

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.

PTAB Case No. IPR2023-01163

Patent No. 10,032,227

**PETITIONER PELOTON INTERACTIVE, INC.'S REPLY TO PATENT
OWNER'S RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT No. 10,032,227**

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EXHIBIT LIST

Exhibit	Description
1001	U.S. Patent No. 10,032,227 (“’227 patent”)
1002	Declaration of R. Lee Rawls (“Rawls”)
1003	File History of U.S. Patent No. 10,032,227
1004	U.S. Patent No. 9,785,827 (“Ray”)
1005	U.S. Patent No. 7,736,273 (“Cox”)
1006	U.S. Patent App. Pub. No. 2010/0160115 A1 (“Morris”)
1007	Reserved
1008	U.S. Patent No. 6,638,198 (“’198 patent”)
1009	File History of U.S. Patent No. 10,796,375
1010	U.S. Patent No. 11,227,340 (“’340 patent”)
1011	U.S. Patent No. 8,574,131 (“Daly”)
1012	Affidavit of Ashlee E. Sherman
1013	CORRECTED Affidavit of Christopher G. Hanewicz
1014	U.S. Patent No. 8,287,434 (“’434 patent”)
1015	U.S. Patent App. Pub. No. 2009/0176629 (“Yi”)
1016	JHT’s Opening Exchange of Claim Terms and Proposed Constructions
1017	Vidal, Updated Guidance on the Treatment of Statements of the Applicant in the Challenged Patent in Inter Partes Reviews Under § 311 (June 9, 2022), <i>available at</i> https://www.uspto.gov/sites/default/files/documents/2022060912updatedAAPAmemo.pdf
1018	Exhibit A to JHT’s June 9, 2023 Infringement Contentions
1019	Peloton’s Unopposed Motion to Stay District Court Proceedings
1020	Sotera Stipulation filed in the U.S. District Court

I. INTRODUCTION

The patent owner's response (POR) fails to rebut Petitioner's showing and suffers many flaws. Instead of considering the teachings of the prior art, in combination, as understood by a POSITA, patent owner (PO) focuses on each reference in isolation. Even then, PO ignores the disclosure of the prior art or takes a narrow interpretation of that disclosure. Realizing that its approach is insufficient, PO proposes "constructions" for three claim terms that arbitrarily exclude certain elements from the scope of the claims. PO's unsupported positions should be rejected.

II. CLAIM CONSTRUCTION

PO's constructions for "exercise use data," "validated exercise use data," and "non-validated exercise use data" are flawed because they are contradicted by the intrinsic evidence and/or incorporate requirements that are already present in the claims, rendering such claim language superfluous. *See* POR, 4-13. The Board should accordingly reject those constructions. *See Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1354 (Fed. Cir. 2012) ("[A] claim construction must not import limitations from the specification into the claims."). But, even applying PO's proposed constructions, the prior art invalidates each challenged claim for the reasons stated in the Petition and herein.

A. Exercise Use Data

PO proposes that “exercise use data” be construed to mean “data that would represent an amount of exercise of the user” (POR, 4), and then limits its construction as covering only two types of exercise data—time and distance. *Id.*, 5-6. But this overly narrow construction finds no support in the record and arbitrarily excludes other forms of “exercise use data” recognized by a POSITA (e.g., pace, heart rate, footfall force, cadence, and Ray’s virtual image of the user). *Id.*, 4-6. But even under PO’s proposed construction, Morris and Ray both disclose “exercise use data.”

1. PO’s Construction Improperly Imports Limitations and Is Not Supported by Intrinsic Evidence

The specification does not limit exercise use data to a specific amount of exercise as PO proposes, nor does it identify certain types of “exercise use data” to the exclusion of others.

For example, in discussing a “conventional exercise apparatus” and what exercise use data it can provide, the ’227 patent teaches that exercise use data is used to “demonstrate his (or her) exercise habit and exercise use to their insurance company.” EX-1001, 1:37-40. The broad usage of “exercise use data” to demonstrate “exercise habits” is repeated in the specification. *Id.*, 2:6-19, 2:34-36 (“...[t]he faked exercise use data shouldn’t represent the exercise habit or amount of

user exercise to the insurance companies.”). A POSITA would understand that “exercise habit,” as used in the ’227 patent, would correspond to a user’s exercise pattern. Rawls, ¶¶114-15. And a POSITA would understand information, such as heart rate, pace, and other metrics disclosed in the prior art, are exercise use data that can show an exercise habit. *E.g.*, Rawls, Appendix K, ¶0026.

PO’s limited construction is further belied by the disclosures in two patents referenced in the specification (U.S. Patent Nos. 8,287,434 and 6,638,198) that include “an exercise use data reporting function...that can provide exercise use data therefrom for a user.” EX-1001, 1:29-37.¹ Both patents describe a variety of exercise-related data collected while a user is exercising, including heart rate, calories, time, and other information; neither support the PO’s proposed limitations.

Based at least on the descriptions in the ’198 and ’434 patents, a POSITA would have understood that “exercise use data” is not limited to only distance or time—nor to an amount of exercise as PO proposes—but can include other information generated by the machine. *E.g.*, Rawls, Appendix K, ¶0025 (identifying exercise results including distances, heart rates, duration, etc.).

For example, the ’198 patent teaches the exercise machine displays “various

¹ The term “exercise use data” is not found in either patent. EX-1008, *passim*; EX-1014, *passim*.

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” (EX-1008, 7:7-14), and “desired exercise data” can include “exercise time, pulse rate at one or more times during the exercise, etc.” *Id.*, 17:31-37. The ’198 patent also teaches why pulse rate is important—monitoring it helps determine if an exerciser can appropriately achieve their goals. *Id.*, 22:63-23:23; *see also id.*, 25:32-54 (pulse rate is important for a third-party consultant). Thus, the ’198 patent recognizes a broad range of “exercise use data.”

The ’434 patent similarly does not limit “exercise use data” to certain metrics, and instead teaches that “information about exercise” can include “number of reps performed, energy used, distance between handles, the pulse, position and velocity from the accelerometer.” EX-1014, 15:33-37.

PO’s construction of “exercise use data” is also contradicted by the prosecution history of the related ’375 patent, where in response to the examiner’s rejection, Applicant did not dispute that Yi disclosed “exercise use data.” EX-1009, 43-48, 61-62; EX-1015, Abstract.

Finally, PO’s construction, which excludes pace, contradicts its own infringement contentions where PO accused Petitioner’s product of producing exercise use data including “pace.” EX-1018. A-23. For these reasons, PO’s construction fails.

2. Ray's Thinning Image, Pace, Etc. Are Exercise Use Data

Even if PO's proposed construction of "exercise use data" was adopted, Ray's thinning image, Morris' pace, footfall force, etc. meet PO's proposed construction 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. Similarly, Morris' pace, footfall force, etc. are displayed so that the user can see information about their workout. Morris, [0050]. A POSITA would understand that pace, footfall force and cadence represent the amount of exercise of the user, namely, the pace run during their exercise, the amount of force being exerted by the user's footfalls, and "the steps per minute...measured based on the detection of each impact over a period of time." *Id.*, [0053]; Pet. 33; Rawls, ¶¶174-83.

PO's additional arguments also fail. PO argues that you cannot determine "any other measure of an amount of exercise from viewing the virtual image alone." POR, 21-22. But, Ray's thinning image is based on, and represents information about the user's workout, including an intensity, speed or duration. Ray, Abstract,

5:44-46, 5:23-29, 10:59-67; Rawls, ¶¶178-79.

PO further argues that Ray’s virtual image cannot be exercise use data because it is multimedia content. POR, 21. But neither PO’s construction, nor the ’227 patent prohibit multimedia content from constituting exercise use data. Ex-1001, 6:16-18.

PO additionally mischaracterizes Mr. Rawls’ testimony that Ray’s thinning image “is not a precise measurement.” POR, 20. Neither PO’s construction nor the ’227 patent requires that a precise amount of exercise be represented. And, Mr. Rawls never testified that exercise use data requires a precise measurement. PO identifies no other evidence to justify importing this narrowing limitation. In fact, PO appears to contradict itself both in its POR and in proposed constructions in the district court, stating “...‘exercise use data’ alone is an *apparent* amount of exercise....” POR, 5²; EX-1016 (construing exercise use data as “an *apparent* amount of exercise...”).

B. Validated Exercise Use Data

PO’s proposed construction for “validated exercise use data” as “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)” should

² All emphasis added unless otherwise indicated.

be rejected because it imports limitations that are inconsistent with the specification and is inconsistent with the construction PO proposed in district court. POR, 6-11. However, even under PO's construction, the challenged claims are invalid because PO's construction merely brings in existing claim limitations that are addressed in each ground.³

PO further imports limitations in its construction that are not in the claims or detailed description. PO argues that cadence and footfall are not validated exercise use data because they are “inherently valid” and can only be generated when a user is exercising. POR, 18-19. Therefore, they are like data generated by a user-driven operating unit that does not require validation. *Id.*

First, PO's construction does not exclude data that is “inherently valid.” Second, inherently valid data is neither recited in the claims, nor the detailed description of the '227 patent. PO's argument that pace and footfall force are

³ PO argues validated exercise use data is 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.**” POR, 6. Claim 1 already requires the “**controller is further configured to generate a validated exercise 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.**” EX-1001, 8:2-6.

“inherently valid” is inconsistent with the purported purpose of the invention to prevent a person from faking exercise use data. EX-1001, 2:4-7. For example, both pace and footfall data can be faked if a user asks a friend to exercise for them. Finally, even if the “inherently validated” is given any credence, the claim merely requires generating validated data in response to detection of the user and movement of the belt, and does not preclude generating inherently valid data.

PO’s construction emphasizing “in response to” instead of “while” (POR, 19) also materially differs from its preliminary construction in district court, which was “exercise use data that has been determined to have occurred *while* the user is exercising.”⁴ EX-1016.

C. Non-Validated Exercise Use Data

PO also construes “non-validated exercise use data” to mean “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).” PO’s proposed construction here, similar to its construction for “validated exercise

⁴ The parties’ opening exchange of claim terms and proposed constructions occurred on August 25, 2023, after Peloton filed its Petition. EX-1016. The district court litigation was stayed before the parties exchanged final constructions. EX-1019. Petitioner also filed a *Sotera* stipulation. EX-1020.

use data,” includes limitations that are inconsistent with the specification and PO’s preliminary construction in district court. But even under PO’s construction, the challenged claims are invalid.⁵

PO’s construction of “non-validated exercise use data” further imports limitations that impermissibly narrow the scope of the claims. Specifically, PO now argues that there can be three types of “exercise use data”—validated, non-validated and data where no determination is made. POR, 12-13. PO relies on this limitation to argue that non-validated exercise use data is not already admittedly in the prior art. *Id.*

PO’s position finds no support in the specification. The specification acknowledges only two types of exercise use data—validated and non-validated. *E.g.*, EX-1001, 4:45-49, 6:5-9. It never refers to a third type, which is neither validated nor non-validated. The background section explains why.

In prior art motor-driven devices, the validity of exercise use data when a user could not be detected was questioned. EX-1001, 2:15-19. A POSITA would

⁵ Claim 1 already requires the controller to generate non-validated exercise use data in response to movement of the operating unit and the sensor does not detect engagement of the user. EX-1001, 7:65-8:2.

understand that this data is non-validated because it is generated when no user is detected as engaged with the treadmill. Rawls, ¶¶187, 266-67.

PO’s proposed construction in district court—that non-validated exercise use data is “exercise use data that is not validated exercise use data”—confirms that the patent recognizes only two types of “exercise data.” EX-1016.

III. GROUNDS FOR CHALLENGE

A. Ground 1

PO does not dispute that a POSITA would be motivated to combine Morris and Ray. Nor does PO dispute that the combination of Morris and Ray teaches limitations 1[pre] through 1[f]. Instead, PO focuses on limitations 1[g] through 1[i]. PO’s analysis for limitations 1[g] and 1[h] is flawed because (1) it relies on flawed constructions; (2) even under those flawed constructions, the claims are rendered obvious, and (3) PO only addresses the prior art in isolation. *See In re Merck*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.”). And PO’s analysis of limitation 1[i] only addresses

a “third party” term that is not present in claim 1. Claim 1 and its dependents are invalid.⁶

1. Limitation 1[h]

a. PO Relies on Improper Claim Construction

Considering Morris alone, PO first argues that Morris’ disclosure of footfall force, cadence, and pace are not “exercise use data.” POR, 17-19. PO’s construction should be rejected. *See* Section II.A, *supra*.

Considering Ray alone, PO argues that heart rate and Ray’s virtual image are not exercise use data because they do not represent an amount of exercise.⁷ PO’s construction should be rejected. *See* Section II.A, *supra*; Ray, 5:44-47; Pet., 35.

Morris and Ray describe exercise use data generated in response to detection of the user, including at least pace, cadence footfall force, and Ray’s thinning image.

⁶ PO’s arguments for independent claims 12 and 14 mirror its arguments for claim 1. POR, 28-29. Claims 12, 14, and their dependents are obvious for the same reasons discussed as claim 1.

⁷ PO also argues that Petitioner muddles Ray’s validation feature and virtual image. POR, 22. PO is incorrect. Ray discloses that its thinning image can be broadcast to a display. Ray, 13:50-14:5. There is no requirement in claim 1 that exercise data be “validated” by a third party.

Thus, PO's arguments fail even when Morris and Ray are considered separately.

b. The *Combination's* Description of Time and Distance Renders the Challenged Claims Obvious

Even if PO's construction that limits the exercise use data to time and distance is accepted is accepted, Morris and Ray describe other exercise use data, such as distance and time. Pet., 32-33, 35-37; Morris, Fig. 11; Ray, Fig. 1.

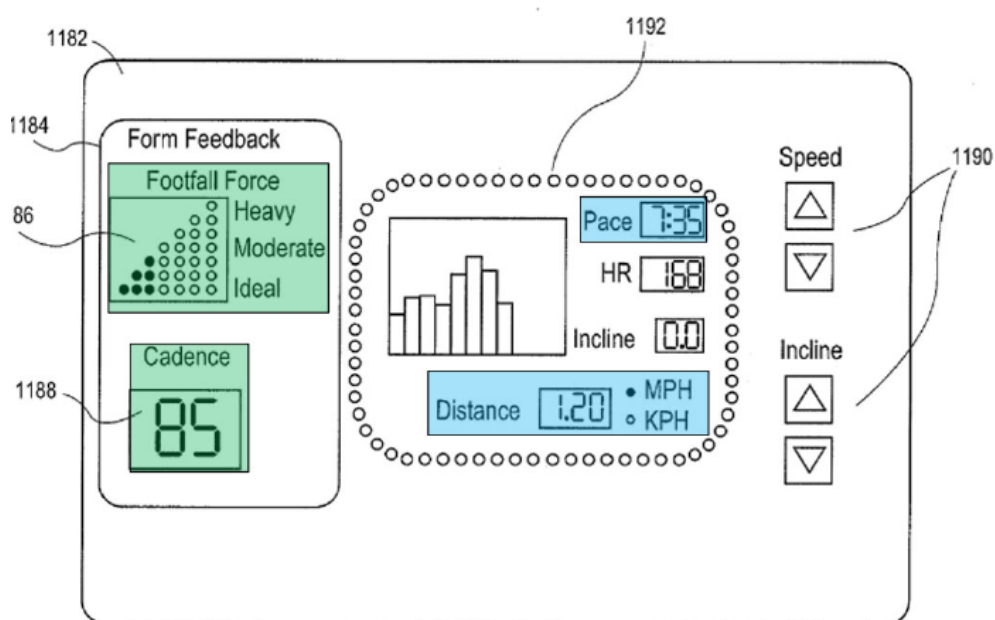


FIG. 11
(Annotated)

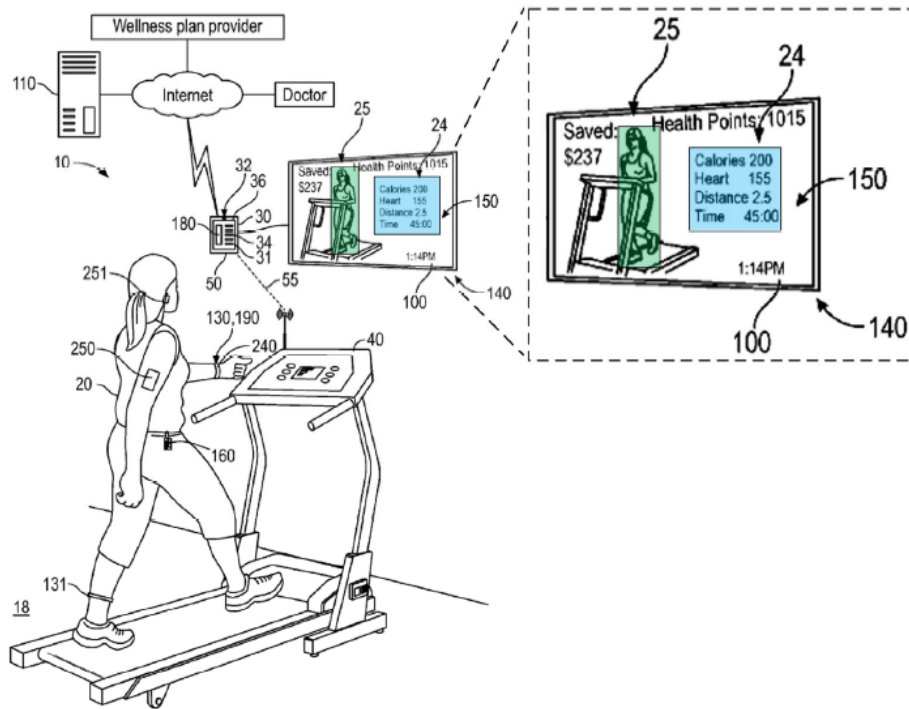


FIG. 1 (Annotated and Display Area Enlarged)

Ray's camera takes a user's real-time image only if the user is exercising. Ray, 6:54-57; Pet. 37. Ray further explains transmitting time and duration of the user's exercise to the server. Ray, 13:24-30; Pet., 37. PO ignores the teachings of Ray regarding the reporting of time and duration of exercise, and Petition's explanations that, in the combination, it would have been obvious to a POSITA that other exercise use data, including time and/or distance would also be reported along with user's thinning image. Pet., 39.

c. PO Ignores the *Combination* of Morris and Ray

PO argues that Morris and/or Ray's controller does not validate distance and time "in response to" the sensor detecting engagement of the user. POR, 19. PO

ignores Petitioner's obviousness combination and the teachings of Morris.

Ray's treadmill displays exercise use data (Figure 1 below), including distance, time, and the user's virtual/thinning image, which is generated based on the intensity, speed and/or duration of a user's exercise. Pet., 34-36. Ray further teaches that its camera detects a user on the moving belt and that the thinning image is generated and displayed only if a user is detected. *Id.*, 37; Ray, 6:53-57, 14:6-14, 14:41-46; *see also id.*, claim 14 (claiming displaying the thinning image only while a user is detected). As explained in subsection (b) above and the Petition, a POSITA would have found it obvious that Ray's other exercise use data, e.g., distance and time, would be transmitted along with Ray's thinning image only when a user is detected. Pet., 33, 38-39; Rawls, ¶179.

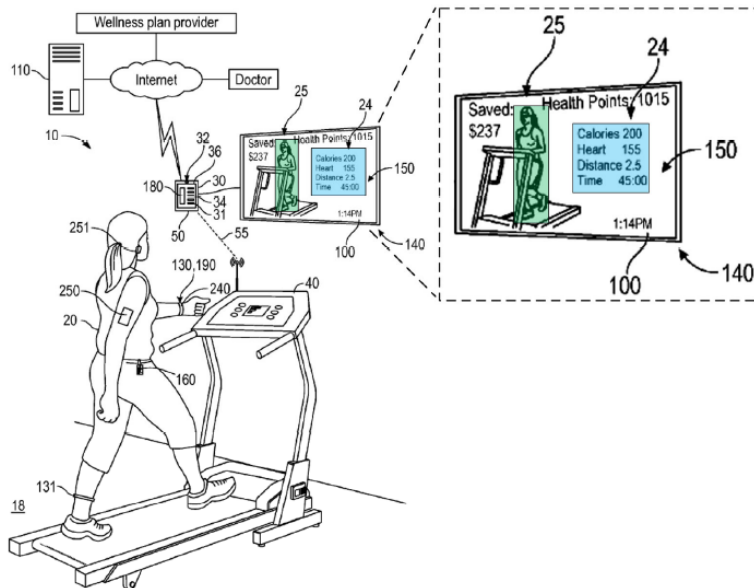
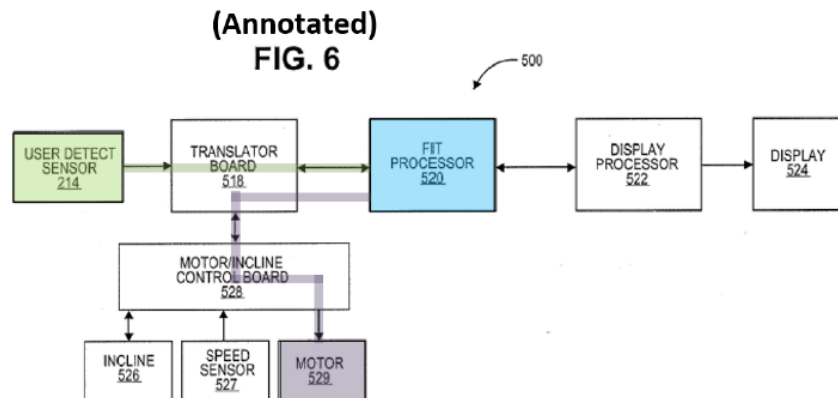


FIG. 1 (Annotated and Display Area Enlarged)

As the Petition explains, Morris' FIT processor (Fig. 6, below) receives

information from the user detect sensor. Pet., 25, 28. In the combination, Morris' FIT processor and/or translator board ("controller") would receive signals from the user detect sensor that includes Ray's sensor (camera), and the controller would interpret those signals. Pet., 27-28, 37.



A POSITA would have understood that, in the combination, Ray's exercise use data would be generated by Morris' controller in response to detection of the user via receipt of signals from the optical sensor (camera) and movement of the tread belt. Pet., 37-38. Thus, the exercise use data generated would be validated exercise use data.⁸

PO relies on Figure 6 of the '227 patent to discuss how the controller generates

⁸ Ray further describes validating both the user's identity and exercise routine simultaneously (Ray, 8:26-28, 13:24-30), thus providing an additional layer of validation. Pet., 38.

validated exercise use data “in response to” detection of a user by the sensor and movement of the operating unit. POR, 6-8. But Morris discloses a similar flow chart in its Figure 9 (below), which demonstrates that its controller generates validated exercise use data “in response to” detection of the user by a sensor and movement of the tread. Morris, [0021]; Pet. 8; Rawls, ¶¶121-23.

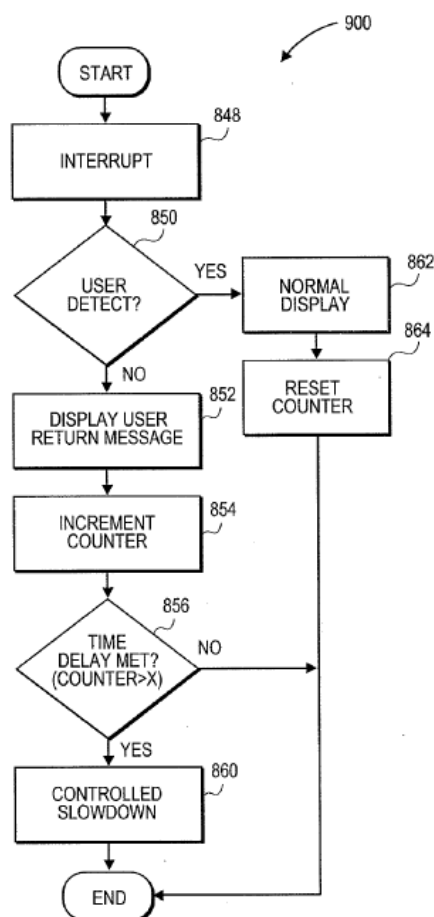


FIG. 9

At step 850, Morris’ user detection sensor (which can include an optical

sensor; Morris, [0033]) detects whether a user is engaged and sends signals to Morris' FIT processor/translation board (controller). *Id.*, [0045]; Pet., 8-9. Based on those signals, Morris' controller calculates various parameters (i.e., exercise use data), manages the motor driver, and outputs parameters to the display. Morris, [0032]; Rawls, ¶¶140-41; Pet., 27-28, 33-34. Morris' controller adjusts the display in response to the user detection sensor's signal. Morris, [0045]; Pet., 25, 27-28. When a user is detected, the program operates as normal. Morris, [0045]; Pet., 8-9. But if a user is not detected, Morris alters the display and triggers a controlled slowdown period. Morris, [0045]; Pet., 8-9. Morris' controller may also affect a workout program (including information on duration, distance, incline, intensity; Morris, [0035]) in response to detection of the absence of a user. *Id.*, [0036]; Rawls, ¶¶140-41; Pet., 8-9. Thus, validated exercise use data in the Morris-Ray combination is produced by the controller *in response* to detection of the user. Petitioner's analysis for claims 3 and 4 does not counsel otherwise.

2. Limitation 1[g]

Morris teaches that when a user is not detected and fails to return within a certain time (e.g., 6-8 seconds), a controlled slowdown is triggered. Morris, [0045], Fig. 8; Pet., 39-40. PO argues that Morris does not make any determination about the validity of the time data generated during this period. POR, 26. Instead, according to PO, it continues to generate data without the user being detected by the

sensor. *Id.* PO's argument rests on improper claim construction and ignores Petitioner's obviousness argument.

PO's construction requiring three types of exercise use data is incorrect. EX-1016; Section II.C.

As the Petition explains, a POSITA, considering the disclosure of Morris and Ray, would have found it obvious that exercise use data not dependent on the user's presence, e.g., time, would continue to generate in the absence of the user. Pet., 40. For example, Morris recognizes this issue and finds it "advantageous to alert the user to reengage or halt the belt movement" when the user stops using the treadmill but leaves the belt running. Morris, [0006]; Pet., 8-9. When a user departs without stopping the belt, their absence is detected, the FIT processor displays an alert message and checks for the user detect signal; if the user does not return after some time, the treadmill begins a controlled slowdown. Morris, [0045], Pet., 39-40; Rawls, ¶¶185-86.

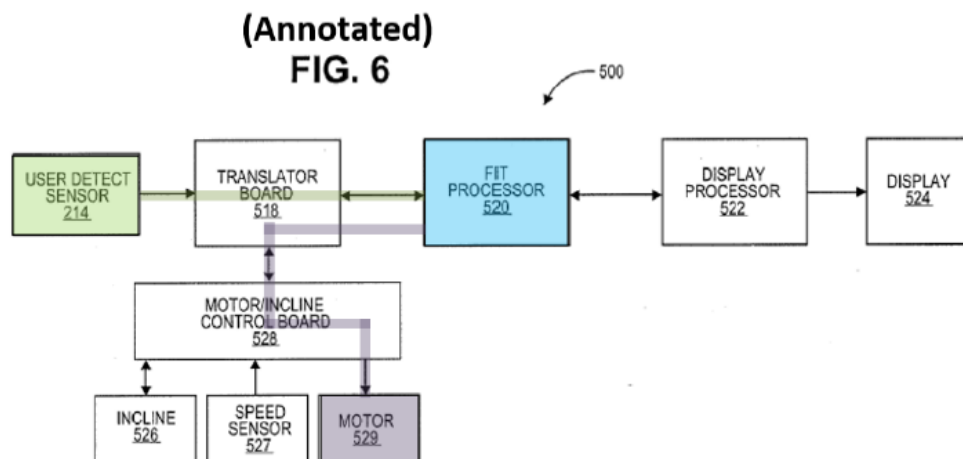
A POSITA would also recognize that non-validated exercise use data, e.g., time, would still be generated during this period because it would indicate to the user that the treadmill was still running, so they needed to reengage with caution, and it would allow generation of validated data to easily resume when the user returned. Pet., 40; Rawls, ¶186. Continuing or not continuing to generate exercise use data while the treadmill was running amounted to only two options, where choosing to

continue generating would be an obvious alternative to a POSITA. Rawls, ¶187. This generated data would be non-validated by Morris' controller because, in the combination, this data is generated in the absence of the user and is not reported or subject to the validation process of Ray. Pet., 40; Rawls, ¶¶184-86; Ray, 6:53-57, 14:6-14, 14:41-46; Morris, [0045], Fig. 9.

3. Limitation 1[i]

PO contends that Morris' controller would not transmit Ray's virtual image to third parties. POR, 26-27. But limitation 1[i] requires transmitting the validated exercise use data to *the communication interface* and not to a third party.

As the Petition explains, Morris and Ray each disclose a variety of communication interfaces, including those that allowed user's motivational image and other data to be transmitted over the Internet, e.g., via a live feed to a remote location or to a storage server. Morris, [0035]-[0036]; Ray, 3:46-51, 6:67-7:10, 8:1-10, 13:65-67; Pet. 29-30.



Morris shows that its FIT processor (controller) communicates with a display via display processor 522. Morris, [0035], Fig. 6; Pet., 29. The Petition describes the role of the controller in transmitting data to the communication interface and third party—“the controller ... received the generated exercise data from, and under the control of, the controller in order to transmit to a storage device and/or to a third party via a live feed. (Rawls, ¶172.)” Pet., 31-32, 41; Ray, 13:20-24, 13:35-37.

PO further erroneously argues that Ray describes only sending the actual image of the user, and not its morphed image, to a third party. POR, 27. To the contrary Ray’s expressly teaches that the user’s thinned image is sent to a third party. Ray, 5:49-51, 13:7-17; Pet., 41.

B. Ground 2

1. Petition Explicitly Identifies Each Element in the Prior Art

PO argues that Ground 2 should be rejected because the Petition “jumps” directly into dependent claims 10-11, 13, and 20. POR, 29-30. PO’s argument asking Petitioner to repeat its mapping for the base claims is misplaced. Petition identifies how each prior art combination discloses each limitation of the asserted claims. PO identifies no requirement that Petitioner must repeat its position for the independent claims in Ground 1 from which claims 10-11, 13, and 20 depend. POR, 29-30.

The authority PO cites for its position is distinguishable. In *Sandbox Med. v. Neotech Prods., Inc.*, in Ground 4 Petitioner substituted attorney argument for precise citations to the prior art and failed to explain why a POSITA would have combined the references. IPR2019-00246, Paper 22 at 29 (May 6, 2020). Conversely, Petitioner here maps disclosure in the prior art to each limitation and includes supporting citations to Mr. Rawls. In *Microsoft Corp. v. FG SRC LLC*, Microsoft attempted to rely on an “unrelated ground in an unrelated section of its petition” to deduce its argument. 860 F. App’x 708, 712-13 (Fed. Cir. 2021). Here, Petitioner’s Ground 2, which simply adds another reference that adds a current sensor, immediately follows Ground 1 that addresses the related independent claims. Petition further explains how the references are combined and motivation for that combination. Pet., 56-59. PO’s argument should be rejected.

2. Motivation to Combine

Outside of its arguments for claim 1, PO does not dispute that the combination of Morris, Ray, and Cox discloses claims 10-11, 13, and 20. POR, 32-33. Instead, PO argues that a POSITA would not be motivated to combine the Morris-Ray combination with Cox for three reasons—none are correct.

First, PO argues that nothing in Ray or Morris suggests that improvements are needed to Ray’s motivational image. POR, 31. Ray, however, disclosed the benefits of other sensors that could assist with feedback to a user. Pet., 57; Ray, 10:24-35,

11:21-55, 16:1-43. A POSITA would be motivated to look to Cox’s current sensor as an inexpensive option that would provide redundancy and accuracy to user detection and the amount of work exerted. Pet., 58; Rawls, ¶236.

Second, PO argues that nothing in Morris suggests that improvements are needed to Morris’ gait analysis. POR, 31-32. Morris, however, contemplated having multiple sensors. Pet., 57; Morris, [0033]. Both Morris and Cox described gait analysis techniques using complementary sensors. Pet., 57-58; Morris, [0009]; Cox, 3:9-21; Rawls, ¶236. A POSITA would have recognized that Cox’s current sensor could improve feedback on a user’s gait. Pet., 58; Rawls, ¶238.

Finally, PO argues that a POSITA would not be motivated to add a third “costly” sensor. POR, 32. PO’s argument improperly restricts a POSITA’s motivation to the purpose for the purported invention of the ’227 patent. *See Janssen Pharma., Inc. v. Teva Pharma. USA, Inc.*, 97 F.4th 915, 929-30 (Fed. Cir. 2024) (“[T]he motivation analysis is not limited to the problem or need recognized by the inventors.”). A POSITA’s motivation to include Cox’s sensor is not limited to inclusion of a redundant sensor to detect a user (although that is present too; Rawls, ¶237). Instead, a POSITA’s motivation includes improvements to gait analysis that provided enhanced accuracy and additional features provided by Cox’s current sensor without requiring multiple pressure sensors on multiple locations, as Morris did. Pet., 58-59; Rawls, ¶¶236-38. Incorporation of Cox’s sensor would not be

“costly” because it did not require sophisticated implementation (Cox, 1:54-61; Pet. 58; Rawls, ¶237) and could be integrated into a standard treadmill. Cox, 4:32-39; Pet. 57.

C. Ground 3

1. Reliance on AAPA Permissible

PO argues that Petitioner’s reliance on AAPA for limitation 1[g] is improper. POR, 24-25. PO is incorrect. Director Vidal’s June 2022 memorandum allows for reliance on AAPA if it is relied on in combination with one or more prior art patents or printed publications. EX-1017, 3-4; *Qualcomm Inc. v. Apple Inc.*, 24 F.4th 1367, 1376-77 (Fed. Cir. 2022). Ground 3 relies on Ray in view of AAPA. PO’s argument should be rejected.

2. AAPA Teaches Limitation 1[g]

PO argues that AAPA does not disclose non-validated exercise use data because AAPA does not disclose that non-validated exercise use data is generated by the controller *in response to* movement of the operating unit and the sensor not detecting a user. POR, 35-36. PO is incorrect.

PO does not dispute that Ray’s controller generates exercise use data, such as time, that is related to treadmill functions and not user detection. Pet., 72-73. When Ray’s sensor does not detect a user (e.g., if the user steps off), this data would still be generated but would not be transmitted to a third party and would not be validated

by Ray's validation process. Pet., 73; Rawls, ¶266. 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.

PO argues that the existence of these two known alternatives is premised on an incorrect construction of “non-validated exercise use data” because Ray's controller purportedly does not generate this data in response to the sensor not detecting the user. POR, 35-36. PO's proposed construction should be rejected. *See* Section II.C.

Even if the Board adopts PO's construction, Ray in view of AAPA still taught or suggested limitation 1[g]. PO does not dispute that a POSITA would have found it obvious that Ray's electronic device includes a processor (controller) in communication with the belt and the sensor, and is responsible for generating exercise use data. Pet., 71-72. A POSITA would have understood that Ray's **controller** would assess whether a user was exercising and generate validated exercise use data (including images or video) in response to its camera detecting a user exercising and movement of the belt. Ray, 6:53-55; Pet., 71-72, 74-75. Ray describes “a set of computer-implemented instructions” stored on the memory of the

electronic device that causes the camera to record images/video and to detect whether a user was present. Ray, 13:20-30, 14:6-19. If Ray's optical sensor did not detect user engagement, it would stop recording images. Ray, 6:55-57. But Ray is silent as to whether the remaining tread-only related data such as time would still be generated. A POSITA would have found it advantageous and obvious for Ray's controller to continue generating exercise use data, such as time, in response to the sensor not detecting a user, as one of the two known alternatives already described in the prior art and admitted in the '227 patent, and because of the safety advantage it provided. Pet., 72-73.

3. Ray Teaches Limitations 1[g] and 1[i]

PO disputes that Ray discloses limitations 1[h] or 1[i] in Ground 3 based on assertions similar to those in Ground 1. PO's arguments are incorrect for the same reasons discussed in Ground 1 above. Pet., 74; Ray, 3:47-51, 5:9-51, 7:4-10, 8:1-8.

D. Ground 4

PO sets forth four arguments. First, PO argues that Petitioner did not specify where each element is found in the prior art. POR, 37-38. PO's argument should be rejected. *See* Section III.B.1.

Second, PO's argument that Petitioner cannot rely on AAPA should be rejected for the reasons above. *See* Section III.C.1.

Third, PO argues that a POSITA would not be motivated to combine Ray,

AAPA, and Cox because: (1) nothing in Ray suggests needing improvements to its motivational image and (2) there is no motivation to implement another sensor for detecting the presence of a user. POR, 39-39. PO's arguments should be rejected for the same reasons discussed above. *See* Section III.B.2; Pet., 78-80.

Finally, PO argues that Petitioner's reference back to its analysis of Ground 1 for claims 10-11 and 20 is fatally flawed because Ground 1 includes the teachings of Morris but Ground 4 does not. POR, 40. PO's argument ignores Petitioner's discussion of the prior art. Ground 4 builds upon the combination in Ground 3 by including Cox's teachings of a current sensor for claims 10-11 and 20. PO identifies no requirement that Petitioner must repeat its position for the independent claims in Ground 3⁹ from which claims 10-11, and 20 depend. To avoid unnecessary repetition, Petitioner also relies on its analysis of Cox's current sensor from Ground 2. The portions of Petition addressing claims 10 and 11 do not discuss or rely on the teachings of Morris (Pet., 60-65), and Petition is clear that "the current sensor of Cox is implemented into Ray's treadmill." *Id.*, 80.

⁹ Petitioner incorrectly argues that Petitioner's Ground 4 positions rely on the teachings of Morris for independent claim 1. POR, 40. Petitioner relies on Ground 3 (Pet., 79-80), where Ray in view of AAPA renders claim 1 obvious.

E. Ground 5

PO does not dispute the merits of Petitioner's combination of Ray, AAPA, and Daly for Ground 5. PO argues that the claims are valid for three reasons.

First, PO argues that Petitioner did not specify where each element is found in the prior art. POR, 40-42. PO's argument should be rejected. *See* Section III.B.1.

Second, PO argues that Petitioner cannot rely on AAPA. POR, 42. PO's argument is wrong. *See* Section III.C.1.

Third, PO argues that a POSITA would not be motivated to combine Ray, AAPA, and Daly. PO relies on the same reasons it used against the combination Ray and Cox in view of AAPA for Ground 4. POR, 42. For the same reasons discussed above in Sections III.B.2 and III.D, PO's argument should be rejected. Pet., 81-83.

F. Ground 6

PO relies on the same arguments it alleged for Grounds 2 and 5 that Petitioner (1) fails to specify where each element is found; (2) improperly relies on AAPA; (3) provide a motivation to combine; and (4) fails to establish obviousness for claim 12, from which claim 13 depends.

PO's first argument should be rejected for the same reasons discussed in Section III.B.1. PO's second argument is contradicted by the guidance of Director Vidal discussed in Section III.C.1. PO's third argument should be rejected for the

same reasons discussed in Sections III.B.2 and III.E. Pet., 88-89. PO's final argument should be rejected for the same reasons discussed in Section III.C.

IV. THE VAN DER WEIDE DECLARATION SHOULD BE AFFORDED LITTLE WEIGHT

Under 37 C.F.R. § 42.65(a), “[e]xpert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” The conclusory statements in the van der Weide Declaration should be afforded little weight because they merely parrot the POR's conclusory statements without adding any facts or data to support the view of a POSITA.¹⁰

For example, PO argues that a POSITA would not have been motivated to combine Cox with Ray and Morris. POR, 30-32. PO relies on paragraphs 82-85 of the van der Weide Declaration in support of its position. A comparison of these sections confirms that Dr. van der Weide parrots the conclusory rationale of the POR, merely swapping the term “Petitioner” for “Mr. Rawls”. *Compare* POR, 30-32, *with* EX-2004, ¶¶82-85. A comparison of the remaining portions of Dr. van der Weide's declaration demonstrates that he does not offer additional supporting

¹⁰ The parties' respective definitions of a POSITA are similar. *Compare* Rawls, ¶33, *with* EX-2004, ¶51. The challenged claims are invalid under either definition of a POSITA set forth by Petitioner or Patent Owner.

evidence or provide any technical reasoning to support his conclusory statements. Accordingly, the van der Weide Declaration should be afforded little weight. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (PTAB 2022) (precedential) (“Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”).

V. CONCLUSION

Petitioner requests the Board find claims 1-20 of the ’227 patent unpatentable as obvious over the prior art.

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CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(d)

Under 37 C.F.R. § 42.24(d), the undersigned certifies that the word count for this *Petition for Inter Partes Review* totals 5,598, excluding the parts exempted by 37 C.F.R. § 42.24(a). Accordingly, this paper is under the word count limit of 5,600 words.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that I caused to be served a true and correct copy of the foregoing: **PETITIONER PELOTON INTERACTIVE, INC.'S REPLY TO PATENT OWNER'S RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT No. 10,032,227 AND SUPPORTING MATERIALS** by email to the electronic service addresses for Patent Owner:

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