, lululemon responds to each below:

Question 1. For this proceeding, lululemon does not dispute that "an interface" is generated and communicated in real-time. (*See* Ex. 1001, 40:64-67.) Specifically, because computers transmit data encoding images rather than the images themselves, a POSITA would have understood "interface" to encompass data encoding an interface. (*See* Ex. 2006, 35:3-14.)

Question 2. For this proceeding, lululemon does not dispute that a "yes"/"no"-type indication satisfies Limitation 1[G]/11[E].

Question 3. For this proceeding, lululemon does not dispute that the claims cover athletes competing at different times. lululemon also does not dispute that "real-time" refers to providing a "current" update, *i.e.*, communicating an interface with low latency after generating it. (*See* Ex. 2006, 32:10-33:3, 38:19-39:3.)

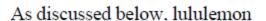
Question 4. For this proceeding, lululemon does not dispute that Limitation 1[G]/11[E] covers providing an interface even while a user takes a break.

Petitioner's Reply, Paper 22 at 2

But lululemon misapplies the parties' undisputed construction

lululemon incorrectly argues that the parties' undisputed construction "do[es] not impact patentability." Reply, 2–3. But lululemon has simply misapplied and ignored key components of the parties' construction.

Patent Owner's Sur-Reply, Paper 26 at 3



takes the position that any interface depicting user progress is "continuously

generated."

Patent Owner's Sur-Reply, Paper 26 at 3

- Q. Okay. So let's focus on interfaces that are collecting data from the real world and displaying that data in a way that's useful to the user. Okay?
 - A. Okay.
- Q. Within that universe of interfaces, can you give me an example of any interface that's working properly and is not being continuously generated?
- A. With the definition meaning without interruption for continuously generated.
 - Q. Yes.
- A. Well, if the purpose of the interface is to show, in some form, the sensor data being collected in the real world, and if it's working properly, then I would expect all such interfaces to be without interruption, and if they are interrupted, then there's a problem.

As discussed below, lululemon

takes the position that *any* interface depicting user progress is "continuously generated."

Patent Owner's Sur-Reply, Paper 26 at 3

athletic performance tracking site. Constant updates can be provided from the athletic performance tracking site to the athletic equipment and portable device 203. Communication

'256 patent, Ex. 1001 at 31:44-46

And in my opening deposition, I gave an example of a sensor on a door that determines whether it's opened or closed, and an interface that's displaying whether the door is open or closed,

Lynch Dep. Tr., Ex. 2013 at 55:22-56:1

Q. Okay. So in that hypothetical, if the door was never opened for two years and the interface was programmed to only generate when the door was opened, in your opinion, that would be a continuously generated interface?

MR. MCCLELLEN: Objection, form.

BY THE WITNESS:

A. Without interruption, which is the construction that I applied, because there is no interruption. You're seeing the same -- the right interface at all times.

Lynch Dep. Tr., Ex. 2013 at 61:16-62:2

race.

But not all leaderboards in 2007—or even

upon occurrence of certain events, such as the leaderboard for the Tour de France, where the leaderboard regenerates only as cyclists complete certain stages of the

Patent Owner's Sur-Reply, Paper 26 at 14

But if that were the case,

there would be no meaningful distinction between "an interface indicating whether the challenge has been met" and "a *continuously generate[d]* ... interface indicating whether the challenge has been met." This implicit construction of "continuously

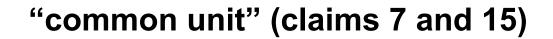
Patent Owner's Sur-Reply, Paper 26 at 4



"It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous."

Wasica Fin. GmBH v. Cont'l Auto Sy., Inc., 853 F.3d 1272, 1288 (Fed. Cir. 2017)

Case referenced Patent Owner's Sur-Reply, Paper 26 at 4



"common unit"



7. The system of claim 1, wherein the challenge is defined in terms of a common unit used for multiple types of athletic activities.

'256 patent, Ex. 1001 at 41:12-14

Nike's construction of "common unit" is a representation of athletic performance data including types of data not normally expressed in that particular unit.

No dispute that common unit involves "multiple types of activities"

Claims 7 and 15 broadly present "common unit" as a unit

"used for multiple types of athletic activities" and place no other restraint on its scope. (Ex. 1001, 41:13-14, 42:17-18.) For example, miles are a common unit because they can be used to measure running, swimming, and other activities.

Petitioner's Reply, Paper 22 at 4

No dispute that "common unit" involves conversion

It also shows how miles are a common unit by describing

converting an elliptical workout into "an equivalent miles run" and then comparing

those "miles run" to "actual miles run" (*Id.*, 36:2-8; see also id., 33:19-25.)

Petitioner's Reply, Paper 22 at 4

"common unit" in the specification

"In [one] example, the runner's data already represents miles run."

"the resistance trainer's data represents total weight lifted"

"The user interface 1700 may convert the resistance trainer's data to distance run"

In an embodiment, the user interface 1700 may thereafter convert the received athletic performance data to a common unit. In an embodiment, an athletic performance module may convert the received athletic performance data to distance (in an embodiment, miles) run. In the above example, the runner's data already represents miles run. However, the resistance trainer's data represents total weight lifted, maximum weight lifted, lifting rate/pace, delay between sets, and the like. The user interface 1700 may convert the resistance trainer's data to distance run in a variety of manners. For example, the user interface 1700 may include a database, look-up table, or the like that stores predetermined conversion factors between, for example, total weight lifted and miles run. The database or look-up table may further contemplate additional metrics such as maximum weight lifted, etc., as introduced above. Alternatively, the athletic performance module may apply the data to one or more algorithms to calculate the distance run equivalent. Accordingly, a goal or challenge may be set in terms of a common unit so that a user may perform a variety of activities to meet the goal or challenge.

'256 patent, Ex. 1001 at 32:24-43

lululemon misunderstands Nike's proposed construction

Nike's proposal would bar "miles" as a

common unit for running even though that is a preferred embodiment. (See Ex.

Petitioner's Reply, Paper 22 at 5

lululemon misunderstands Nike's proposed construction – Example 1



Nike's proposal would bar "miles" as a

common unit for running even though that is a preferred embodiment.

Petitioner's Reply, Paper 22 at 5

an embodiment, miles) run. In the above example, the runner's data already represents miles run. However, the resistance trainer's data represents total weight lifted, maximum weight lifted, lifting rate/pace, delay between sets, and the like. The user interface 1700 may convert the resistance trainer's data to distance run in a variety of manners. For example, the user interface 1700 may include a database, look-up table, or the like that stores predetermined conversion factors between, for example, total weight lifted and miles run. The

'256 patent, Ex. 1001 at 32:28-36

lululemon misunderstands Nike's proposed construction – Example 2

Nike's proposal would bar "miles" as a

common unit for running even though that is a preferred embodiment. (See Ex.

Petitioner's Reply, Paper 22 at 5

Once the athletic performance of the user or athlete has been converted to a common unit, for example miles run, they may compare their athletic performance with personal goals,

'256 patent, Ex. 1001 at 33:10-12

a workout on an elliptical machine. FIG. 25 in particular illustrates that the thirty minute elliptical workout has been converted to an equivalent miles run. Once a workout has been converted to its equivalent in miles run, it may be displayed alongside actual miles run as part of, for example, an interactive athletic training tool and/or interactive athletic training log. Such an interactive athletic training tool and/or

'256 patent, Ex. 1001 at 36:2-8

lululemon misunderstands Nike's proposed construction

lululemon misunderstands Nike's proposed construction for "common unit." Nike does not disagree that "miles" can be a "common unit." Instead, Nike contends that "miles" is a "common unit" only when used to represent at least one activity "not normally expressed in that particular unit." Response, 39–41; Ex. 2005, ¶¶73, 75.

Patent Owner's Sur-Reply, Paper 26 at 6

and "equivalent cardiovascular miles," where activities traditionally measured in distance are indeed measured in that distance (e.g. miles run, miles walked), but athletic activities not traditionally measured with the same distance units are converted to an equivalent distance (e.g. cardiovascular mile) based on some measured physiological signal to enable comparison between dissimilar activities and competition involving a diverse set of physical tasks:





Iululemon fails to show that Tagliabue discloses 1[G]/11[E]



What is claimed is:

- 1. A system comprising:
- an athletic performance module configured to receive athletic activity data from a wirelessly-connected sensor worn on an appendage of a first user, wherein the first user is performing athletic activities at a first location; and
- a challenge module configured to:
 - receive information specifying a challenge, wherein the challenge includes a competition between the first user, and a second user performing athletic activities at a second location, different to, and remote from, the first location;
 - determine, from the received athletic activity data, a first amount of athletic activity performed by the first user;
 - receive data from a second sensor indicating a second amount of athletic activity performed by the second user;
 - determine whether the challenge has been met by the first user based on a comparison of the first amount of athletic activity performed by the first user and a second amount of athletic activity performed by the second user; and
 - continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

^{&#}x27;256 patent, Ex. 1001 at 40:41-67

Institution decision – 1[G]/11[E]

"We currently find Patent Owner's argument persuasive on the record before us. In particular, Petitioner cites merely a few statements from Tagliabue that on their face do not appear to explicitly disclose the features of the subject limitations, and we discern no explanation as to how or why the cited statements disclose such limitations."

Institution Decision, Paper 11 at 34

lululemon's entire argument for 1[G]/11[E]



Four sentences in Petition

Element 1[G]

continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

Tagliabue discloses notifying users whether a challenge has been met via a "special-purpose interface" (Ex. 1004, 22:45-50.) During the challenge, "the athletic data display configuration device 601 may additionally provide updates regarding the status of a participant relative to other participants." (*Id.*, 22:54-56.) It "may configure and provide a user interface showing each participant's progress toward the goal of the challenge using, e.g., bar graphs for each participant of the type previously described with regard to monitoring individual goals." (*Id.*, 22:61-65.) As explained above, the competing users can be located remotely from each other. (*Supra* § VI.A.4.)

Citing two paragraphs in Tagliabue

each participant of the winner. The athletic data display configuration device 601 may notify the participants using any desired technique, such as by sending an electronic mail message, by displaying a special-purpose interface when each participant connects to the athletic data display configuration device 601, etc. A variety of such notification techniques are well known in the art, and thus will not be discussed in detail.

With various examples of the invention, the athletic data display configuration device 601 may additionally provide updates regarding the status of a participant relative to the other participants. These updates also can be provided using any desired technique, such as by sending an electronic mail message, by displaying a special-purpose interface when each participant connects to the athletic data display configuration device 601, etc. For example, the athletic data display configuration device 601 may configure and provide a user interface showing each participant's progress toward the goal of the challenge using, e.g., bar graphs for each participant of the type previously described with regard to monitoring individual goals.

Support for 1[G]/11[E] found in '256 patent, not Tagliabue



Specifically, as shown in a redline between the '256 Patent specification and Tagliabue (Ex. 2008), the '256 Patent expands on Tagliabue's disclosure by adding (1) column 3, lines 30–37, and (2) column 29, line 26 until column 40, line 29 and associated figures (Figures 17–42). *Compare* Ex. 1004 with '256 Patent; Ex. 2008. As a result, in my opinion, Tagliabue lacks any description of "real-time" display of performance. *Compare* Ex. 1004 with '256 Patent, 3:30–37, 30:39–44. Tagliabue also lacks any teachings related to "constantly" or "continuously" generating or updating a user interface. *Compare* Ex. 1004 with '256 Patent, 31:41–46.

Toney-Bolger Declaration, Ex. 2005 at ¶69

For yet other implementations of the invention, the performance data collected from one or more users or athletes may be collected by an athletic device or machine and/or displayed on an athletic device or machine console so that the user or athlete may have a substantially real-time display of their performance against personal goals, benchmarks, or milestones. The user or athlete may also have a display of their performance in a competition or challenge.

'256 patent, Ex. 1001 at 3:30-37

letic performance device or machine. More specifically, the user interface 1700 may be a console that displays the user or athlete's athletic performance substantially in real-time. Further, the user interface 1700 console may display a comparison of substantially real-time athletic performance data to historical or otherwise stored athletic performance data.

'256 patent, Ex. 1001 at 30:39-44

workout. Thus, bi-directional communication is provided between the portable device 203/athletic equipment and the athletic performance tracking site. Constant updates can be provided from the athletic performance tracking site to the athletic equipment and portable device 203. Communication

'256 patent, Ex. 1001 at 31:41-46

Differences between Tagliabue and '256 patent



Tagliabue discloses a more conventional, less technologically advanced process by which a user transfers recorded athletic data from a "special-purpose computing device," e.g., digital music player or other portable device, to a local computer by syncing the device (in a wired or wireless fashion) to the local computer. Ex. 1004, 5:4-12, 9:19-24, 11:40-58. The local computer then transfers the data to a remote server which saves the data. Id., 5:12-16; 12:35-43. Afterwards, a user can use a local computing device to intermittently query, retrieve, and view the stored data from the server. Id., 5:16-23; 13:25-39. Tagliabue discloses a slower, less automated process, in which a first user's challenge performance data would not be available to a second user continuously, nor in real-time.

Toney-Bolger Declaration, Ex. 2005 at ¶71

No anticipation





"[D]ifferences between the prior art reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation."

Net MoneyIN, Inc. v. Verisign, Inc., 545 F.3d 1359, 1371 (Fed. Cir. 2008).

Case referenced Patent Owner's Response, Paper 18 at 39



Iululemon fails to show that Tagliabue discloses claims 7 or 15

7. The system of claim 1, wherein the challenge is defined in terms of a common unit used for multiple types of athletic activities.

'256 patent, Ex. 1001 at 41:12-14

Iululemon's entire argument for claims 7 and 15



Two sentences in Petition

G. Claim 7

The system of claim 1, wherein the challenge is defined in terms of a common unit used for multiple types of athletic activities.

Tagliabue discloses defining challenges in "miles." (Ex. 1004, 22:35-36,

22:66-23:2.) Miles are a common unit used for multiple types of athletic activities.

(Ex. 1001, 33:11 ("a common unit, for example miles run").)

Petition, Paper 2 at 35

Citing two excerpts from Tagliabue

example, if the challenge is a race to determine who can be the first to run 100 miles, for each participant the athletic data

Tagliabue, Ex. 1004 at 22:35-36

Returning now to FIG. 13A, if a user wishes to establish a challenge regarding who can run the most miles in a given period of time, then the user activates the "Most Miles" button 1305. In response, the athletic data display configuration

Tagliabue, Ex. 1004 at 22:66-23:2

Tagliabue never discusses conversion to "common unit"

"run ... miles"

example, if the challenge is a race to determine who can be the first to run 100 miles, for each participant the athletic data

Tagliabue, Ex. 1004 at 22:35-36

"run ... miles"

Returning now to FIG. 13A, if a user wishes to establish a challenge regarding who can run the most miles in a given period of time, then the user activates the "Most Miles" button 1305. In response, the athletic data display configuration

Tagliabue, Ex. 1004 at 22:66–23:2

Tagliabue never mentions "common unit"



74. Tagliabue does not include the column of the '256 Patent specification that describes converting athletic data to a "common unit." *See* Ex. 2008. Based on my review of Tagliabue, it includes no mention of this term.

Toney-Bolger Declaration, Ex. 2005 at ¶74



Overview of grounds



Ground	35 U.S.C. §	Claims	Reference(s)
1	102	1–20	Tagliabue
2	102	1–4, 7, 8, 11–16	Arrasvuori
3	103	1–4, 7, 8, 11–16	Arrasvuori
4	103	13	Arrasvuori, Ellis
5	103	1, 7, 8, 11–13, 15, 16	Watterson, Arrasvuori



Iululemon fails to show that Arrasvuori teaches or suggests 1[G]/11[E]



What is claimed is:

1. A system comprising:

an athletic performance module configured to receive athletic activity data from a wirelessly-connected sensor worn on an appendage of a first user, wherein the first user is performing athletic activities at a first location; and

a challenge module configured to:

receive information specifying a challenge, wherein the challenge includes a competition between the first user, and a second user performing athletic activities at a second location, different to, and remote from, the first location;

determine, from the received athletic activity data, a first amount of athletic activity performed by the first user;

receive data from a second sensor indicating a second amount of athletic activity performed by the second user;

determine whether the challenge has been met by the first user based on a comparison of the first amount of athletic activity performed by the first user and a second amount of athletic activity performed by the second user; and

continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

^{&#}x27;256 patent, Ex. 1001 at 40:41-67

No dispute: Arrasvuori is silent on frequency of generation

39. Second, a POSITA also would have understood from Arrasvuori's descriptions of the leaderboards that the leaderboards are continuously generated.

Lynch Declaration, Ex. 1017 at ¶39

Anticipation: "mere possibility" insufficient





"While it is possible that [prior art] system utilizes [the claimed feature], mere possibility is not enough."

PAR Pharm, Inc. v. TWI Pharm., Inc., 773 F.3d 1186, 1195 (Fed. Cir. 2014)

Case referenced Patent Owner's Sur-Reply, Paper 26 at 14

Dr. Lynch's testimony: unsupported and conclusory



lululemon also relies on Dr. Lynch's testimony that Arrasvuori's application "has no value" without continuous generation. Reply, 11 (citing Ex. 2006, 66:24–67:2).

Patent Owner's Sur-Reply, Paper 26 at 14

But

the continuous generation, simultaneous communication, and realtimeness of it needs to be appropriate to the task, the application, otherwise it has no value.

Lynch Dep. Tr., Ex. 2006 at 66:24-67:2

Obviousness: unsupported and conclusory testimony is insufficient





"[W]e conclude that while "common sense" can be invoked, even potentially to supply a limitation missing from the prior art, it must still be supported by evidence and a reasoned explanation."

Arendi S.A.R.L. v. Apple Inc., 832 F.3d 1355, 1362–63 (Fed. Cir. 2016)

Case referenced Patent Owner's Sur-Reply, Paper 26 at 14

Dr. Lynch's testimony: unsupported and conclusory



[I]n the context of multiplayer video games as were common in 2007, many very popular ones, people around the world are playing in realtime shooting at each other, and those things have to be done with low latency. It has to be continuously generated. It has to be simultaneously communicated with an appropriate definition of those terms.

Lynch Declaration, Ex. 1017 at ¶40

Q. Do you consider yourself an expert in designing the software that video games use to control latency and turnaround times?

MR. MCCLELLEN: Objection, form.

BY THE WITNESS:

A. I do not consider myself an expert in video game design or this sub-area that you mentioned.

Lynch Dep. Tr., Ex. 2013 at 35:8-14

"Shooting video games" different from '256 patent

Call of Duty and similar

- Q. What shooting video game are you referring to there?
- A. I'm not referring to any single shooting game. There are several.
- Q. Okay. Can you name them for me, the ones that you are aware of?
- A. I can't give you an exhaustive list, but Call of Duty would be one.

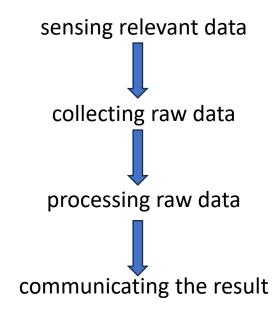
Lynch Declaration, Ex. 2013 at 117:1-8

shooting video games merely generated an interface based on buttons pressed by the user. They did not involve sensing, processing, and relaying to an interface data collected from a user's physical activity—the way that the '256 patent claims recite. The continuous generation of an interface based on user activity is far more complex than a traditional, button-based video game. *See* Ex. 2005, ¶70.

Patent Owner's Sur-Reply, Paper 26 at 15

"Shooting video games" different from '256 patent





70. Continuous generation and simultaneous communication of an interface depicting athletic information derived from worn sensors in real time is not a trivial feat. It requires at least sensing relevant data, collecting raw data, processing raw data to determine the value of the metric of interest (which can include data cleaning, filtering, rectifying, etc.), and communicating the result without perceived delay (in real-time) and without perceived interruption (continuously). Visual

Toney-Bolger Declaration, Ex. 2005 at ¶70

Iululemon Fails To Show That Arrasvuori Teaches Or Suggests Limitations 1[A]/11[B]

lululemon fails to show that Arrasvuori teaches or suggests limitations 1[A]/11[B]



A system comprising:

an athletic performance module configured to receive athletic activity data from a wirelessly-connected sensor worn on an appendage of a first user, wherein the first user is performing athletic activities at a first location; and

a challenge module configured to:

receive information specifying a challenge, wherein the challenge includes a competition between the first user, and a second user performing athletic activities at a second location, different to, and remote from, the first location;

determine, from the received athletic activity data, a first amount of athletic activity performed by the first user;

receive data from a second sensor indicating a second amount of athletic activity performed by the second user;

determine whether the challenge has been met by the first user based on a comparison of the first amount of athletic activity performed by the first user and a second amount of athletic activity performed by the second user; and

continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

Iululemon fails to show that Arrasvuori teaches or suggests limitations 1[A]/11[B]

Arrasvuori never discloses or suggests that its wireless node is a computerized watch (Response, 47–48). Arrasvuori's only mention of a computerized watch falls in a generic listing of types of computers that may assist with "[v]arious operations" in "various embodiments." Ex. 1005, ¶90.

Patent Owner's Sur-Reply, Paper 26 at 16

[0090] Various operations and/or the like described herein may, in various embodiments, be executed by and/or with the help of computers. Further, for example, devices described herein may be and/or may incorporate computers. The phrases "computer", "general purpose computer", and the like, as used herein, refer but are not limited to a smart card, a media device, a personal computer, an engineering workstation, a PC, a Macintosh, a PDA, a portable computer, a computerized watch, a wired or wireless terminal, phone, communication device, node, and/or the like, a server, a network access point, a network multicast point, a network device, a set-top box, a personal video recorder (PVR), a game console, a portable game device, a portable audio device, a portable media device, a portable video device, a television, a digital camera, a digital camcorder, a Global Positioning System (GPS) receiver, a wireless personal sever, or the like, or any combination thereof, perhaps running an operating system such as OS X, Linux, Darwin, Windows CE, Windows XP, Windows Server 2003, Palm OS, Symbian OS, or the like, perhaps employing the Series 40 Platform, Series 60 Platform, Series 80 Platform, and/or Series 90 Platform, and perhaps having support for Java and/or Net.

Arrasvuori, Ex. 1005 at ¶90



Iululemon fails to show that Arrasvuori teaches or suggests claims 2, 3, or 14

2. The system of claim 1, wherein the challenge is received from the second user.

'256 patent, Ex. 1001 at 41:1-2

Iululemon fails to show that Arrasvuori teaches or suggests claims 2, 3, and 14



in my opinion, Arrasvuori never discloses or suggests any user inviting another user to participate in a particular challenge, i.e., competition. Arrasvuori allows a user "to learn of available users, create one or more teams, to select one or more users for one or more new and/or existing teams, to invite one or more users to join one or more new and/or existing teams, to request to join one or more new and/or existing teams." Ex. 1005, ¶18.

Toney-Bolger Declaration, Ex. 2005 at ¶83

[0018] Various operations might, in various embodiments, be performed by the wireless node and/or other computer. For example, the wireless node and/or other computer might offer team-related functionality to the user (e.g., via a Graphical User Interface (GUI) and/or other interface) (step 103). The wireless node and/or other computer might, for instance, allow the user (e.g., via a GUI and/or other interface) to learn of available users, create one or more teams, to select one or more users for one or more new and/or existing teams, to invite one or more users to join one or more new and/or existing teams, to request to join one or more new and/or existing teams, and/or to accept invitation to join one or more new and/or existing teams. The user's wireless node and/or other computer might, in various embodiments, communicate with another wireless node and/or other computer. For example, the user's wireless node and/or other computer might act to perform a join operation with a server (e.g., a game server).

Arrasvuori, Ex. 1005 at ¶18

Iululemon fails to show that Arrasvuori teaches or suggests claims 2, 3, and 14



lululemon argues that Arrasvuori's

disclosure of "multiplayer videogames" involving "plural" users indicates receiving a challenge from a second user. Reply, 19. Although Arrasvuori generally discloses two users being in a challenge, it never discloses receiving a challenge from a "second user." *See* Ex. 2005, ¶¶82–83.

Patent Owner's Sur-Reply, Paper 26 at 17

Because multiplayer videogames involve

more than just a first user, Arrasvuori's system receives an indication of desire and selection of the multiplayer videogame from a second user.

Petitioner's Reply, Paper 22 at 19



Iululemon fails to show that Arrasvuori teaches or suggests claim 13

13. The method of claim 11, wherein the sensor worn on the appendage of the first user comprises an accelerometer.

'256 patent, Ex. 1001 at 42:12-13

Iululemon fails to show that Arrasvuori teaches or suggests claim 13

I. Claim 13

The method of claim 11, wherein the sensor worn on the appendage of the first user comprises an accelerometer.

Arrasvuori's monitoring equipment can include "one or more sensors."

(Ex. 1005, ¶ 40.) It "might, for instance, include ... pedometer hardware" (*Id.*)

A pedometer is "[a]n instrument that gauges the approximate distance traveled on foot by registering the number of steps taken." (Ex. 1008, 1296.) One type of pedometer includes an accelerometer. (Ex. 1009, 2:1-15.) As discussed above, the monitoring equipment can be integrated into a watch worn on a user's wrist. (*Supra* § VII.A.2.)

Petition, Paper 2 at 64

Iululemon fails to show that Arrasvuori teaches or suggests claim 13

Early pedometers used a variety of mechanical methods to acquire step counts. While accelerometer-based pedometers existed as of 2007, their reliability, accuracy, and applications were still being developed and were not largely commercially available (*See generally* Exs. 2010, 2011). Integration of an accelerometer within a pedometer was popularized in the 2010s (Ex. 2012, Abstract). Thus, a POSITA would not have understood Arrasvuori's pedometer to be the same type as that of Blackadar.

Toney-Bolger Declaration, Ex. 2005 at ¶86



"[Party's] position [] based on attorney argument rather than evidence in the record, does not persuade us that the Board's understanding [] is incorrect."

Facebook, Inc. v. Windy City Innovations, LLC, 973 F.3d 1321, 1342 (Fed. Cir. 2020)

Case referenced Patent Owner's Response, Paper 18 at 22–23





Watterson and Arrasvuori do not teach or suggest claims 1 or 11



1. A system comprising:

an athletic performance module configured to receive athletic activity data from a wirelessly-connected sensor worn on an appendage of a first user, wherein the first user is performing athletic activities at a first location; and

a challenge module configured to:

receive information specifying a challenge, wherein the challenge includes a competition between the first user, and a second user performing athletic activities at a second location, different to, and remote from, the first location;

determine, from the received athletic activity data, a first amount of athletic activity performed by the first user; receive data from a second sensor indicating a second

receive data from a second sensor indicating a second amount of athletic activity performed by the second user;

determine whether the challenge has been met by the first user based on a comparison of the first amount of athletic activity performed by the first user and a second amount of athletic activity performed by the second user; and

continuously generate and simultaneously communicate in real-time to the first user at the first location and the second user at the second location, an interface indicating whether the challenge has been met.

'256 patent, Ex. 1001 at 40:41-67

Watterson does not compare users' data from "wirelessly-connected sensor"



lululemon relies on Watterson's pulse watch as "wirelessly-connected sensor"

Watterson's pulse watch collects heart rate data.

But lululemon then relies on Watterson's comparison of users "distance traveled"

Patent Owner's Response, Paper 18 at 55-56

Iululemon proposes modifying Watterson with Arrasvuori

 Iululemon argues that combination with Arrasvuori would allow Watterson to calculate "distance traveled" based on heart rate data

 lululemon's proposed motivation: "normalizing" performance between users with different abilities

The combination. Arrasvuori's discloses normalizing virtual performance according to competitor physical fitness levels: "[I]n the case where two users performing the real-world fitness task each traveled the same real-world distance within a certain elapsed time, the user associated with the lower fitness level might be depicted as having gone further." (Ex. 1005, ¶ 60.) A POSITA would have combined this disclosure with Watterson's personalized race by changing how Watterson's software determined user speed during a personalized race so that a user's apparent velocity equaled the multiple of the user's actual speed and heart rate divided by a constant. (Ex. 1003, ¶ 115, 116.) Thus, if two users ran the

Petition, Paper 2 at 75

No motivation to combine Watterson and Arrasvuori

 But Watterson already teaches "normalizing" performance

Watterson scales workout difficulty in competitions

 lululemon's proposed combination is a "hindsight-based attempt" to meet the claimed limitation

B. Watterson already solves the problem that Arrasvuori's compensation feature purports to solve

lululemon argues that a POSITA would have been motivated to combine Arrasvuori's feature of "normalizing virtual performance according to competitor physical fitness levels" with Watterson's competitions because some participants cannot perform the same exercises as others. Petition, 74-75, 77. But Watterson already solves this problem, rendering baseless lululemon's alleged motivation to combine. See Decision on Appeal, Appeal No. 2018-008208, at 6 (P.T.A.B. Jul. 1, 2020) (finding no motivation to combine secondary reference when primary reference "already discloses an effective" solution); Response, 60-62. lululemon argues that Watterson never discusses these solutions in the context of a head-tohead competition. Reply, 22. But Watterson does address scaling workout difficulty in the context of a competition. Ex. 1006, 41:26-41. And lululemon fails to explain specifically why a skilled artisan-in view of these scaling features-would be motivated to combine Watterson with Arrasvuori simply to apply the features to a head-to-head competition. This type of conclusory, unsupported attorney argument

No motivation to combine Watterson and Arrasvuori

Watterson scales workout difficulty in competitions

Referring again to FIG. 17A, the user may optionally select to race against the computer, as referenced by block 404. As the name of the race type suggests, this option enables the user to select a particular type of race and a particular skill level of the computer against which to race. As shown in FIG. 17C, a user selects the difficulty level for the particular race, as represented by block 416, such as in the case of a treadmill, the speed, incline, distance, and the like. This may also enable the user to select a particular skill level of the computer, such as a beginner runner, intermediate runner, or advanced runner. Additionally, the user may select various other options, as represented by block 418, such as a head start for the computer or the user, scaling of the particular difficulty level, and the like. Upon completing the selections, the user may race against the computer, as represented by block 420.

Watterson, Ex. 1006 at 41:25-41

<u>lululemon fails to show a motivation to combine Watterson and Arrasvuori</u>





"Because each device independently operates effectively, a [POSITA], who was merely seeking to create a better device ... would have no reason to combine the features of both devices into a single device."

Kinetic Concepts, Inc. v. Smith & Nephew, Inc., 688 F.3d 1342, 1369 (Fed. Cir. 2012)

Case referenced Patent Owner's Response, Paper 18 at 62



Iululemon fails to show that Watterson teaches or suggests claims 7 or 15

7. The system of claim 1, wherein the challenge is defined in terms of a common unit used for multiple types of athletic activities.

'256 patent, Ex. 1001 at 41:12-14

Watterson does not teach or suggest conversion to a "common unit"



B. Claim 7

It would have been obvious to define Watterson's personalized race in miles. Miles are a common unit used for multiple types of athletic activities. (Ex. 1001, 33:11; see also Ex. 1008, 1114 (defining mile: "4. Sports A race that is one mile long").)

Petition, Paper 2 at 81



Iululemon fails to show that Watterson teaches or suggests claims 12 or 13

- 12. The method of claim 11, wherein the sensor worn on the appendage of the first user comprises a location-determining sensor.
- 13. The method of claim 11, wherein the sensor worn on the appendage of the first user comprises an accelerometer.

'256 patent, Ex. 1001 at 41:12-14

Iululemon fails to show that Watterson teaches or suggests claims 12 or 13

 lululemon proposes adding "GPS hardware" and an "accelerometer" to Watterson's pulse watch

E. Claims 12 & 13

A POSITA would have understood that computerized watches, such as Watterson's pulse watch, often included multiple sensors. (See, e.g., Ex. 1003, ¶ 109 (computerized watches with accelerometers were well known).) For example, Arrasvouri's computerized watch could include "GPS hardware ... heart rate meter hardware ... [and] pedometer hardware" (Ex. 1005, ¶ 40; see also id., ¶¶ 39, 90.) Ellis' INCs, which could be wrist-worn computers, could include accelerometers, heart rate meters, and location-determining sensors. (See, e.g., Ex. 1007, 17:4-5, 42:10-16, 64:10-19, 84:12-26, Figs. 19, 44, 70.) Thus, Watterson's disclosure of a pulse watch meets these additional limitations.

Petition, Paper 2 at 84-85

Iululemon fails to show that Watterson teaches or suggests claims 12 or 13

 Common sense: no need for an "accelerometer" or "GPS

device" during treadmill race

It is my opinion that because Watterson's pulse watch is not responsible for monitoring or collecting the comparison data, there would be no motivation to combine any teaching in Arrasvuori of a "location-determining sensor," e.g., GPS, or "accelerometer," with the pulse watch of Watterson. It is also my opinion that as a matter of common sense, incorporating a location-determining unit into a pulse watch of a user exercising on a treadmill would provide no benefit, as the user would not be changing locations.

Toney-Bolger Declaration, Ex. 2005 at ¶110

Dated: February 12, 2024

Respectfully Submitted,

/s/ Christopher J. Renk

Christopher J. Renk (Reg. No. 33,761) Michael J. Harris (Reg. No. 62,957) Aaron P. Bowling (Reg. No. 67,311) Arnold & Porter Kaye Scholer LLP Chicago, IL 60602-42310

Tel: (312) 583-2300 Email: chris.renk@arnoldporter.com

michael.harris@arnoldporter.com aaron.bowling@arnoldporter.com

Nicholas M. Nyemah (Reg. No. 67,788) Lindsey C. Staubach (Reg. No. 76,738) Arnold & Porter Kaye Scholer LLP 601 Massachusetts Avenue NW Washington, D.C. 20001

Tel: (202) 942-5000

Email: nicholas.nyemah@arnoldporter.com lindsey.staubach@arnoldporter.com

Counsel for Patent Owner, Nike, Inc.

CERTIFICATE OF SERVICE

I hereby certify that a true and entire copy of **Patent Owner's Presentation for Oral Argument** was served via e-mail upon Petitioner's correspondence address of record, indicated below.

Alex S. Yap (Reg. No. 60,609)
Mehran Arjomand (Reg. No. 48,231)
Forrest McClellan (Reg. No. 76,553)
Jean Nguyen (Reg. No. 71,051)
MORRISON & FOERSTER LLP
Email: ayap@mofo.com
marjomand@mofo.com
fmcclellen@mofo.com
jnguyen@mofo.com

/s/ Timothy Haugh
Timothy Haugh