UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PELOTON INTERACTIVE, INC.,

Petitioner,

v.

JOHNSON HEALTH TECH CO., LTD.,

Patent Owner.

Case No.: IPR2023-01163
U.S. Patent No. 10,032,227

PETITIONER PELOTON'S DEMONSTRATIVES

Peloton Interactive Inc. v. Johnson Health Tech Co., Ltd.

IPR2023-01163 (U.S. Patent No. 10,032,227)

IPR2023-01164 (U.S. Patent No. 10,796,375)

IPR2023-01165 (U.S. Patent No. 11,227,340)

Petitioner Peloton's Demonstratives

Oral Hearing
September 5, 2024

Demonstrative Exhibit – Not Evidence

Table of Contents: Background

1. **Background**
2. Claim Construction
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5. ’340 Patent-Specific Issues
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7. Ray/AAPA Combination (’227 and ’375)
8. ’375 Patent-Specific Issues
9. Yi Ground (’340)

Demonstrative Exhibit – Not Evidence

Obviousness Grounds of Invalidity

Challenged Patent	Ground(s)	Reference(s)	Challenged Claims
’227 Patent	1-2	Morris + Ray (+ Cox)	1-20
’375 Patent	1-2	Morris + Ray (+ Cox)	1-20
’340 Patent	1	Morris + Ray	1-20
’227 Patent	3-6	Ray + AAPA (+ Cox and/or Daly)	1-20
’375 Patent	3-4	Ray + AAPA (+ Cox)	1-3, 6-16, 18-20
’340 Patent	2	Ray + AAPA (+ Cox)	1-17, 19-20
’340 Patent	3	Yi	1, 4-6, 8-9, 12

Demonstrative Exhibit – Not Evidence

Summary of Disputed Issues

1. What constitutes “exercise use data” (applies to all three patents)

2. Generating validated/non-validated data “in response to” detection of a user and movement of the belt? (’227 and ’340 patents)

3. Reporting or stop reporting exercise use data “in response to” detection of a user and movement of the belt? (’375 patent)

4. Would a POSITA be motivated to combine Cox with Morris and Ray (applies to Ground 2 of ’227 and ’375 patents)

Demonstrative Exhibit – Not Evidence

Overview: The Challenged Patents

The Challenged Patents relate to a motor-driven treadmill that includes conventional elements, including a base, belt, sensors, controller, and communication interface.

’227 Patent, Fig. 4.

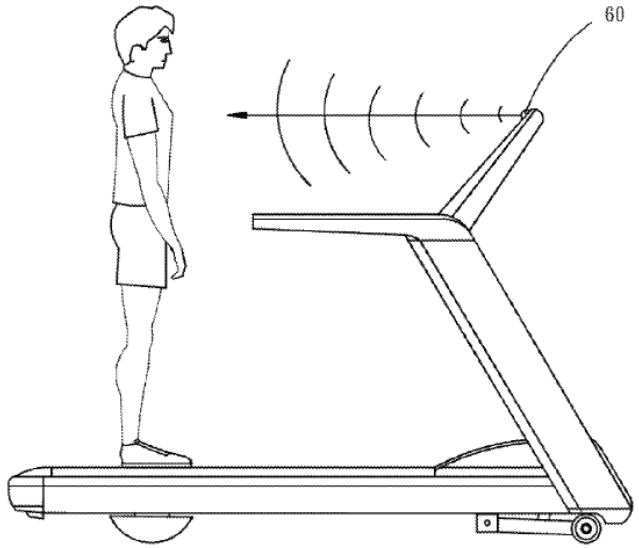


FIG. 4

’227 Patent, Fig. 5.

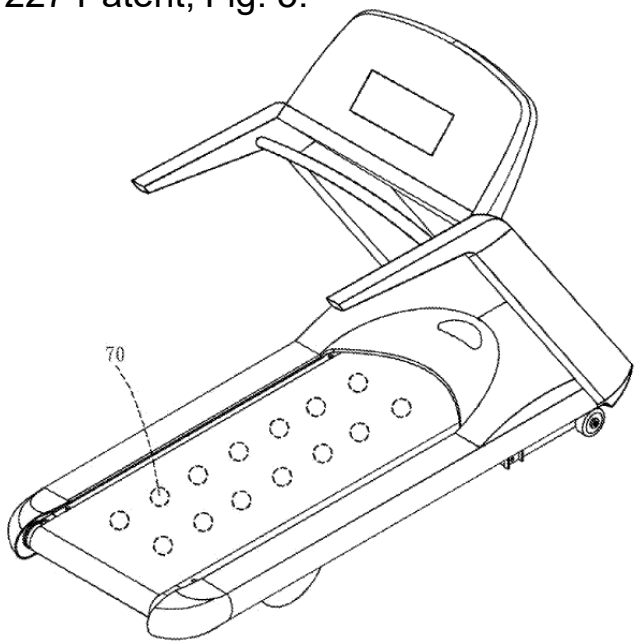


FIG. 5

Petition (’227), 3; ’227 patent, 1:45-51, 3:45-4:45, 6:5-54.

Demonstrative Exhibit – Not Evidence

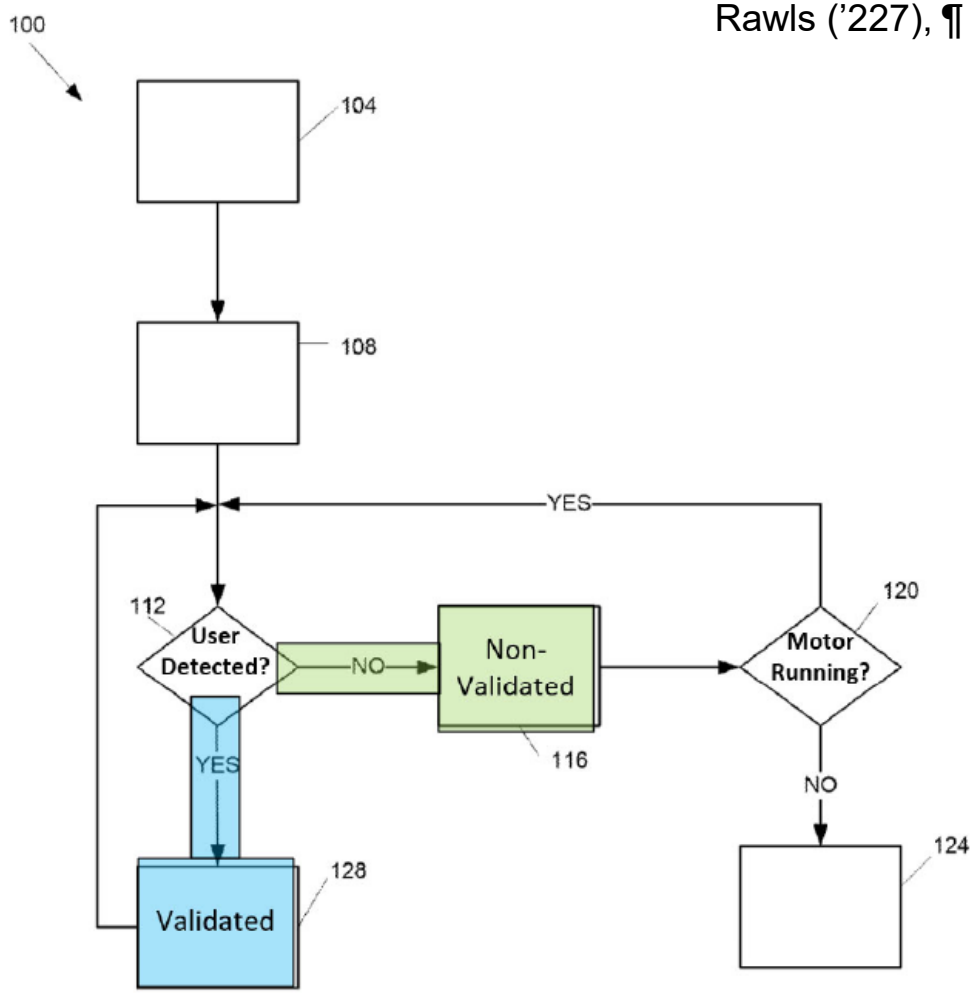
Overview: The Challenged Patents

The patent describes “exercise use data” is valid or not based on two conditions (checked at steps 112/120):

(1) Detection of a user

(2) Whether the operating unit/member is still running

Rawls (’227), ¶ 149.



’227 Patent Figure 6 (Annotated)

Petition (’227), 5; ’227 Patent (Ex. 1001), 2:37-52.

Demonstrative Exhibit – Not Evidence

Overview: The Challenged Claims

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data** **in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to **generate a validated exercise use data** **in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ’375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Overview: The Challenged Claims

’340 Patent: Claim 1	’340 Patent: Claim 2
1. An exercise apparatus comprising … a controller in communication with the operating unit and the sensor, the controller configured to **generate validated exercise use data** **in response to** the sensor detecting engagement of the user with the operating unit and movement of the operating unit relative to the base.	2. The exercise apparatus of claim 1, wherein the controller is further configured to **generate non-validated exercise use data** **in response to** the sensor detecting the user not engaged with the operating unit and movement of the operating unit relative to the base.

Independent claims 8 and 13 of ’340 patent do not recite validated/non-validated exercise use data

Petition (’340), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Terminology in Claims of Challenged Patents

Claim Term/Action		’227 Patent	’375 Patent	’340 Patent
Exercise Use Data				
	Generate		Claims 1, 16	Claim 13
	Report		Claims 1, 16	Claims 8, 13
	Stop/Cease Reporting		Claims 1, 16	*Dependent Claims 9, 14*
Validated Exercise Use Data				
	Generate	Claims 1, 14		Claim 1
	Record	Claim 12		
	Transmit	Claim 14		
Non-Validated Exercise Use Data				
	Generate	Claim 1		*Dependent Claim 2*

Petition (’227, ’375, ’340), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Overview: Morris

Morris describes accurately detecting when a user is on a treadmill for safety and data analysis purposes.

Morris, Fig. 1.

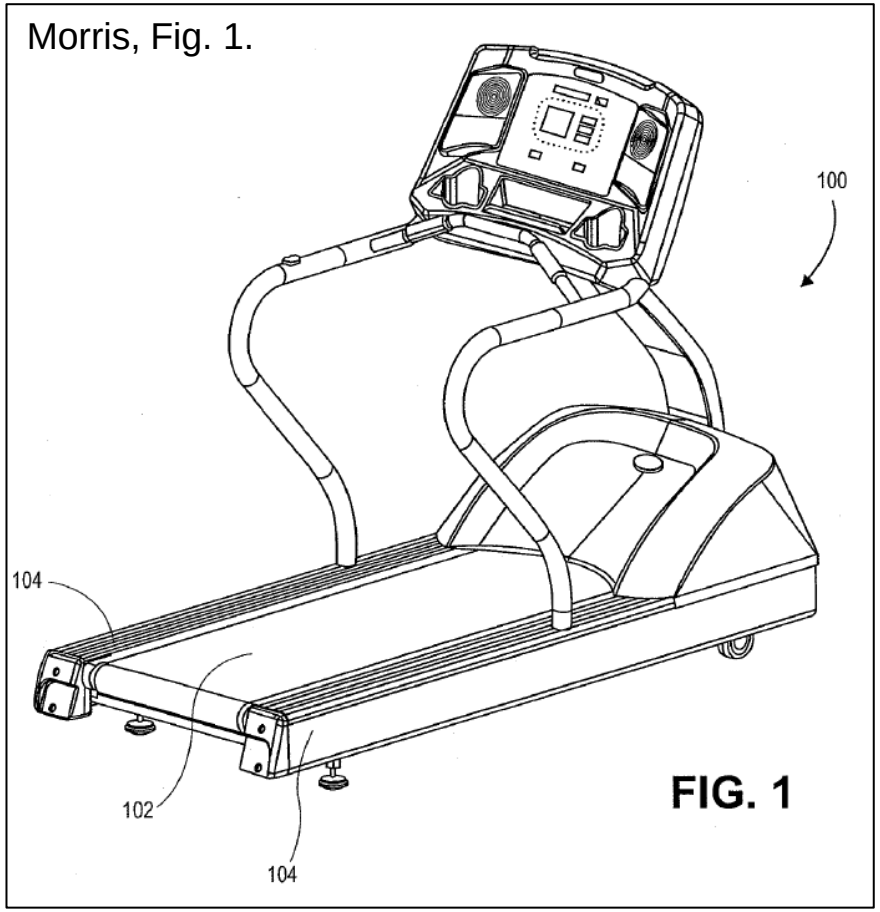
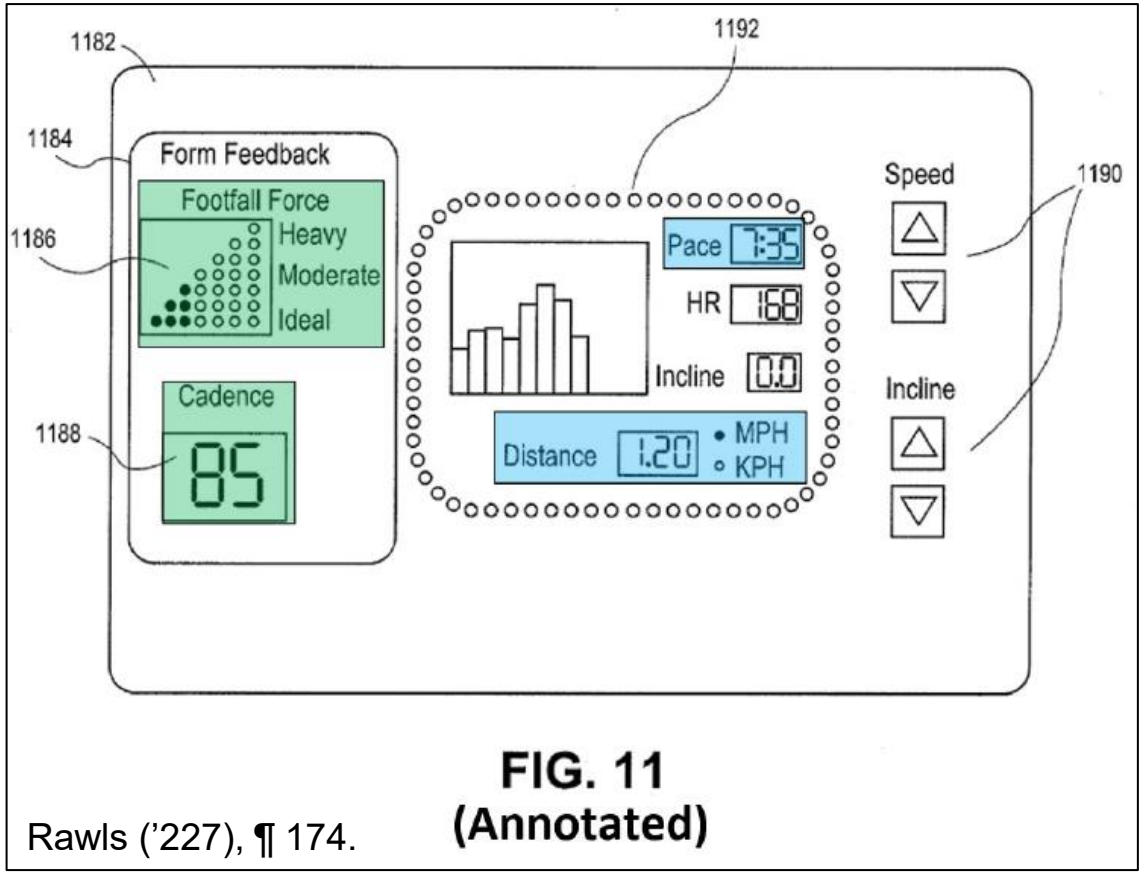


FIG. 1



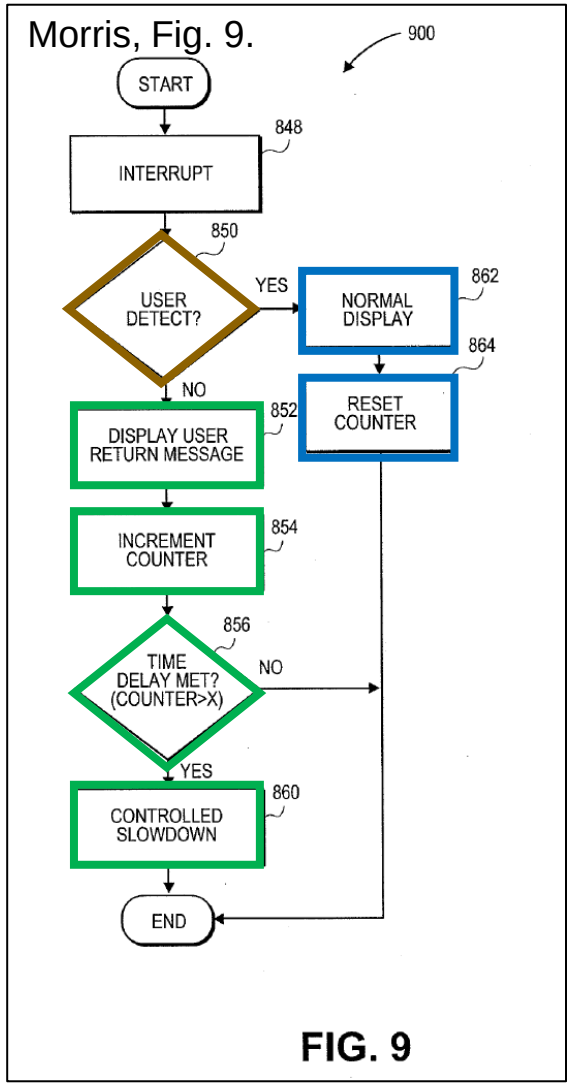
Rawls ('227), ¶ 174.

FIG. 11 (Annotated)

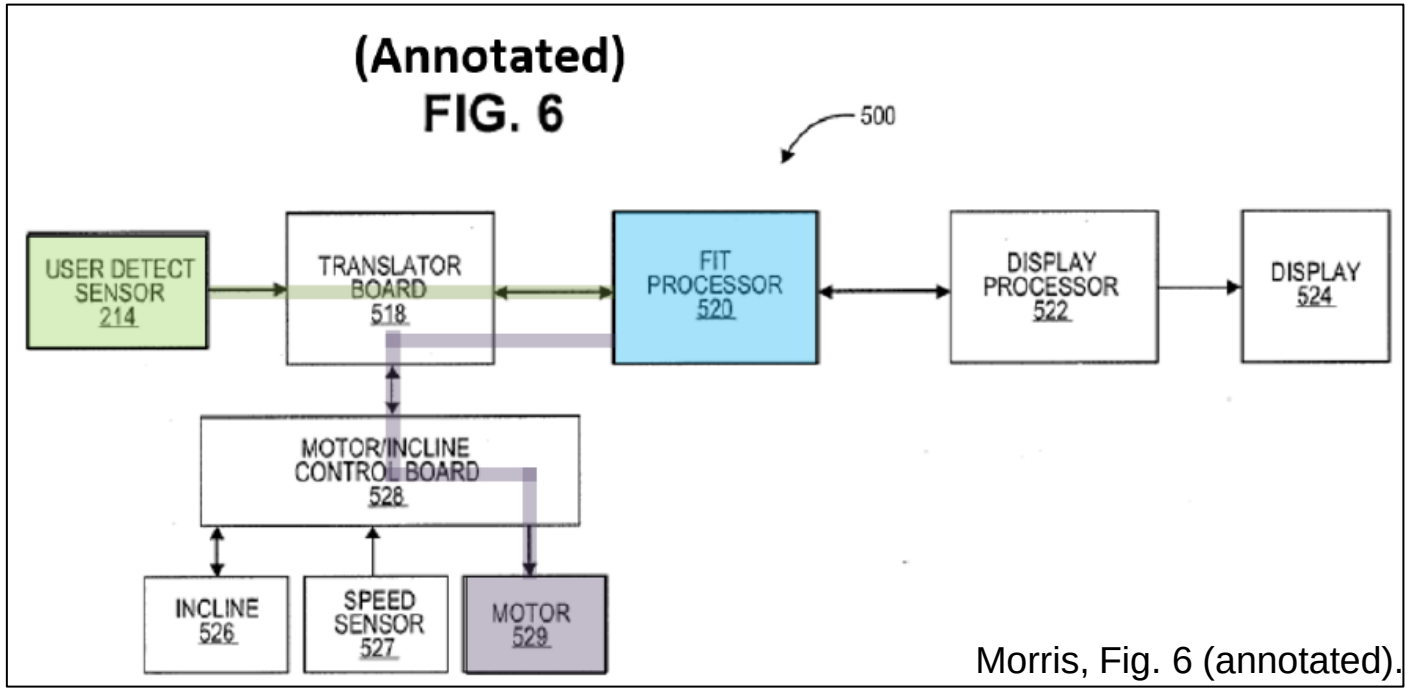
Petition ('227), 7, 21, 33; Morris (Ex. 1006), Title, ¶¶ 4-5.

Demonstrative Exhibit – Not Evidence

Overview: Morris



Morris describes a user detection sensor and a controller that generates exercise use data in response to detection of the user and movement of the tread.



Morris, Fig. 6 (annotated).

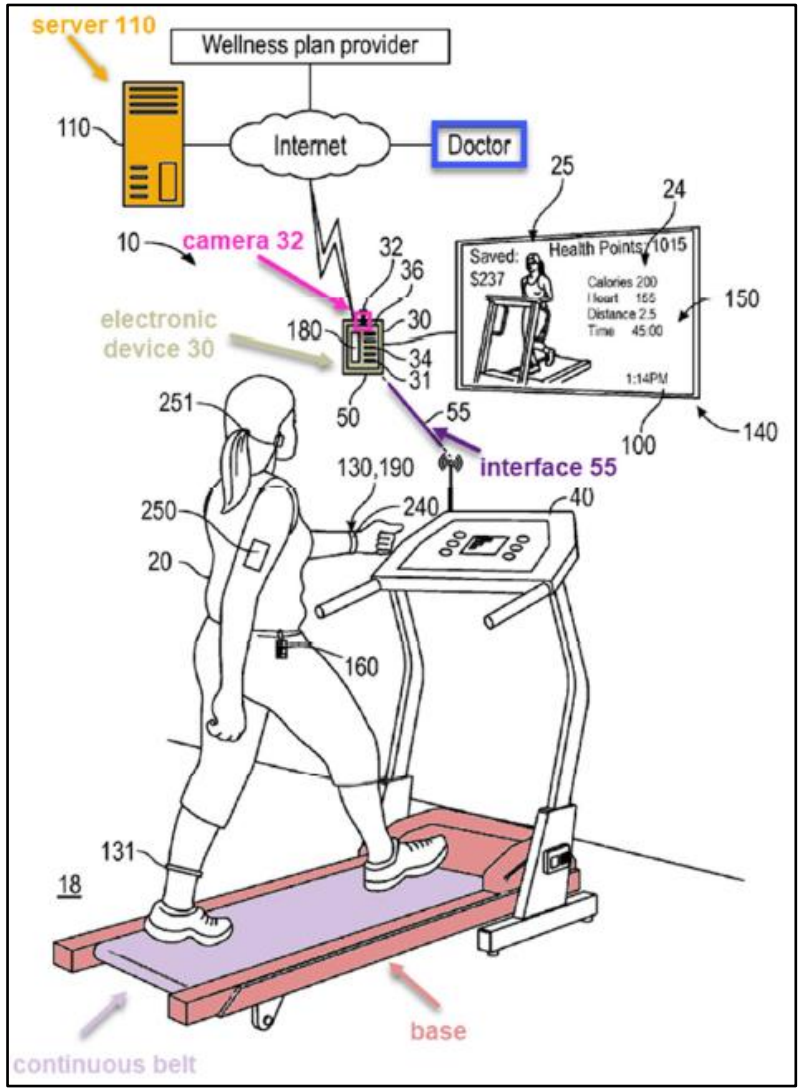
Petition ('227), 8, 27; Reply ('227), 15-17; Morris, ¶¶ 36, 45.

Demonstrative Exhibit – Not Evidence

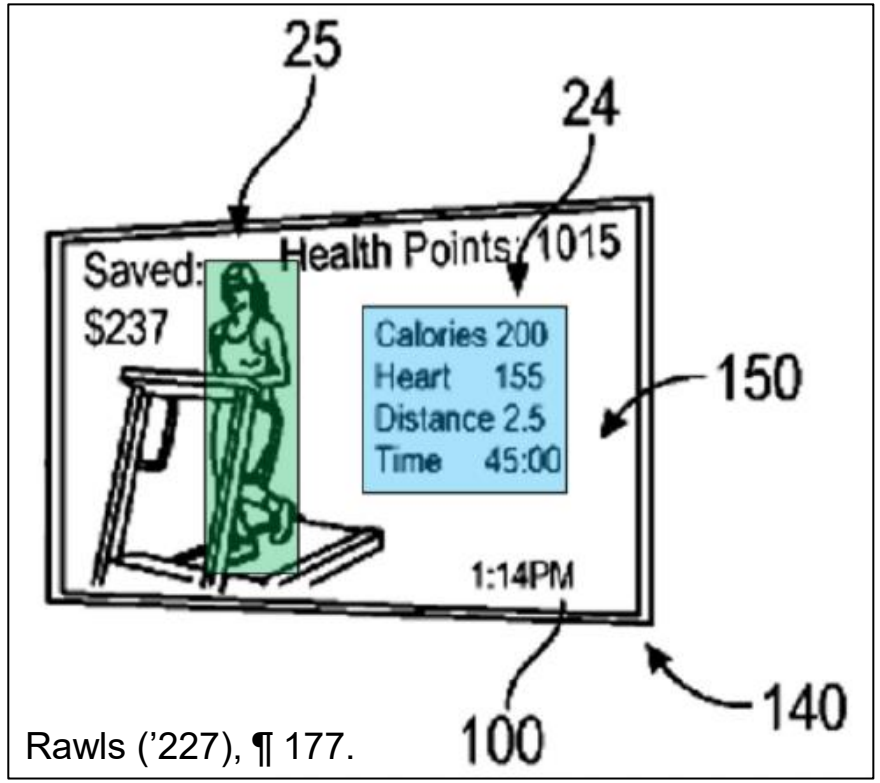
Overview: Ray

Ray's treadmill:

(1) detects a user's movement in real-time, generates a thinning image (based on intensity, duration, speed) and other data for display to user, to the doctor, or to the server for storage,
(2) validates user identity and exercise routine,
(3) stops recording images when user is no longer being detected.



Ray, Fig. 1 (annotated)



Rawls ('227), ¶ 177.

Petition ('227), 9-11, 34-37; Ray, 5: 41-46; 5:45-48, 5:49-51, 6:55-57, 7:4-10, 8:26-28, 10:59-67, 13:24-30, 13:50-67, 14:31-55.

Demonstrative Exhibit – Not Evidence

Table of Contents: Claim Construction

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5. ’340 Patent-Specific Issues
6. Morris/Ray Combination + Cox (’227 and ’375)
7. …

Demonstrative Exhibit – Not Evidence

PO Attempts to Improperly Limit What Constitutes "Exercise Use Data"

PO's Construction: "data that would **represent** an amount of exercise of the user."

What PO Agrees is "Exercise Use Data"	What PO Disagrees is "Exercise Use Data"
• Distance • Time • Calories	• Ray's Thinning Image • Pace • Heart Rate • Footfall force • Cadence

POR ('227), 4; Sur-Reply ('227), 2.

Demonstrative Exhibit – Not Evidence

The Specification Does Not Limit "Exercise Use Data"

'227 Patent

U.S. Pat. No. 8,287,434 and U.S. Pat. No. 6,638,198 both disclose a conventional exercise apparatus that can provide exercise use data therefrom for a user. The exercise use data would represent an exercise amount of the user. The user could demonstrate his (or her) exercise habit and exercise use to their insurance company, via this data. The conventional exercise apparatus comprises an operating member and a controller associated with the operating member. When the user drives the operating member to operate the exercise apparatus, the controller associated with the operating member creates exercise use data. Thereafter, the controller records the exercise use data and reports the exercise use data to the user. The user could use this exercise use data to demonstrate his (or her) exercise habit. Provided with this exercise use data, the user's insurance company may then offer discounts to the user.

Reply ('227), 3-4; '227 Patent, 1:35-50.

'434 Patent

ECM is configured to periodically transmit to video gaming system information about exercise: number of reps performed, energy used, current distance between handles, the pulse, position and velocity from the accelerometer.

'434 Patent (Ex. 1014), 15:33-37.

'198 Patent

porary storage by processor **201**. Display **206** includes, for example, a cathode ray tube (CRT), light emitting diodes (LEDs) and/or liquid crystal displays (LCDs) and is responsive to signals from processor **201** for displaying various information to the exerciser including, but not limited to, the elapsed exercise time, the exercise level, the difficulty level number of calories burned, pulse rate, and the like as is known in the art. Keypad **207** includes exerciser-operable

'198 Patent (Ex. 1008), 7:7-14.

Demonstrative Exhibit – Not Evidence

The Claims Do Not Limit Exercise Use Data

What is claimed is:
1. An exercise apparatus comprising:

...

a controller in communication with the operating member and the sensor, the controller configured to generate exercise use data when the operating member is driven by the motor; and

...

2. The exercise apparatus of claim 1, wherein the exercise use data includes a distance traveled by the user while the user is detected as engaged with the operating member.
3. The exercise apparatus of claim 1, wherein the exercise use data includes a time spent exercising while the user is detected as engaged with the operating member.

'375 patent, 8:1-28; Reply ('375), 4 n.3.

Demonstrative Exhibit – Not Evidence

Prosecution History of ’375 Patent Does Not Support PO’s Narrow Construction

PO did not dispute that Yi’s pace speed and pace time are exercise use data during prosecution of the ’375 patent.

Examiner’s rejection:

> Claim(s) 1-7 and 14 is/are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Yi (US PGPub. 2009/0176629). Yi describes the same invention as claimed, including: An exercise apparatus comprising: a motor; an operating member

’375 FH (Ex. 1009), 46.

> (57) **ABSTRACT**
>
> The present invention relates to an automatic speed-controlled treadmill using a pressure sensor array and a method of operating the same. The automatic speed-controlled treadmill includes a walking belt, a pressure sensor array including pressure sensors for detecting loads of the exerciser’s feet and outputting the detected loads of the feet as load detection signals, a pace speed status storage unit for storing a pace speed and variation in pace speed of the exerciser, and a

Reply (‘227), 4; Yi (Ex. 1015), Abstract.

PO Response:

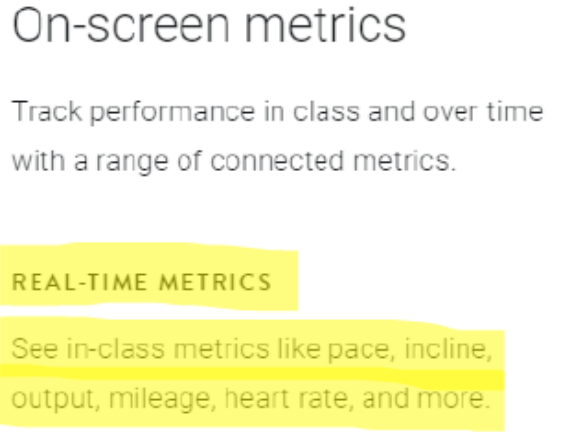
> In contrast, in the invention of claim 1, the controller generates exercise use data when the operating member is driven by the motor and the exercise use data that is generated while the operating member is driven by the motor is reported to the communication interface when the user is determined to be engaged with the operating member. In response to the controller determining that the user is not engaged with the operating member, the controller is configured to stop reporting the exercise use data to the communication interface. Yi discloses that distance, time and speed may be displayed on a display unit 42 while a user is on the belt 44 and exercising, but does not teach (1) that the controller 40 generates exercise use data while the belt 44 is driven by the motor (absent detection of footsteps by the pressure array 47); or (2) that the controller 40 stops reporting generated exercise use data to a communication interface when it is determined that the user is not on the belt.
>
> Yi therefore fails to anticipate claim 1. Neither Choy nor Watterson teach the exercise use data

’375 FH (Ex. 1009), 39.

Demonstrative Exhibit – Not Evidence

PO's Preliminary Infringement Contentions Contradict its Assertion that Pace Is Not Exercise Use Data

the controller configured to generate exercise use data when the operating member is driven by the motor; and	The Accused Products' controller generates exercise use data (i.e., in-workout metrics or real-time metrics) when the operating member is driven by the motor. As shown in the images below, the Accused Products generate exercise use data, including pace, speed, mileage, elevation gain, output, and heart rate when the operating member is driven by the motor.



PO '375 Infringement Contentions (Ex. 1020) at B-5; see also PO '340 Infringement Contentions (Ex. 1020) at C-24; Reply ('227), 4.

Demonstrative Exhibit – Not Evidence

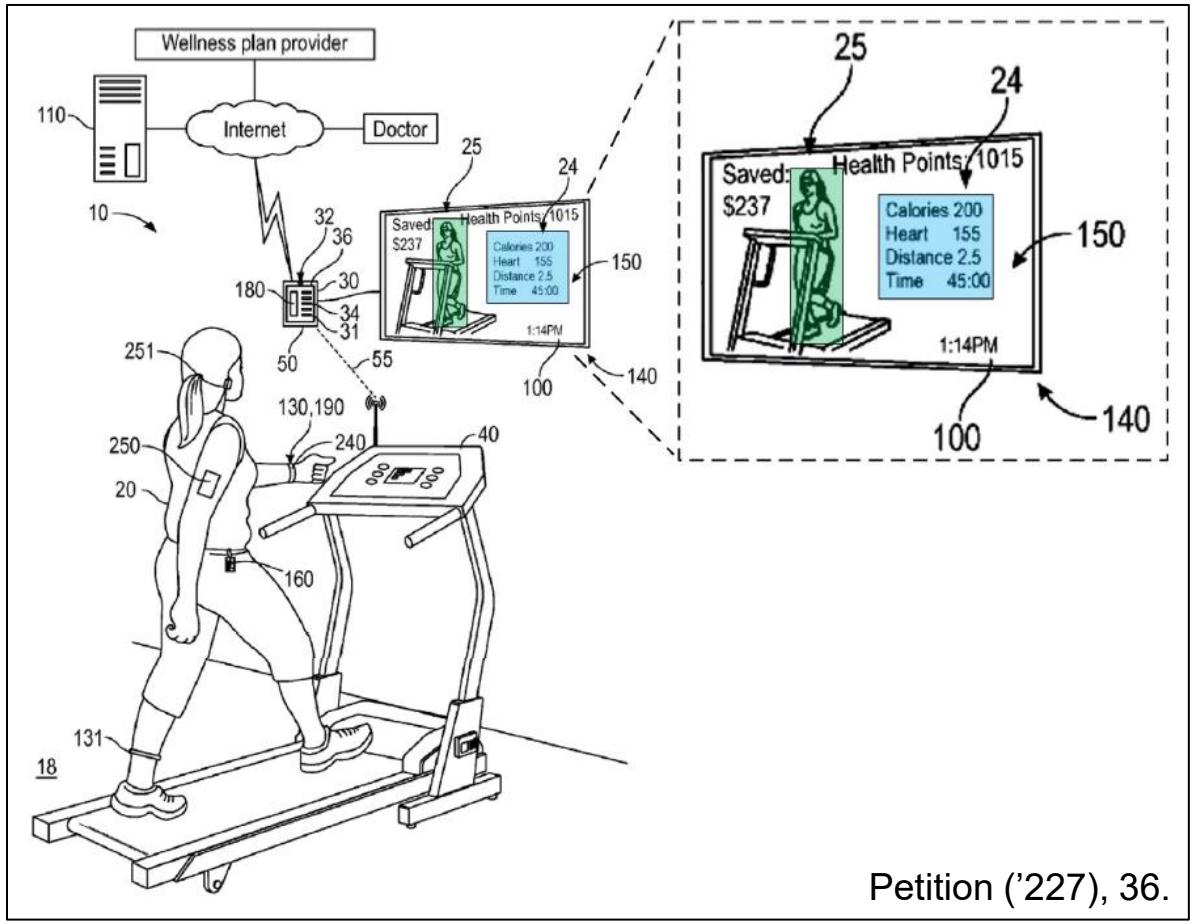
PO's Preliminary District Court Claim Constructions Do Not Support PO's Position

Claim Terms	Proposed Construction
exercise use data	"an apparent amount of exercise based on movement of the operating member/unit"
validated exercise use data	"exercise use data that has been determined to have occurred while the user is exercising"
non-validated exercise use data	"exercise use data that is not validated exercise use data"

PO Opening Exchange of Claim Terms and Proposed Constructions (Ex. 1016); Reply ('227), 6.

Demonstrative Exhibit – Not Evidence

Ray's Thinning Image is Exercise Use Data



Petition ('227), 36.

Petition ('227), 34-36; Reply ('227), 5-6.

because they "represent an amount of exercise of the user." Ray teaches that its thinning image reflects the intensity, speed and/or duration of a user's workout, i.e., an amount of exercise of the user. Ray, Abstract, 5:44-46, 5:23-29, 10:59-67; Pet., 34-38. Ray's image changes in real-time based on the user's workout—the faster, longer or more intensely the user exercised, the thinner the user's image became. *Id.* A POSITA would understand that Ray's thinning image represents an amount of exercise. Rawls, ¶¶177-79.

Reply ('227), 5.

When using an exercise machine such as a treadmill, the action of the interface between the treadmill and the computer causes the user's image to become thinner, healthier and more aesthetically pleasing. Therefore, the faster and/or more intensely the user exercises, the thinner and more appealing the user's image becomes. In addition to seeing her image, she can also view on the display her exercise data such as heart rate, calories burned and distance advanced.

Ray, 5:41-48.

Demonstrative Exhibit – Not Evidence

Morris's Pace, Cadence, Distance and Footfall Force are Exercise Use Data

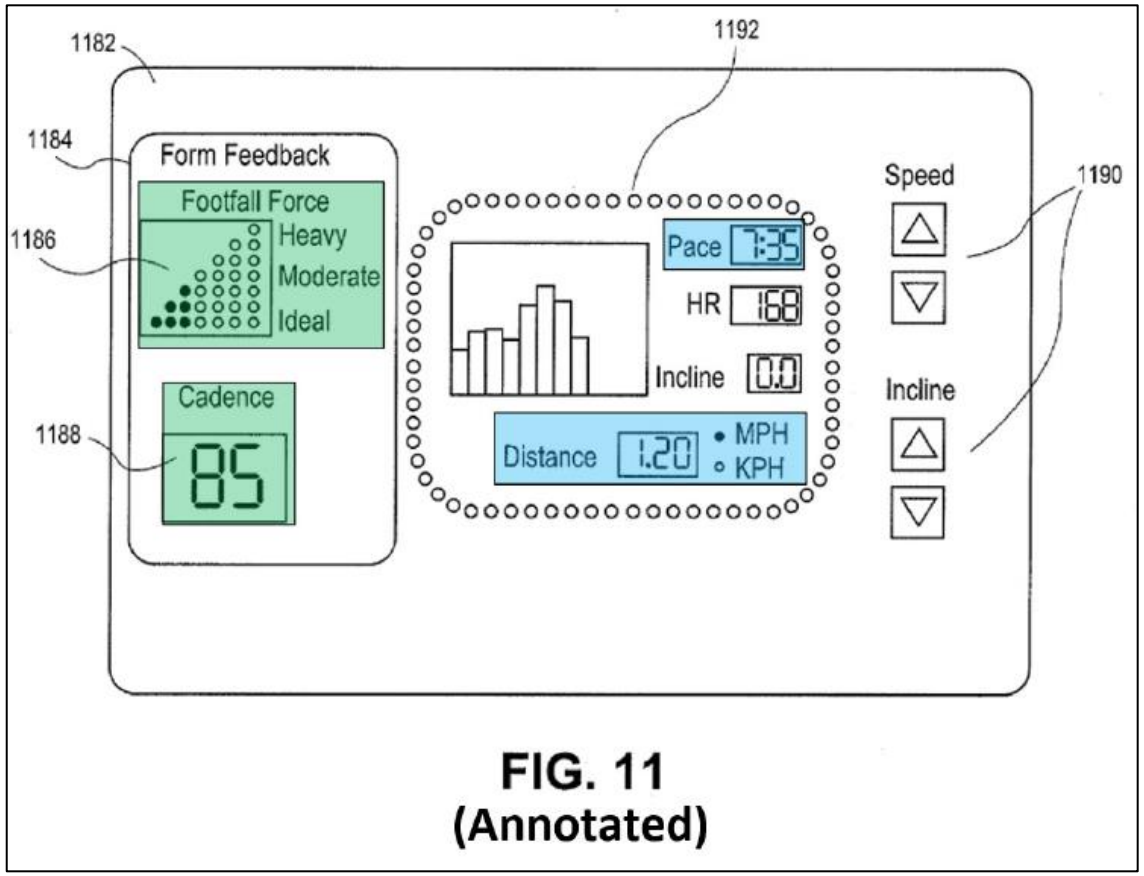


FIG. 11
(Annotated)

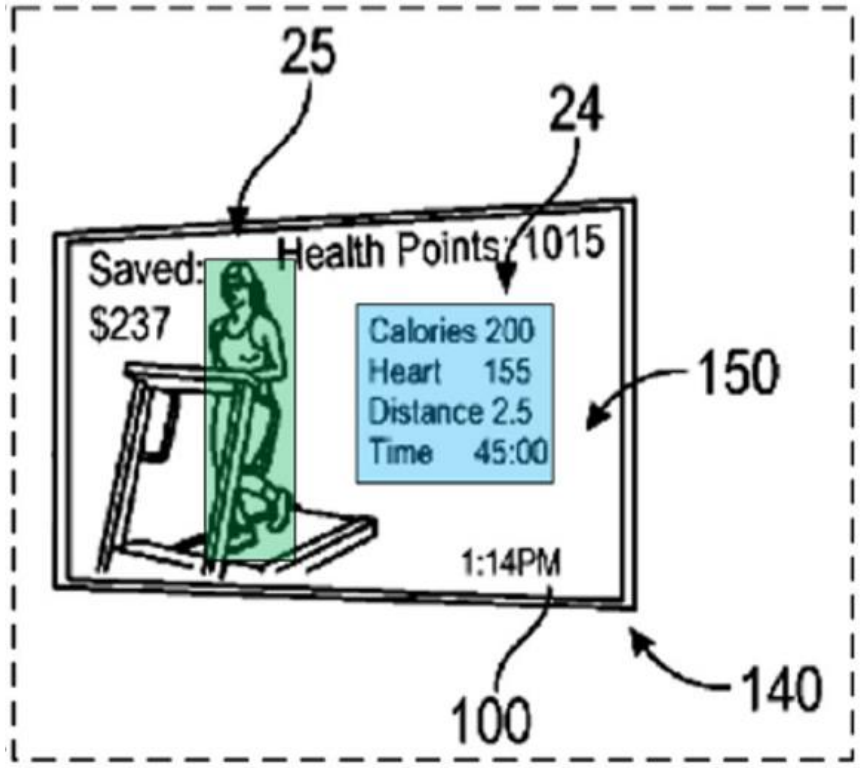
Petition ('227), 32-33; Reply ('227), 5-6.

[0051] FIG. **11** illustrates an exemplary display panel **1182** that may be used in connection with the user detection systems disclosed herein. The display contains one or more control buttons **1190** and one or more exercise program information panels **1192** including information such as pace, heart rate (when available), incline, distance, program profile, and/or the like. FIG. **11** also illustrates an exemplary form feedback panel **1184**. In an embodiment, the duration of a signal, the signal strength, and/or the like of the output of one or more user detection sensors, such as inductance coil(s) **214**, can be processed and interpreted as a force of impact for a user's footfalls. Such information may be dependent upon other available information, such as a user's weight, the treadmill speed, the incline, and the like from, for example, programs or user input. The form feedback panel can then display the force feedback in various forms, such as in a graph **1186**.

Morris, ¶ 0051.

Demonstrative Exhibit – Not Evidence

Even if PO's Narrowing Construction Is Accepted, Ray and Morris Disclose Time and Distance



appealing the user's image becomes. In addition to seeing her image, she can also view on the display her exercise data such as heart rate, calories burned and distance advanced.

Ray, Fig. 1, 5:46-48; Petition ('227), 37-39; Reply ('227), 12-13.

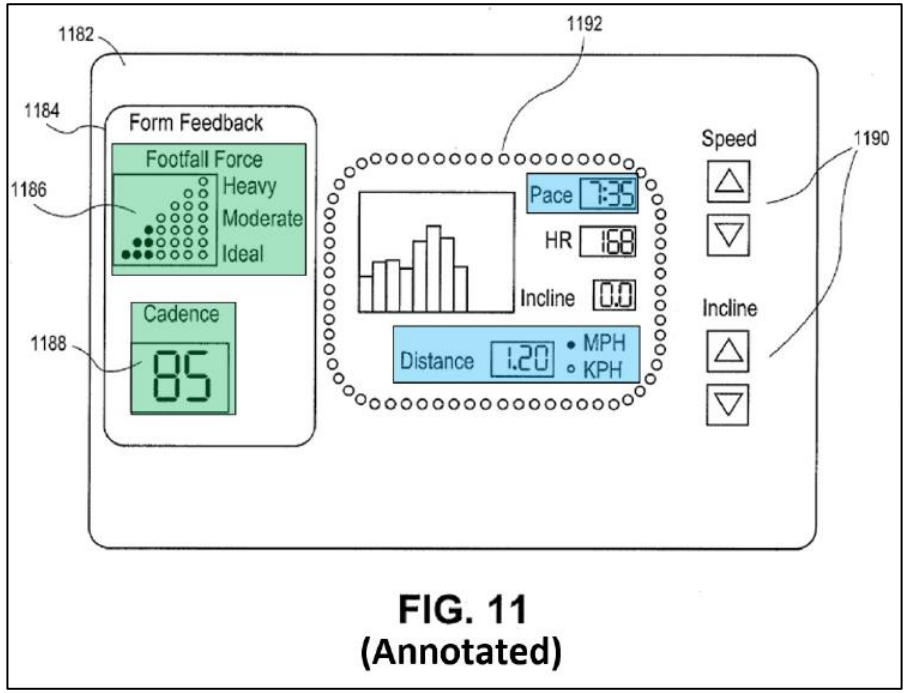


FIG. 11
(Annotated)

tems disclosed herein. The display contains one or more control buttons **1190** and one or more exercise program information panels **1192** including information such as pace, heart rate (when available), incline, distance, program profile, and/or the like.

Morris, Fig. 11, ¶ 0051; Petition ('227), 37-39; Reply ('227), 12-13.

Demonstrative Exhibit – Not Evidence

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5. ’340 Patent-Specific Issues
6. Morris/Ray Combination + Cox (’227 and ’375)
7. …

Demonstrative Exhibit – Not Evidence

PO's Construction for Validated Exercise Use Data is Already Required by Claim 1 ('227 and '340)

PO's Construction

"exercise use data that has been determined to have occurred by the controller **in response to** the sensor detecting a user engaging the moving operating unit (or endless belt)"

POR ('227), 6.

Claim 1

"…wherein the controller is further configured to generate a validated exercise use data **in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit…"

Reply ('227), 7, n.3.

Demonstrative Exhibit – Not Evidence

PO's Preliminary District Court Claim Constructions Do Not Support PO's Position

Claim Terms	Proposed Construction
exercise use data	"an apparent amount of exercise based on movement of the operating member/unit"
validated exercise use data	"exercise use data that has been determined to have occurred while the user is exercising"
non-validated exercise use data	"exercise use data that is not validated exercise use data"

PO Opening Exchange of Claim Terms and Proposed Constructions (Ex. 1016); Reply ('227), 8.

Demonstrative Exhibit – Not Evidence

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6. Morris/Ray Combination + Cox (’227 and ’375)
7. …

Demonstrative Exhibit – Not Evidence

PO's Construction for Non-Validated Exercise Use Data is Already Required by Claim 1 ('227 and '340)

PO's Construction

"exercise use data that has been determined to have occurred by the controller in response to the sensor not detecting a user engaging the moving operating unit (or endless belt)"

POR ('227), 11.

Claim 1

"…wherein the controller is configured to generate a non-validated exercise use data in response to movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit…"

Reply ('227), 8.

Demonstrative Exhibit – Not Evidence

PO's Preliminary District Court Claim Constructions Do Not Support PO's Position

Claim Terms	Proposed Construction
exercise use data	"an apparent amount of exercise based on movement of the operating member/unit"
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PO Opening Exchange of Claim Terms and Proposed Constructions (Ex. 1016); Reply ('227), 10.

Demonstrative Exhibit – Not Evidence

The Specification Only Cites Two Types of "Exercise Use Data"

PO argues that there can be three types of "exercise use data"—validated, non-validated, and data where no determination is made. POR ('227), 12-13. The specification does not support PO's argument.

Reply ('227), 9-10.

> The communication interface **50** facilitates transmission or communication of exercise use data (validated and/or unvalidated) from the exercise apparatus **10** for distribution. The communication interface **50** is discussed in additional detail below.

'227 Patent, 4:45-49; Reply ('227), 9.

> Therefore, if one buys an exercise apparatus with a motor-driven operating member, he (or she) couldn't demonstrate his (or her) exercise habits via the exercise apparatus, because there is a question as to the validity of this exercise use data.

'227 patent, 2:15-19; Reply ('227), 9.

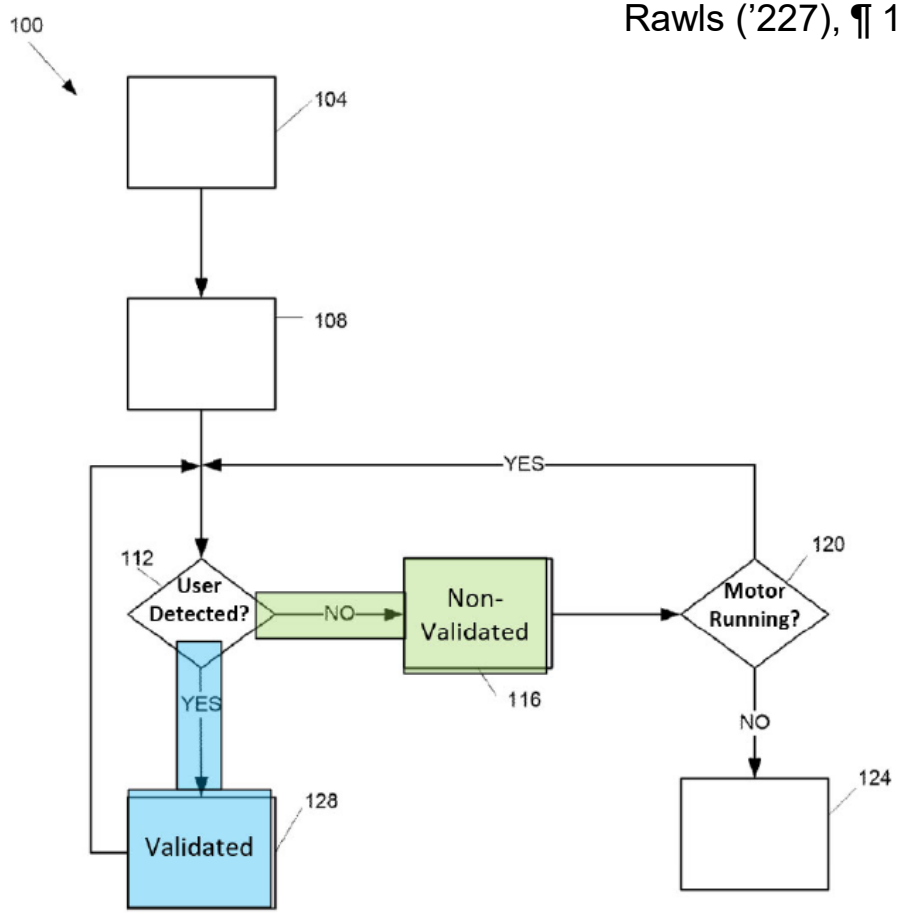
> The communication interface **50** can communicate the exercise use data (e.g., validated and/or unvalidated exercise use data) to an interested third party (e.g., a physician, a medical provider, etc.), a demander (e.g., an insurance company, an insurance provider, etc.), and/or the user.

'227 Patent, 6:5-9; Reply ('227), 9.

Demonstrative Exhibit – Not Evidence

Figure 6 Supports Only Two Types of "Exercise Use Data"

Rawls ('227), ¶ 149.



'227 Patent Figure 6 (Annotated)

➔ Figure 6 – relied upon by PO - only describes two types of data.

At step **128**, the process generates validated exercise use data. More specifically, the controller can record (or otherwise identify) the non-validated exercise use data as validated exercise use data. The validated exercise use data can be locally stored or communicated to an interested third party, a demander, and/or the user as discussed above. The process returns to step **112** and repeats.

Reply ('227), 9-10; '227 Patent, 7:41-47

Demonstrative Exhibit – Not Evidence

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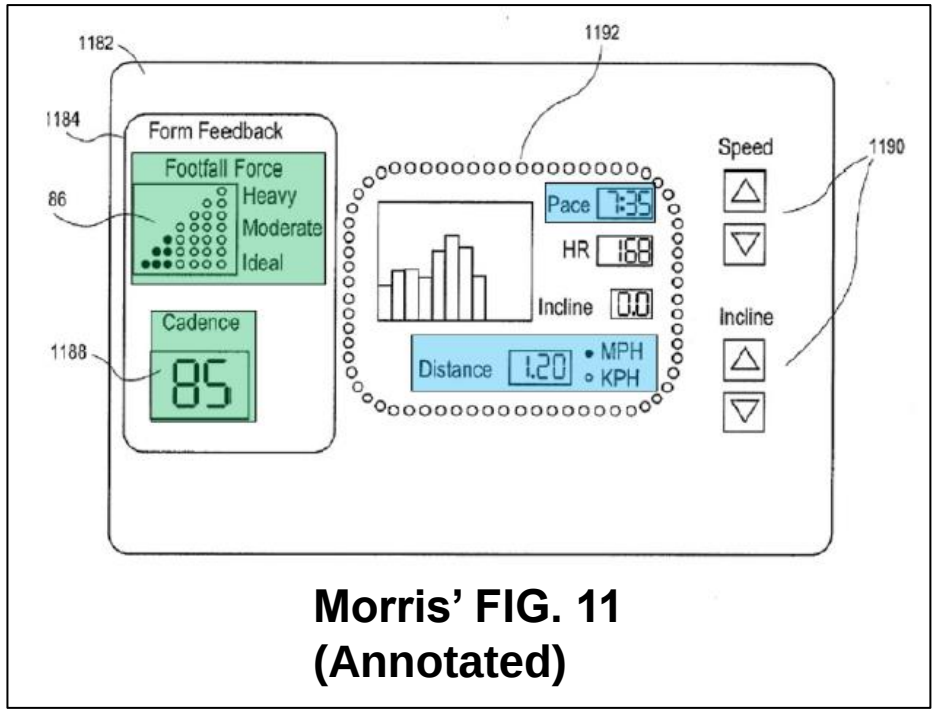
8. ’375 Patent-Specific Issues
9. Yi Ground (’340)

Demonstrative Exhibit – Not Evidence

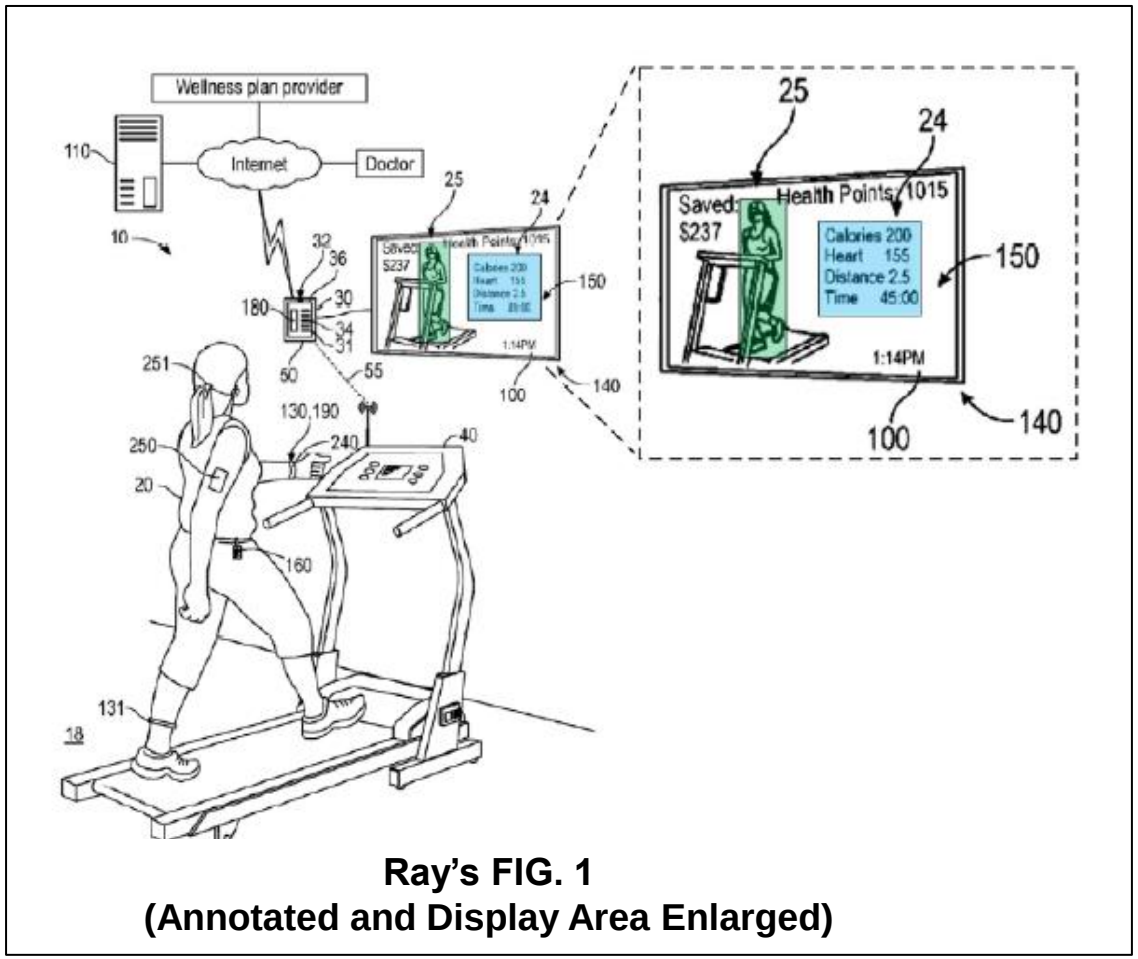
Morris/Ray Disclos Exercise Use Data

Exercise Use Data Displayed in Morris/Ray Combination:

Distance; time; thinning image; heart rate; **calories**; pace; cadence; footfall force



Morris' FIG. 11 (Annotated)



Ray's FIG. 1 (Annotated and Display Area Enlarged)

Petition ('227), 33, 36, 39; Reply ('227), 12-13.

Demonstrative Exhibit – Not Evidence

Claim Limitation: Validated/Reporting Exercise Use Data

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ’375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

It is Obvious to a POSITA that Ray Generates/Reports Validated Exercise Use Data

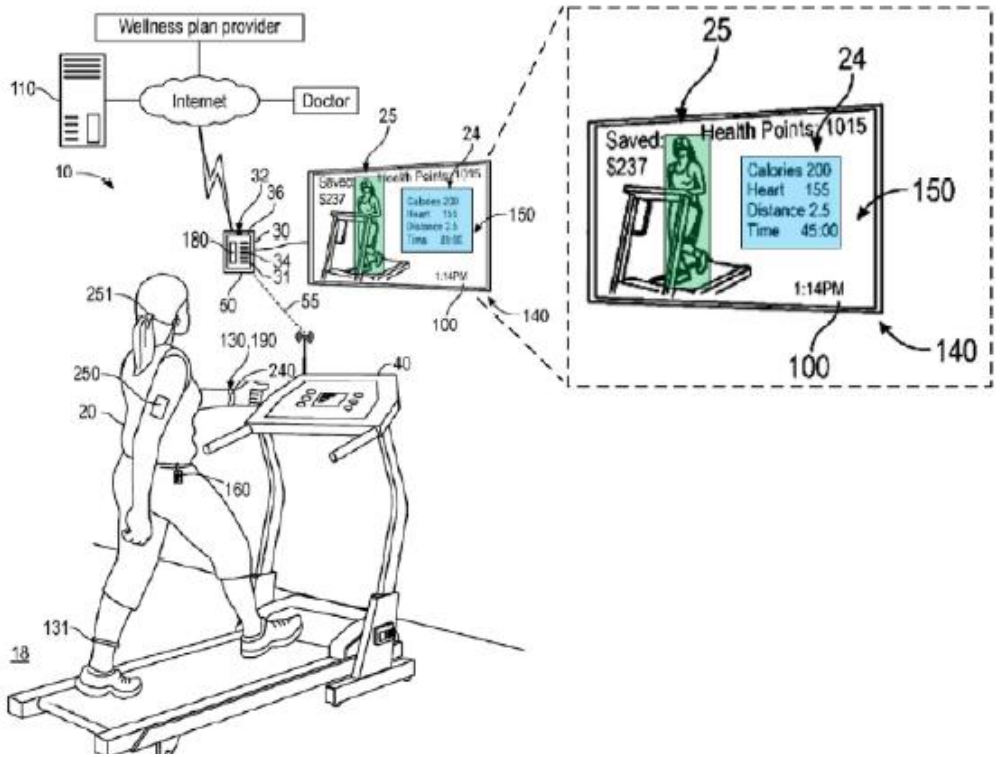
(1) Ray's camera produces user's real-time image **only if it detects the user is exercising**, and stops recording images once the user stops exercising

(2) Ray's data includes a **motivational image morphed based on speed/intensity/duration of exercise**, and other data such as **time, distance, calories, heart rate**

(3) Live images are sent to the screen, to the wellness trainer/doctor; also sent to remote server for storage

(4) Extra validation process that confirms the user's identity and the exercise routine

➔ Ray's describes validated exercise use data, produced in response to detecting an exercising user on the treadmill and movement of the belt



Ray's FIG. 1
(Annotated and Display Area Enlarged)

Ray, 5:49-51, 6:54-57; 7:4-10, 13:20-24; Petition ('227), 25, 37-38; Reply ('227), 13.

Demonstrative Exhibit – Not Evidence

It is Obvious to a POSITA that Morris-Ray Combination Generates/Reports Validated Exercise Use Data

In the combination of Morris and Ray:

- Validated exercise use data would also include Morris' pace, footfall force, cadence, distance and/or time; and
- Would be transmitted along with Ray's thinning image only when a user is detected.

> Additionally, it would have been obvious to a POSITA that other exercise use data, such as pace, footfall force, cadence, distance, and/or time would also be reported while the exercising user was being detected and some or all of those additional exercise use data would cease to be reported when the user was no longer exercising. For example, pace, footfall force and cadence could only be generated based on detection of the user's footsteps, which would no longer be generated in the absence of the user, and the reporting of other information such as time and distance would have been unnecessary as the user had finished exercising, or had left the premises. (Rawls, ¶ 183.)

Petition ('227), 39.

Petition ('227), 39; Reply ('227), 13-14; Rawls ('227), ¶¶ 179, 183.

Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Satisfies the "In Response To" Requirement

➔ In the combination, Ray's exercise data would be generated by Morris's controller in response to detection of the user via receipt of signals from the optical sensor (camera) and movement of the tread belt.

> In the combination, Ray's camera and its analysis software would be combined with Morris' treadmill and augment the reluctance sensor, which provided

Petition ('227), 26.

> In the Morris-Ray combination, the controller would have been configured to detect the user's presence using a camera (sensor) as described in Ray. The camera,

Petition ('227), 37.

Reply ('227), 15-17; Petition ('227), 16-18, 26-27, 37-38.

Morris, Fig. 9 (annotated).

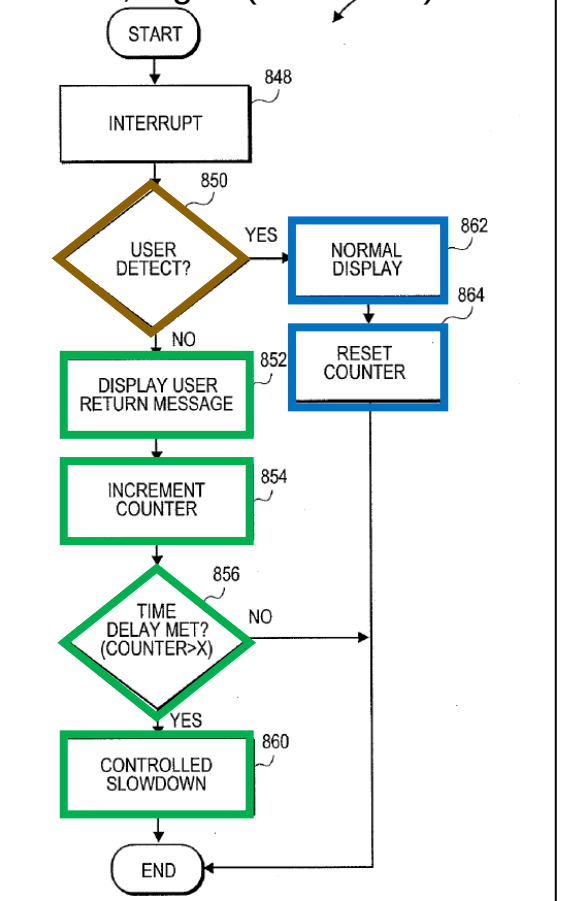


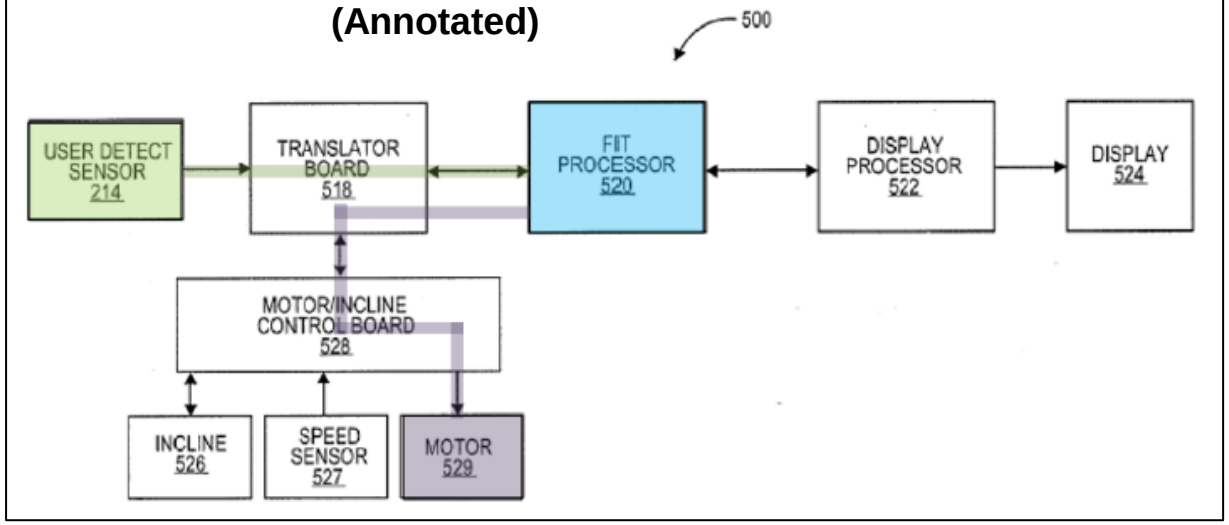
FIG. 9

Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Satisfies the "In Response To" Requirement

In the combination, Morris's FIT processor and/or translator board ("controller") would receive signals from the user detect sensor that includes Ray's camera ("sensor"), and the controller would interpret those signals.

Morris' FIG. 6 (Annotated)



[0035] In an embodiment, the FIT processor **520** manages workout programs. This management may include duration, speed, intensity, incline, and segment length parameters, for example. Workout programs may include specific duration, distance, incline, and/or intensity parameters and the like, creating, for example, timed workouts, user controlled workouts, specific distance workouts, hill climbing workouts, interval workouts, fat burning or heart rate controlling workouts, or the like. The FIT processor **520** may also process or store information relating to heart rate, calories burned estimates, and the like. In an embodiment, the display processor

Morris, ¶¶ 0035-36.

Reply ('227), 14-15; Petition ('227), 15-16, 27-28, 37.

Demonstrative Exhibit – Not Evidence

Claim Limitation: Non-Validated/Stop Reporting Exercise Use Data

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ‘375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Morris's Controlled Slowdown Teaches or Suggests the Non-Validated Data Limitation

processor alters the display, such as by asking that the user return to his or her workout (block **852**). For example, the display may read "Please return to the treadmill to complete your workout or stop the machine." The user timeout counter increments (block **854**), and the processor checks the counter to see if it has surpassed a threshold (block **856**). If not, the process exits and is rerun upon receipt of the next user detect signal after the interrupt (block **848**), and repeats the process. If the user returns, the display returns to normal, and the program proceeds. If the user does not return in time, the user timeout counter will ultimately meet the time delay (block **856**) and trigger a controlled slowdown (block **860**) to stop the treadmill. Such a process may include saving the program data for a specific amount of time (such as a "pause" state) before ultimately resetting the machine and/or returning to a user attract mode, such as that described with respect to FIG. **8**. The timeout counter threshold is preferably of sufficient duration to allow a user to see the user return message, understand it, and react by returning to the treadmill. In an embodiment, this time delay is preferably at least about 6-8 seconds.

Morris, ¶ 0045.

It would have been obvious to a POSITA that, in the Morris-Ray combination, for at least the duration of before slowdown was initiated, exercise information that did not depend on the user's presence (e.g., time), would be generated in the absence of the user. This information, which was generated while the user was not being detected, would be non-validated exercise use data and would not be reported (e.g., as part of the live feed to the user or the doctor), and would not be subject to Ray's identity verification. It would have been obvious that the treadmill would continue generating and displaying such non-validated information (e.g., for 6-8 seconds) prior to slowdown of the treadmill because it would have alerted the user that the treadmill is still running (e.g., a safety feature) and would have allowed reporting of the information to be readily resumed without further delay upon the user's return (e.g., efficiency feature). (Rawls, ¶¶ 184-186.)

Petition ('227), 40.

Petition ('227), 39-40; Rawls ('227), ¶¶ 184-87.

Demonstrative Exhibit – Not Evidence

PO Provides a Different Definition in its Preliminary District Court Claim Constructions

Claim Terms	Proposed Construction
exercise use data	"an apparent amount of exercise based on movement of the operating member/unit"
validated exercise use data	"exercise use data that has been determined to have occurred while the user is exercising"
non-validated exercise use data	"exercise use data that is not validated exercise use data"

PO Opening Exchange of Claim Terms and Proposed Constructions (Ex. 1016); Reply ('227), 10.

Demonstrative Exhibit – Not Evidence

Claim Limitation: Reporting/Transmitting to Communication Interface

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ‘375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Communicates Validated Exercise Use Data to the Communication Interface

PO's Position: Petition only explains validated exercise use data is transmitted to the 3rd party, but not to the communication interface. *Sur-Reply ('227), 18.*

➔ But Petition explains:

1) Morris describes the communication interface as any one of a ***display*** or a ***display processor***.

2) Ray describes the communication interface as any one of a ***display***, a ***communication interface that transmitted*** user's motivational image and other exercise data ***via live feed to a 3rd party***, or to ***a remote location for storage***.

3) In Morris/Ray combination, any one or combination of above constituted "communication interface."

Petition ('227), 29-32; Reply ('227), 19-20.

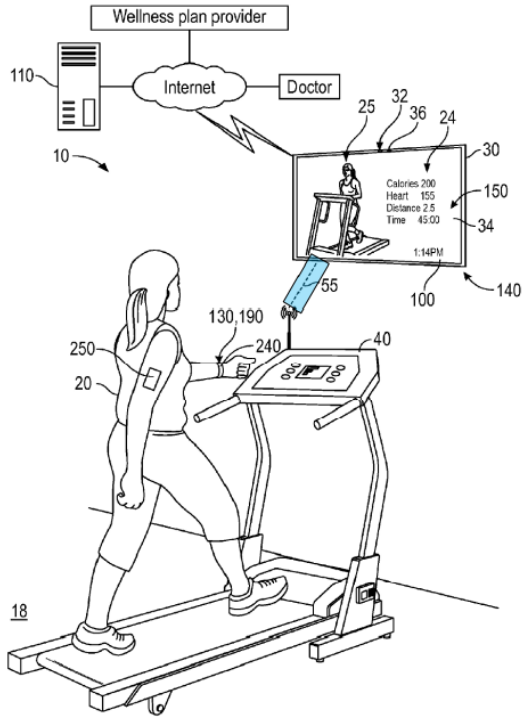


FIG. 3
(Annotated)

The various communication interfaces in Ray's, to the extent they did not overlap with Morris', could be readily implemented in Morris' treadmill, well within the capabilities of a POSITA. (Rawls, ¶¶ 144, 189.)

Accordingly, any one or combinations of the above constituted the claimed communication interface. The communication interface was in communication with

Demonstrative Exhibit – Not Evidence

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7. Ray/AAPA Combination (’227 and ’375)
8. ’375 Patent-Specific Issues
9. Yi Ground (’340)

Demonstrative Exhibit – Not Evidence

Claim Limitation: Non-Validated/Stop Reporting Exercise Use Data

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ‘375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Ray's Thinning Image is Only Reported When a User is Detected

PO erroneously argues:

- Morris/Ray do not make determination or **any analysis *about the validity*** of ***time*** or ***distance*** generated during the slowdown period;

Not required by the claims

POR ('375), 16-18.

Claim 1:

wherein in response to the controller determining that the user is not engaged with the operating member, the controller is configured to stop reporting the exercise use data to the communication interface, and

- Ray stops transmitting morphed image when user not detected
- In the combination, it would have been obvious that other data (time/distance/pace/etc.) would also not be reported – because the user no longer exercising
- One of two obvious options: stop reporting vs. keep reporting

Reply ('375), 17-19; Petition ('375), 40; Rawls ('375), ¶ 183.

Demonstrative Exhibit – Not Evidence

Claim Limitation: Reporting/Transmitting to Communication Interface

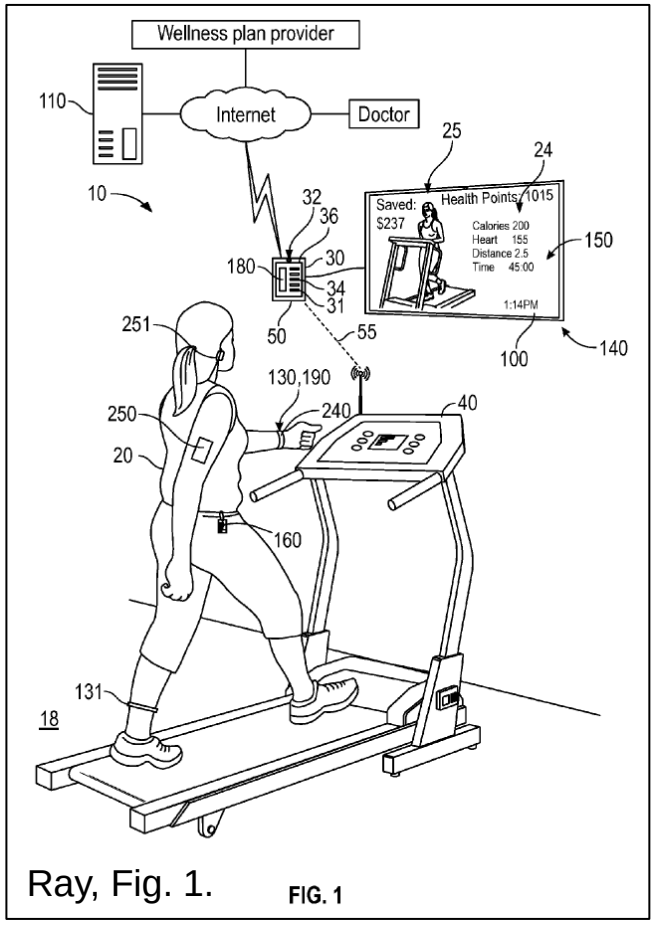
’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ‘375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Ray Explicitly Teaches that its Thinning Image is Sent to Third Parties

PO erroneously argues that Ray only transmits a user's *actual* image (and not its morphed image) to a third party. *Sur-Reply ('375), 13-14.*



Ray, Fig. 1. FIG. 1

> Therefore, the faster and/or more intensely the user exercises, the thinner and more appealing the user's image becomes. In addition to seeing her image, she can also view on the display her exercise data such as heart rate, calories burned and distance advanced. The thinner image is able to be transferred in real time while exercising via the internet to someone such as a doctor, wellness manager or the like. A still image of the user's thinner image can be transferred as well. For convenience at

Ray, 5:44-52.

➔ Ray expressly teaches sending user's thinned image to a third party.

Petition ('375), 40; Reply ('375), 19.

Demonstrative Exhibit – Not Evidence

Petitioner Permissibly Referred Back to Its Earlier Analysis for Claim 16

PO erroneously argues that Petitioner's analysis for claim 16 ignores the "in response to comparison step."

POR ('375), 20.

7. Claim 6

"…wherein the controller compares data from the sensor to a known data parameter that is indicative of a user not engaging the operating member in order to detect whether the user is engaging the operating member."

Petition ('375), 44-46.

16[d] "comparing, at the controller, the received sensor data with a known data parameter that is indicative of a user not engaging the motor-driven operating member;"

See claim limitation *1[f]* and claim *6, supra*.

Petition ('375), 53.

➔ Petition (at 53) clearly cites to the relevant analysis already described in connection with claim 6.

Demonstrative Exhibit – Not Evidence

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7. Ray/AAPA Combination (’227 and ’375)
8. ’375 Patent-Specific Issues
9. Yi Ground (’340)

Demonstrative Exhibit – Not Evidence

’340 Patent, Dependent Claim 7 Communication with Remote Location

’340 Patent: Claim 7
7. An exercise apparatus of claim 1, wherein the controller is configured to establish communication with a remote location, **and wherein the controller is configured to maintain communication between the exercise apparatus and the remote location** while the user is determined by the controller not to be engaged with the operating member.

Petition (’340), Claims Listing Appendix.

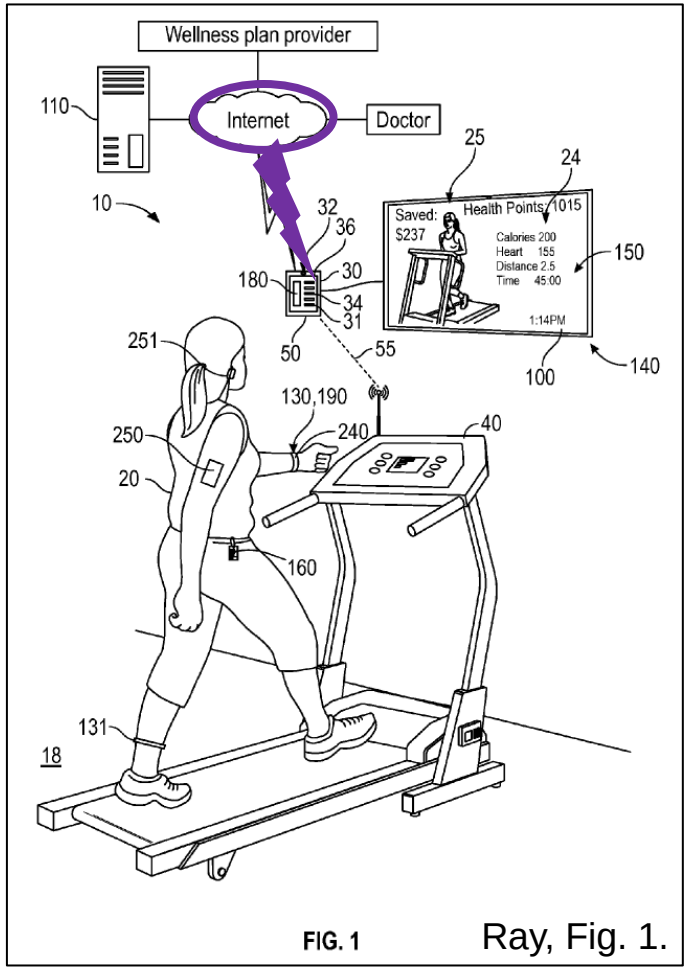
Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Discloses Communication with a Remote Location

PO erroneously argues that Ray does not teach a controller that maintains communication with a remote location while the user is not engaged with the treadmill. *POR ('340), 27-28.*

> A POSITA would be motivated to keep communication with a remote location, such as a storage device, even when a user was not detected so that an exercise can be quickly resumed. Pet., 38-39; Rawls, ¶¶184-86. It would not make sense to sever the remote connection if the user may return within a short period. Pet., 38-39; Rawls, ¶186; Morris, [0045] (displaying a return message for the user and saving program data for a specific amount of time in case the user returns).

Reply ('340), 20; Petition ('340), 38-39; Rawls ('340), ¶ ¶ 184-86.



Ray, Fig. 1.

Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Discloses Communication with a Remote Location (*cont.*)

PO erroneously argues that Ray's wall-mounted TV does not constitute a remote location. *POR ('340), 27-28.*

Alternatively, a POSITA understand that the Morris-Ray treadmill could be in communication with a remote wall-mounted TV. Pet., 39; Rawls, ¶187; Ray, 12:65-67. PO argues a wall-mounted TV is not a "remote location" because it is too close to the treadmill. POR, 28-29. Ray teaches that its exercise use data can be displayed on a wall-mounted TV, where data is transmitted over a wireless network. *E.g.*, Ray, Figure 1 (showing interface 55 for transmitting exercise use data); Pet., 41-42. The '340 patent similarly describes transmitting information to a "remote location" via a local area network (i.e., a wireless network) (EX-1001, 7:34-37), which is similar to a wall-mounted TV that is at a distance from the treadmill.

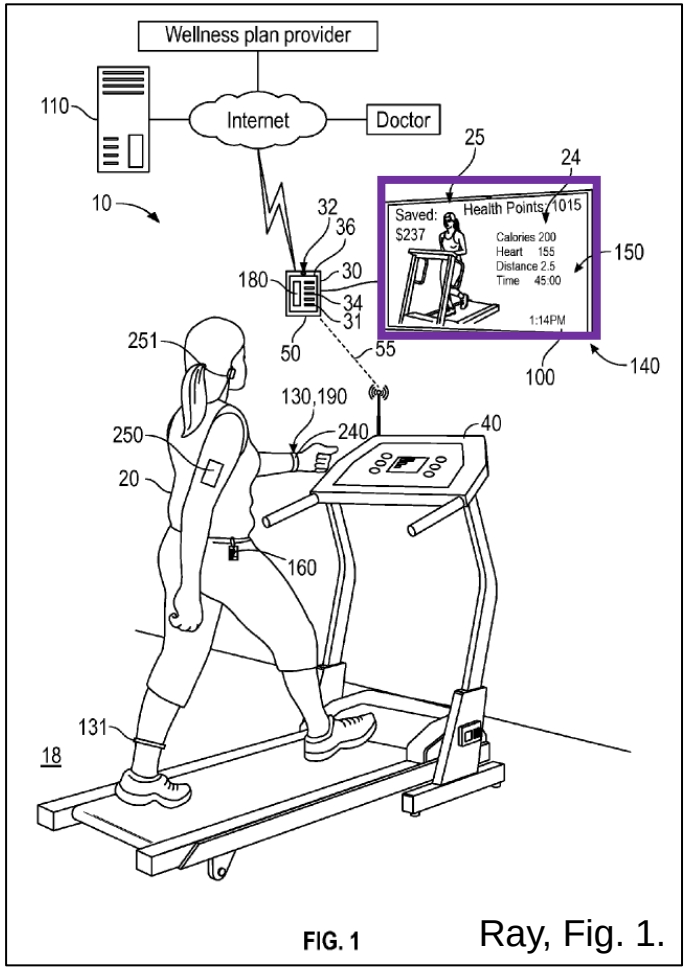


FIG. 1

Ray, Fig. 1.

➔ Transmissions to remote TV are consistent with '340 patent description.

Reply ('340), 20-21; Petition ('340), 39; Ray, Fig. 1; Rawls ('340), ¶ ¶ 187.

Demonstrative Exhibit – Not Evidence

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Demonstrative Exhibit – Not Evidence

Overview: Cox

- Cox's treadmill data acquisition system uses a current sensor to detect a user to generate a stride analysis. *Petition ('227), 11-12.*

FIG. **1** illustrates the general ESA method. Load and speed variations in electromechanical systems generally produce correlated variations in current and voltage. ESA analyzes these small perturbations and matches them to their source. The resulting time and frequency signatures reflect loads, stresses, and wear throughout the system and provide the basis for assessing the operational condition of the monitored equipment.

Cox, 3:49:56

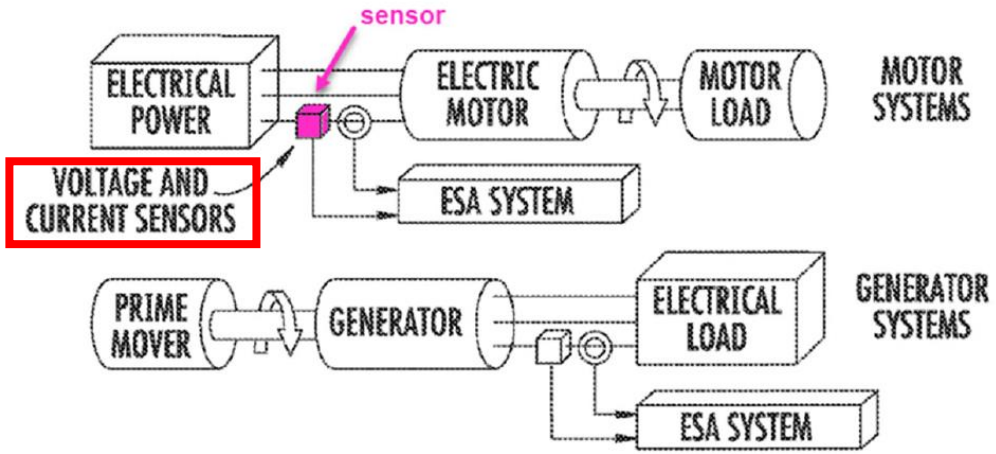

FIG. 1
(Annotated)

Cox, Fig. 1.

Petition ('227), 11-13, 60.

Demonstrative Exhibit – Not Evidence

A POSITA Would Be Motivated to Combine Cox with Morris and Ray

PO disputes a POSITA's motivation to combine Cox with Morris and Ray.

POR ('227), 30-32; Sur-Reply ('227), 19-20.

A POSITA would be motivated to combine Cox with Morris/Ray because:

1. Additional sensors would improve accuracy and add redundancy
2. Cox's current sensor would improve Morris's feedback of a user's gait
3. Cox's current sensor is not expensive and would be incorporated into a standard treadmill

Petition ('227), 57-58; Reply ('227), 21-23; Rawls ('227), ¶¶ 232-41.

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Demonstrative Exhibit – Not Evidence

Claim Limitation: Non-Validated/Stop Reporting Exercise Use Data

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ‘375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

Ray Discloses Generating Validated Exercise Use Data and Stopping Reporting "In Response To" No User Detection

PO erroneously argues that the combination of Ray and AAPA does not generate non-validated exercise use data in response to the sensor not detecting engagement of the user.

POR ('227), 35-36.

Ray teaches that if its optical sensor did not detect user engagement, it would stop recording images.

Petition ('227), 71-75; Reply ('227), 23-25.

A set of computer-implemented instructions resident in the non-volatile storage medium **31** of the electronic device **30** is adapted to cause the camera **32** to record a still or video image or produce a live feed of the patient or exercising user **20** when movement is detected by the camera **32**. Further, the electronic device **30** is instructed to use an identity validation system **130** to validate the identity of the user **20** performing the exercise, and to transmit to the server **110** at least the user's identity as determined by the identity validation system **130** and the time **140** and duration **150** of the exercise performed by the user **20**.

Ray, 13:20-30.

Thus, as long as the treadmill is moving the camera will operate to take their real time image while exercising. If the user stops exercising, the camera will no longer record images. This is used to keep the user engaged and motivated. For example, the user knows if

Ray, 6:53-57.

Demonstrative Exhibit – Not Evidence

Two Known Alternatives: Whether or Not to Continue Generating Data When a User is Not Detected

PO erroneously argues that the combination of Ray and AAPA does not generate non-validated exercise use data in response to the sensor not detecting engagement of the user.

POR ('227), 35-36.

➔A POSITA would have found it obvious that, while the treadmill was running, Ray's controller would continue generating exercise use data in response to the sensor not detecting the user—it was one of two known alternatives—and provided a safety measure. *Petition ('227), 71-75; Reply ('227), 23-25.*

> Whether or not to continue generating the data when a user is not detected was one of two known alternatives, and obvious to try. Pet., 73. A POSITA would have found it advantageous to continue generating non-validated exercise use data because it would notify the user that the treadmill is still running so a user could cautiously resume exercising. *Id.*; Rawls, ¶267.
>
> *Reply ('227), 24-25; Petition ('227), 72-73; Rawls ('227), ¶¶ 266-67.*

Demonstrative Exhibit – Not Evidence

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Demonstrative Exhibit – Not Evidence

Claim Limitation: Non-Validated/Stop Reporting Exercise Use Data

’227 Patent: Claim 1	’375 Patent: Claim 1
1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured to **generate a non-validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does not detect engagement of the user with the operating unit, wherein the controller is further configured to generate **a validated exercise use data in response to** movement of the operating unit relative to the base and the sensor does detect engagement of the user with the operating unit, and wherein the controller transmits the validated exercise use data to the communication interface.	1. An exercise apparatus comprising: … a communication interface in communication with the controller, wherein the controller is configured determine whether the user is engaged with the operating member in response to movement of the operating member and the sensor detecting engagement of the user with the operating member, wherein **in response to** the controller determining that the user is engaged with the operating member**,** the controller is **configured to report the exercise use data** to the communication interface, wherein **in response to** the controller determining that the user is not engaged with the operating member, the controller is configured **to stop reporting the exercise use data** to the communication interface, and wherein the communication interface is configured to communicate the reported exercise use data to **a third party**.

Petition (’227, ’375), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

The Combination of Ray and AAPA Discloses Reporting Exercise Use Data

PO admits AAPA discloses reporting exercise use data but only disputes the "in response to" requirement.

POR ('375), 26-27; Sur-Reply ('375), 17.

A set of computer-implemented instructions resident in the non-volatile storage medium **31** of the electronic device **30** is adapted to cause the camera **32** to record a still or video image or produce a live feed of the patient or exercising user **20** when movement is detected by the camera **32**. Further,

Ray, 13:20-24.

➔ Ray satisfies the "in response to" requirement:

Petition ('375), 72, 73-76; Reply ('375), 24-25.

The camera **32** may take a still image or real time video of the user **20** according to output parameters of the exercise machine **40** transmitted by wire, wirelessly by Bluetooth technology, infrared communication, or the like. The image can be captured at pre-set intervals. For example, as long as the exercise data **24** is being produced by the exercise machine **40**, the camera **32** can be instructed to capture the user's image every 10 minutes. Therefore, as long as the user **20** continues exercising, the camera **32** will continue to capture the user's image. For privacy, background images may be automatically obscured, if desired. Additionally, upon the camera **32** sensing movement of user **20** (such as shoulder movement up and down of the user **20**) on an exercise machine **40**, or within the exercise area **18**, the camera **32** can be set to capture the user's image at the pre-set intervals.

Ray, 14:31-46.

Thus, as long as the treadmill is moving the camera will operate to take their real time image while exercising. If the user stops exercising, the camera will no longer record images. This is used to keep the user engaged and motivated. For example, the user knows if

Ray, 6:53-57.

Demonstrative Exhibit – Not Evidence

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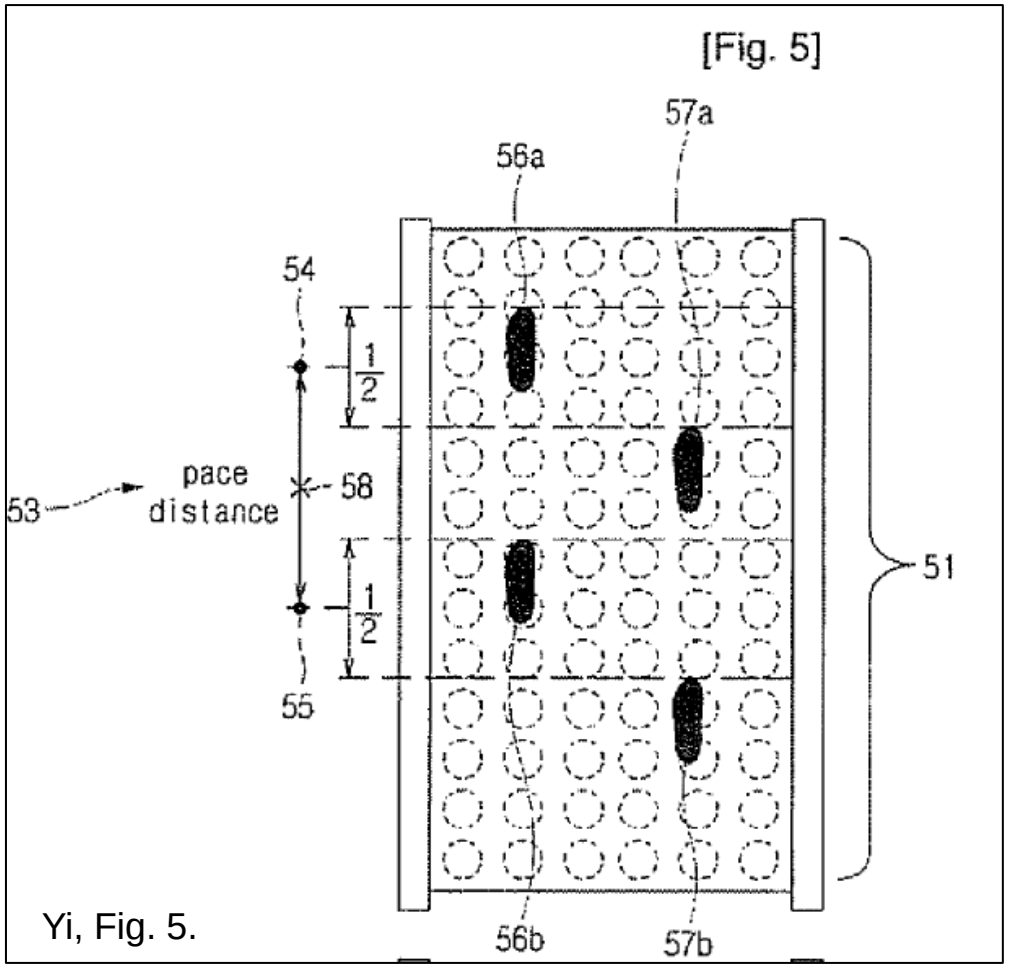
9. **Yi Ground (’340)**

Demonstrative Exhibit – Not Evidence

Overview: Yi



Yi, Fig. 5.

- Yi detects a user's presence while the user is moving on the treadmill, where Yi's control unit calculates a pace distance and pace time based on the user's detected footsteps. *Petition ('340), 70-71.*

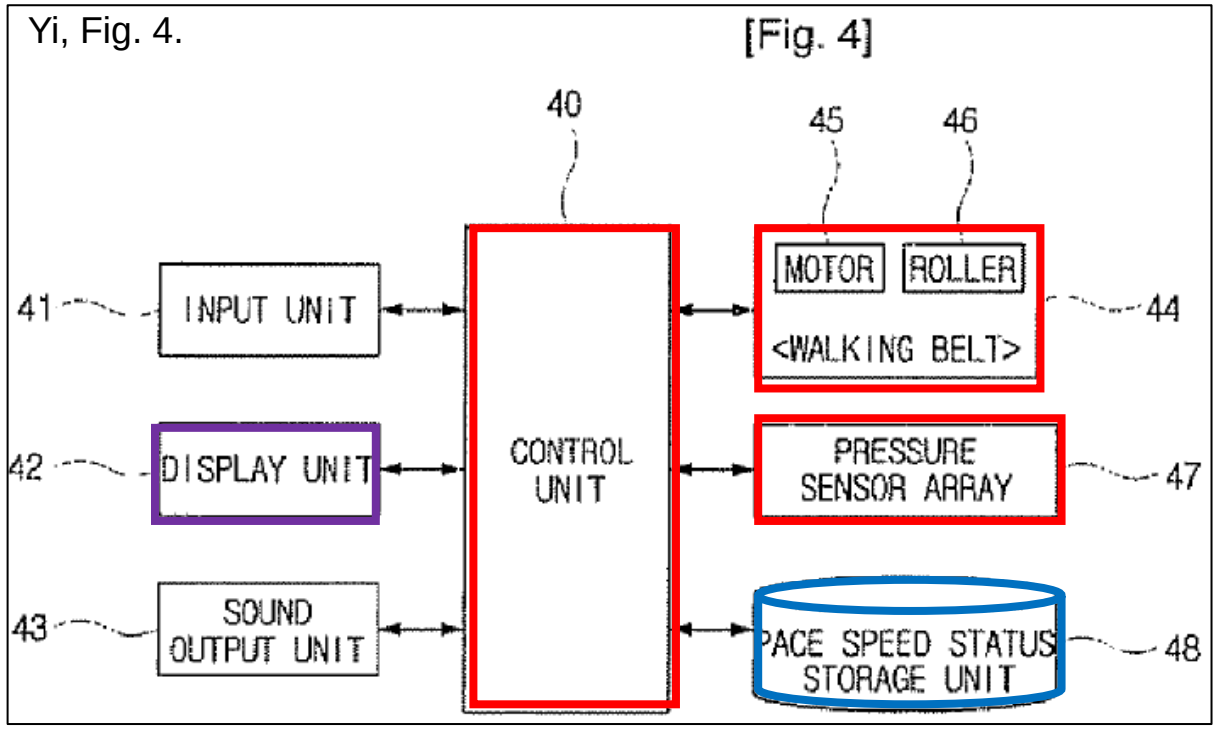
[0039] A display unit **42** is a display device, such as a TFT-LCD, and displays various types of exercise information, such as heart rate during exercise, exercise distance, exercise time, calories consumed, and speed. An exerciser can become aware of his current exercise status while viewing various types of exercise information displayed on the display unit.

Yi, ¶ 0039.

Demonstrative Exhibit – Not Evidence

Yi Discloses Validating Exercise Use Data "In Response To…"

Yi, Fig. 4.



[0046] The control unit **40** drives the walking belt by controlling the respective function units, and is provided with an algorithm for automatically controlling the speed of the walking belt in conformity with the rate of exercise of an exerciser. In other words, when each of the pressure sensors of the right and left pressure sensor arrays **23** and **22** detects a load and sends it to the control unit as a load detection signal, the control unit **40** calculates a pace distance and a pace time period based on load detection signals, and controls the speed of the walking belt based on the pace distance and the pace time period.

Yi, ¶ 0046; Petition ('340), 70-71; Reply ('340), 26-27.

Demonstrative Exhibit – Not Evidence

’340 Patent, Claim 9 – Stop Reporting Exercise Use Data

’340 Patent: Claim 9
9. An exercise apparatus of claim 8, **wherein the controller is configured to stop reporting the exercise use data to the communication interface in response to** the controller determining that the user is not engaged with the operating member and the operating member is driven by the motor.

Petition (’340), Claims Listing Appendix.

Demonstrative Exhibit – Not Evidence

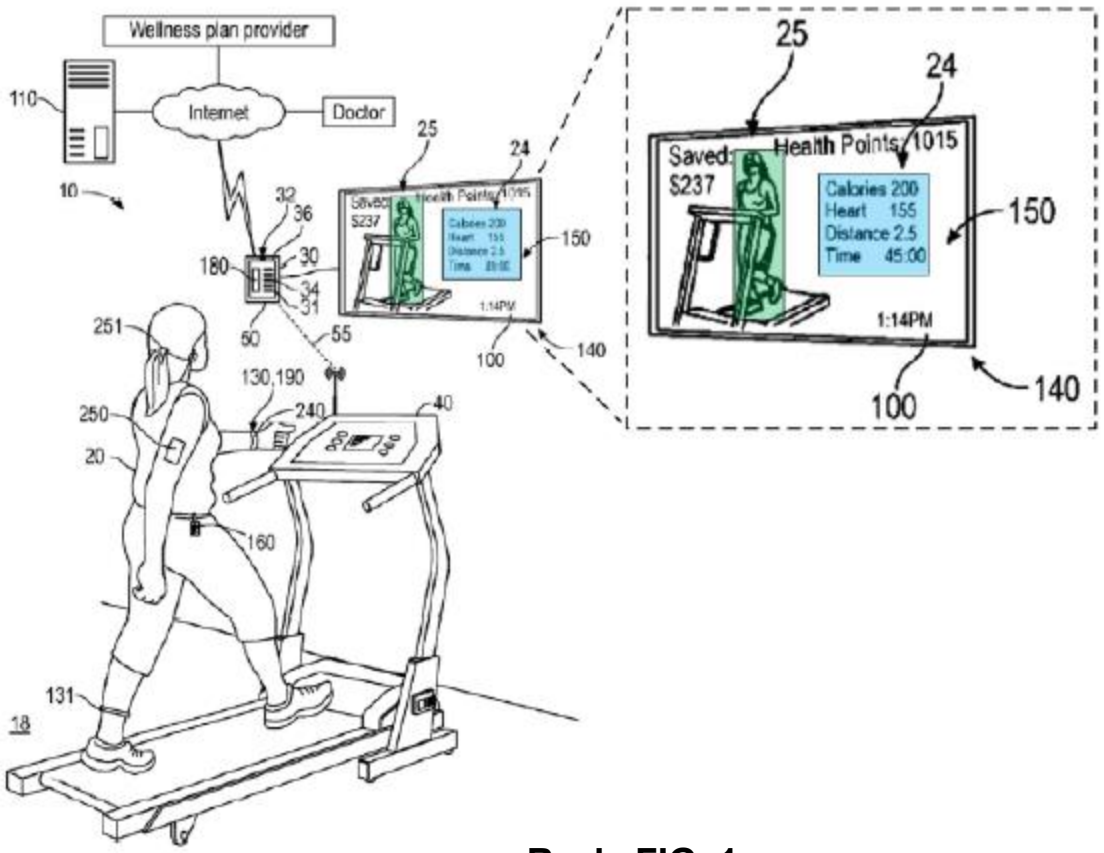
It Would Be Obvious that Yi Would Not Report Exercise Use Data When No User Detected

291. It was known (AAPA) that the treadmill could run unattended. In this situation, a POSITA would have found it obvious that when the user was no longer being detected, Yi's pressure sensors were also no longer detecting footsteps, and therefore did not report any load and could not compute the pace information. This meant that the controller would also stop reporting the pace data to memory or to the display when the belt was running and the user was not on the treadmill.

Rawls ('340), ¶ 291; Petition ('340), 74-75; Reply ('340), 28.

Demonstrative Exhibit – Not Evidence

It is Obvious to a POSITA that Ray Generates Validated Exercise Use Data



Ray's FIG. 1
(Annotated and Display Area Enlarged)

Reply ('227), 13.

Thus, as long as the treadmill is moving the camera will operate to take their real time image while exercising. If the user stops exercising, the camera will no longer record images. This is used to keep the user engaged and motivated. For example, the user knows if

...

Additionally, upon the camera **32** sensing movement of user **20** (such as shoulder movement up and down of the user **20**) on an exercise machine **40**, or within the exercise area **18**, the camera **32** can be set to capture the user's image at the pre-set intervals.

Ray, 6:53-57, 14:41-46.

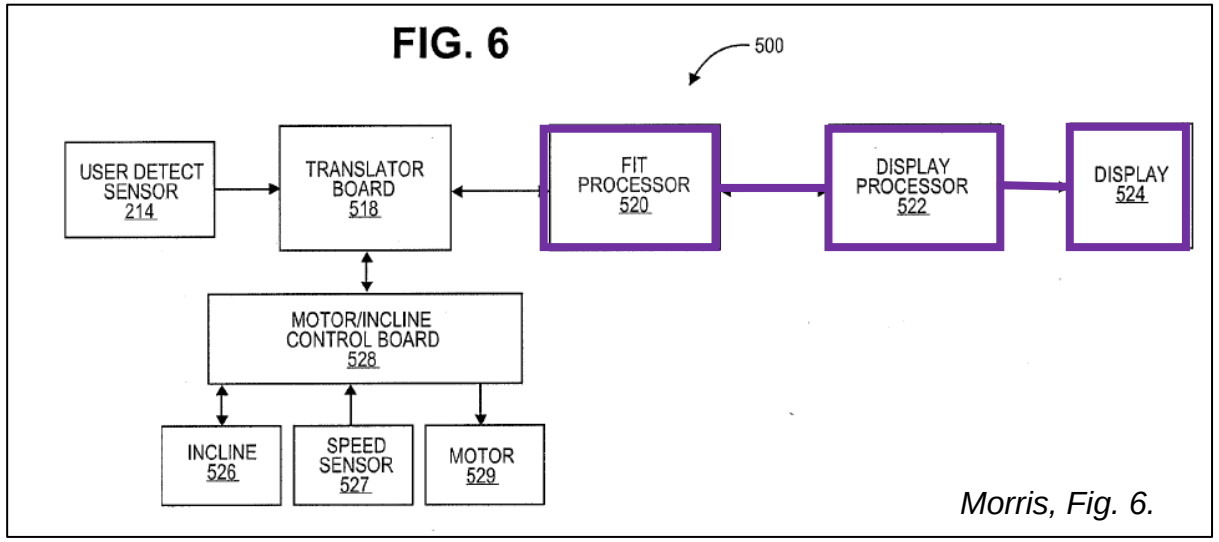
Demonstrative Exhibit – Not Evidence

The Morris/Ray Combination Communicates Validated Exercise Use Data to the Communication Interface

The FIT processor **520** may also process or store information relating to heart rate, calories burned estimates, and the like. In an embodiment, the display processor **522** governs a display and/or its controls, such as an interactive display. The display processor **522** includes, in various embodiments, fan controls, a television interface, a display interface, an iPod® or other music, multimedia, or other player interface, or the like. In an embodiment, the display

Morris, ¶ 0035.

- PO argues that validated exercise use data (including Ray's thinning image) in the Morris/Ray combination is not transmitted to the communication interface. *Sur-Reply ('227), 18.*



Morris, Fig. 6.

A server **110** with access to the Internet is further included and is adapted to receive information from the electronic device **30**, which can then be sent to the user's doctor, wellness program, or other authorized practitioner. Such information may include user identity validation information from the electronic device **30**, as further explained below, as well as data from the exercise machine **40**, biometrics, motivational image statistics, and image and modified motivational image **25** data from the electronic device **30**, and data from alternate validation systems, dollar amounts saved, health points earned, and other data, as further explained below.

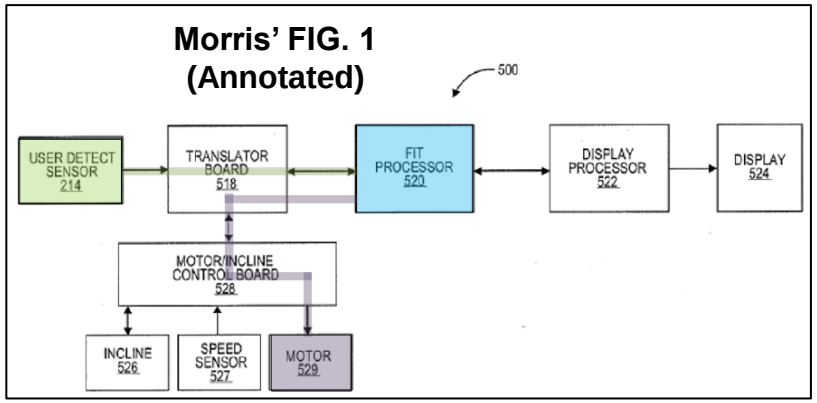
Ray, 13:7-17; Reply ('227), 19-20.

Demonstrative Exhibit – Not Evidence

A POSITA Would be Motivated to Combine Morris and Ray

Ray's camera/software would be readily incorporated into Morris:

- Morris, like Ray, describes using an optical sensor
- Morris's processors already performed user detection;
  - Generated exercise use data, including virtual reality content



The combination with Ray improved the capabilities of Morris:

- Added the thinning image to motivate the user
- Provided internet connectivity and real-time sharing features, allowing a more efficient flow of data to a physician or personal trainer
- Provided the capability to store data on a remote server accessible to user's doctor, trainer.

Petition ('227), 16-17, Morris, ¶¶ 32-36, 50, 56-58; Ray, 7:11-22, 9:55-57, 11:55-59; 13:50-57; Rawls, ¶¶ 138-145.

Demonstrative Exhibit – Not Evidence

Petition's Use of AAPA with Ray is Permitted

PO erroneously argues that Petition uses AAPA as a basis for Ground 3. *POR ('227), 33.*

> A patentee's admissions regarding the scope and content of the prior art under § 103 can be used, for example, to: (1) supply missing claim limitations that were generally known in the art prior to the invention (for pre-America Invents Act (AIA) patents) or the effective filing date of the claimed invention (for post-AIA patents); (2) support a motivation to combine particular disclosures; or (3) demonstrate the knowledge of the ordinarily-skilled artisan at the time of the invention (for pre-AIA patents) or the effective filing date of the claimed invention (for post-AIA patents) for any other purpose related to patentability. *See Qualcomm*, 24 F.4th at 1376; *see also Koninklijke Philips*, 948 F.3d at 1337-1338.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MEMORANDUM

DATE: June 9, 2022

TO: Members of the Patent Trial and Appeal Board

FROM: Katherine K. Vidal Katherine Kelly Vidal
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

SUBJECT: UPDATED GUIDANCE ON THE TREATMENT OF STATEMENTS OF THE APPLICANT IN THE CHALLENGED PATENT IN INTER PARTES REVIEWS UNDER § 311

Director Vidal's Memorandum (Ex. 1017), 4; Reply ('227), 23.

Demonstrative Exhibit – Not Evidence

Petition's Use of AAPA with Ray is Permitted

PO erroneously argues that Petition uses AAPA as a basis for Ground 3.

POR ('227), 33.

C. Ground 3: Claims 1-6 and 14-20 are Obvious over Ray in View of Applicant Admitted Prior Art (AAPA).

Ray disclosed a treadmill that validated exercise data when a user was exercising on a treadmill and reported that exercise data to a third party. Ray's Figures 1-3 clearly depicted a treadmill, but the specification assumed that certain components of that treadmill—like a base, motor, belt, and a controller—were so essential and well-known that they didn't warrant an explicit explanation. (Ray, 12:36-43.)

Petition ('227), 65.

As explained above, limitations 1[pre]-1[c] were known to a POSITA per AAPA. Additionally, Ray disclosed these limitations because it described implementing its user and exercise validation process "with a treadmill" (exercise apparatus.) Ray, 5:23-26, Ray's Figures 1-3 clearly depicted user 20 exercising on exercise machine 40—a treadmill. (Ray, 5:23-29; Figs. 1-3.) Treadmills had a belt (operating unit) so the user could walk or run on it, as shown in Ray's annotated Figure 1 (below). The treadmill's belt moved with respect to a stationary base as also illustrated below.

Petition ('227), 68.

Demonstrative Exhibit – Not Evidence

Cadence and Footfall are Validated Exercise Use Data in Morris-Ray Combination

PO erroneously argues cadence and footfall are not validated exercise use data because they are "inherently valid." *POR ('227), 17-19.*

- PO's construction for "validated exercise use data" does not exclude "inherently valid" data
- Claims or the detailed description do not recite (or exclude) "inherently valid" data
- Pace and cadence can be faked

Reply ('227), 7-8; '227 Patent, 2:4-7.

Demonstrative Exhibit – Not Evidence

CERTIFICATE OF SERVICE

The undersigned hereby certifies that true copies of this **PETITIONER PELOTON'S DEMONSTRATIVES** were served in their entirety this 28th day of August 2024 by electronic mail on the Patent Owner via its attorneys of record:

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