

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIFECORE FITNESS, LLC d/b/a ASSAULT FITNESS,
Petitioner,

v.

WOODWAY USA, INC.,
Patent Owner.

IPR2024-00083
Patent 11,465,005 B2

Before MEREDITH C. PETRAVICK, NEIL T. POWELL, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

PETRAVICK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

MOTION TO EXCLUDE
Denying-in-Part and Dismissing-in-Part
Patent Owner's Motion to Exclude
37 C.F.R. § 42.64(c)

I. INTRODUCTION

A. *Background and Summary*

LifeCore Fitness, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–4, 6–13, 15, and 16 of U.S. Patent No. 11,465,005 B2 (Ex. 1001, “the ’005 patent”). Paper 2 (“Pet.”).

On October May 17, 2024, we instituted *inter partes* review as to all challenged claims and all grounds presented in the Petition. Paper 13 (“Institution Decision” or “Inst. Dec.”).

After institution, Patent Owner filed a Response to the Petition. Paper 23¹ (“PO Resp.”). Petitioner filed a Reply. Paper 37 (“Pet. Reply”). Patent Owner filed a Sur-reply. Paper 39 (“PO Sur-Reply”). An oral hearing was held on February 18, 2025 and the transcript² is entered into the record. Paper 57 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the challenged claims of the ’005 patent.

For the reasons discussed below, we determine that Petitioner has established by a preponderance of the evidence that claims 1–4, 6, 7, 9–13, 15, and 16 are unpatentable but fails to establish by a preponderance of the evidence that claim 8 is unpatentable.

¹ The record contains sealed and redacted versions of some papers. We refer to the redacted papers in this decision.

² Judge Laney was added to the panel after the oral argument. Judge Laney has reviewed the transcript of the oral argument, in addition to the entirety of the record.

B. Real Parties in Interest

Patent Owner identifies Woodway USA, Inc. as the real party in interest. Paper 3, 1.

The Petition identifies LifeCore Fitness, Inc. (“the California Corporation”) as the real party in interest. Pet. ix. On March 11, 2024, Petitioner filed Updated Mandatory Notices stating:

On April 19, 2023, LifeCORE Fitness, Inc. converted from a California corporation to a Delaware limited liability company, LifeCORE Fitness, LLC.

On February 7, 2024, Sprinter Merger Sub, LLC, a Delaware limited liability company and wholly-owned subsidiary of FitLab Inc., merged with and into LifeCORE, and as a result, FitLab Inc. became the majority equity holder of LifeCORE. LifeCORE Fitness, LLC is now a subsidiary of FitLab Inc. and continues to do business as Assault Fitness.

Paper 7, 1. In the Updated Mandatory Notices, Petitioner identifies LifeCore Fitness, LLC d/b/a Assault Fitness and FitLab Inc. (“the Delaware Corporation”) as the real parties in interest. *Id.*

Prior to institution, Patent Owner argued that we should dismiss the Petition because it identifies the Petitioner as the California Corporation and not the Delaware Corporation. Paper 6, 23–24 (Preliminary Response); Paper 9, 1 (Preliminary Sur-Reply); Paper 12 (Conference Call Transcript); Paper 18 (Request for Director Review). In our Decision on Institution, we found Patent Owner’s argument, as applied to the facts of this proceeding, to be unpersuasive and corrected the caption to correctly reference Petitioner as the California Corporation, essentially replacing the “Inc.” with “LLC” in Petitioner’s name. Paper 13, 14–17; *see also* Paper 21 (Decision Denying Director Review).

For the first time after institution, during oral argument, Patent Owner attempted to renew its argument by referring to pre-institution argument made mostly in the Preliminary Response and Preliminary Sur-Reply. *See* Tr. 26:12–27:2 (“Patent Owner . . . renews its arguments as detailed in papers 6 and 9 and as stated during the conference before Your Honors on May 7th of 2024, relating to the statutory provision identifying who constitutes a person”); Ex. 2089, 3.

When asked where Patent Owner raised its argument post-institution, Patent Owner represented to the Board that the argument was raised in a single sentence on page one of the Patent Owner’s Response and nowhere else in the Patent Owner’s Response. *See* Tr. 66:20–69:15. The sentence is as follows:

Woodway USA, Inc. (“Patent Owner” or “Woodway”) submits this Response to the Petition for *inter partes* review (“IPR”) of claims 1-4, 6-13, 15-16 (“Challenged Claims”) of U.S. Patent No. 11,465,005 (“the ’005 Patent”), filed by LifeCORE Fitness, Inc. (now LifeCORE Fitness, LLC), d/b/a Assault Fitness (“Petitioner”).

PO Resp. 1. Contrary to Patent Owner’s representation, this sentence is not an argument. It is a statement of fact and insufficient to support Patent Owner’s representation that Patent Owner raised its argument in the Patent Owner’s Response.

Our Scheduling Order states: “Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.” Paper 14, 9; *see also* Consolidated Trial Practice Guide,³ 94; *In re NuVasive, Inc.*, 842 F.3d 1376, 1380–81 (Fed. Cir. 2016) (holding Patent Owner waived an

³ Available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf?MURL=TrialPracticeGuideConsolidated>.

argument addressed in the Preliminary Response by not raising the same argument in the Patent Owner Response). Patent Owner had the opportunity to renew its pre-institution argument in the Patent Owner's Response and did not do so. We determine that Patent Owner has waived this argument.

C. Related Matters

The parties identify the following related court proceeding:

Woodway USA, Inc. v. LifeCore Fitness, Inc. d/b/a Assault Fitness, Case No. 3:22-cv-00492 (S.D. Cal.) (“the District Court Litigation”). Pet. ix; Paper 3, 1. However, “[O]n November 22, 2024, the District Court, by way of a Stipulated Order to Dismiss Certain Claims, dismissed the ’005 patent from the case.” Paper 51, 1 (citing Ex. 1055); *see also* Paper 50, 1.

Petitioner also indicates that “the related ’005 Patent was at issue in” the following proceedings: *Woodway USA, Inc. v. Samsara Fitness, LLC et al.*, Case No. 2:15-cv-00956 (E.D. Wis.), and *Chapco, Inc. et al v. Woodway USA, Inc.*, Case No. 3:15-cv-01665 (D. Conn).

Pet. ix;

This proceeding is related to the following *inter partes* reviews: IPR2023-00836 (U.S. Patent No. 9,039,580 B1), IPR2023-00843 (U.S. Patent No. 10,561,884 B2), and IPR2023-00849 (U.S. Patent No. 10,799,745 B2) (collectively, “the Related IPRs”). We have issued Final Written Decisions in each of these proceedings.

D. The '005 patent

The '005 patent is titled “Manually Powered Treadmill” and issued on Oct. 11, 2022. Ex. 1001, code (45), (54). The '005 patent depicts manual treadmill 10 in Figure 1, which is reproduced below.

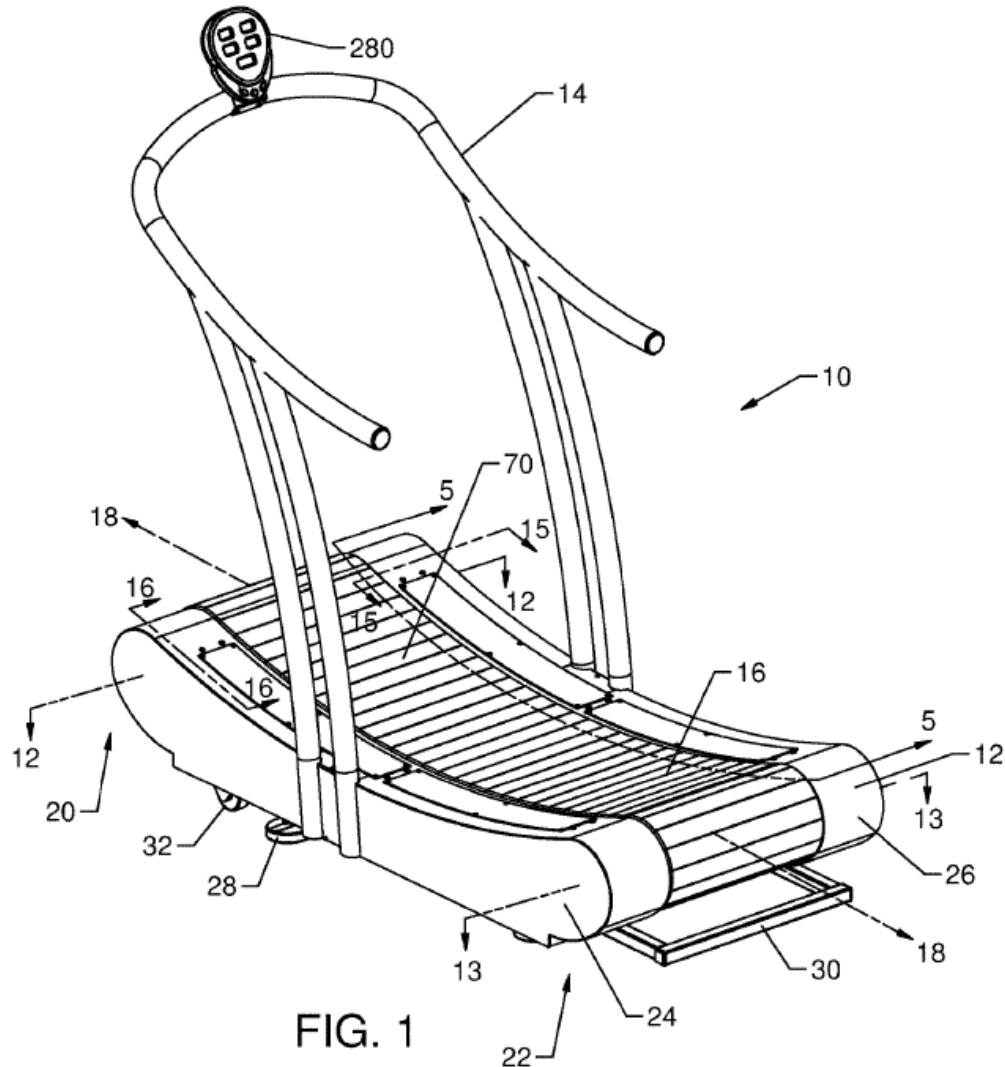


Figure 1 shows manual treadmill 10, having a handrail 14 mounted on a base 12, which supports running belt 16. *Id.* at 4:50–54. Running belt 16 has a non-planar running surface 70. *Id.* at 6:14–17. As a user runs on the treadmill, running belt 16 moves (rotates) in a generally clockwise direction as seen in Figure 1. *Id.* at 6:53–58.

Figure 2 of the '005 patent is reproduced below.

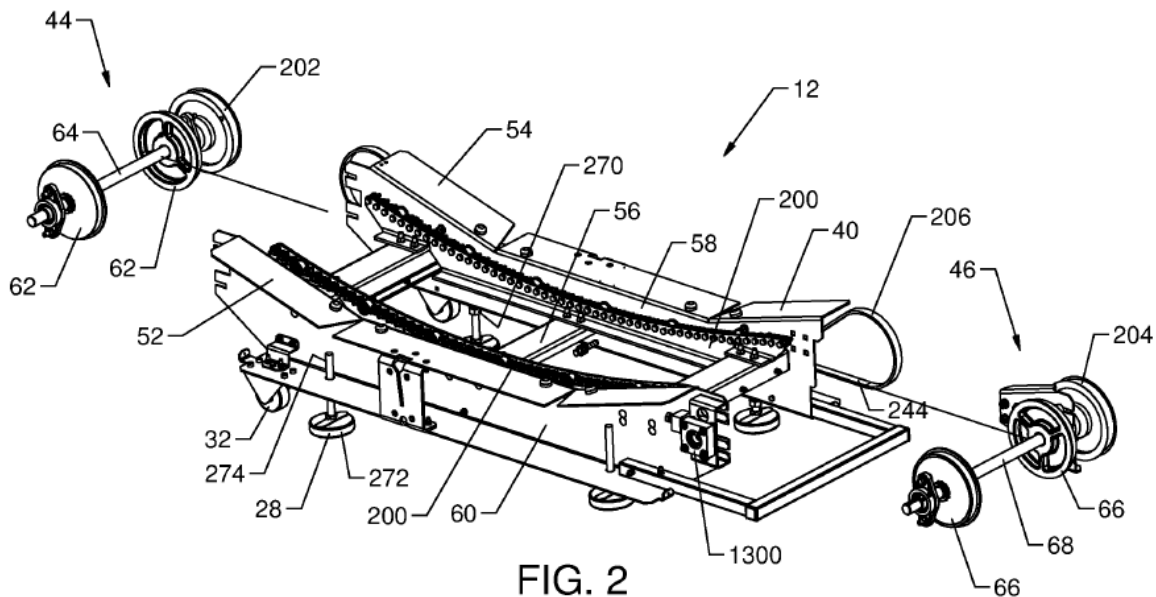


Figure 2 depicts an embodiment of base 12, having a frame 40, front shaft assembly 44, and rear shaft assembly 46. *Id.* at 5:13–16. Rear shaft assembly 46 has running belt pulleys 66 interconnected with shaft 68. *Id.* at 5:34–39. Base 12 includes “a pair of opposed bearing rails 200 to support the running belt 16 along with a front synchronizing belt pulley 202, a rear synchronizing belt pulley 204, and a synchronizing belt 206 all of which are interconnected to the running belt 16.” *Id.* at 11:11–16.

Figure 9 of the '005 patent is reproduced below.

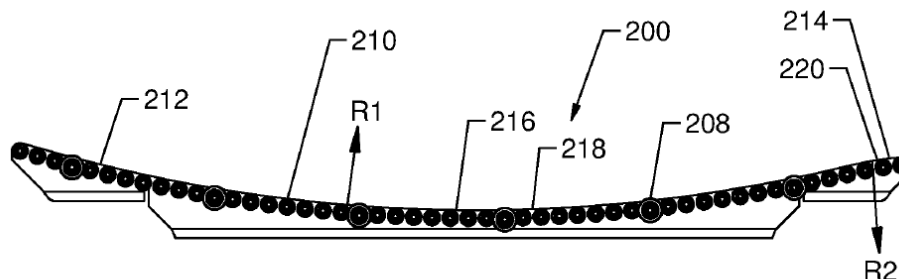


Figure 9 depicts bearing rail 200. *Id.* at 3:26–27. Bearing rail 200 includes a plurality of bearings 208 and has top profile 210, which is shaped as a

complex curve in this embodiment. *Id.* at 11:20–23. However, the shape of the top profile can have variations and may not have an entirely smooth contour. *Id.* at 12:12–25, Figs. 7a–7j.

Forward rotation of running belt 16 is undesirable because it could cause a user to lose their footing, resulting in injury. *Id.* at 27:2–10. Manual treadmill 10, thus, may include safety devices to prevent forward rotation. *Id.* at 27:11–19.

One safety device is depicted in Figure 36 of the '005 patent, reproduced below.

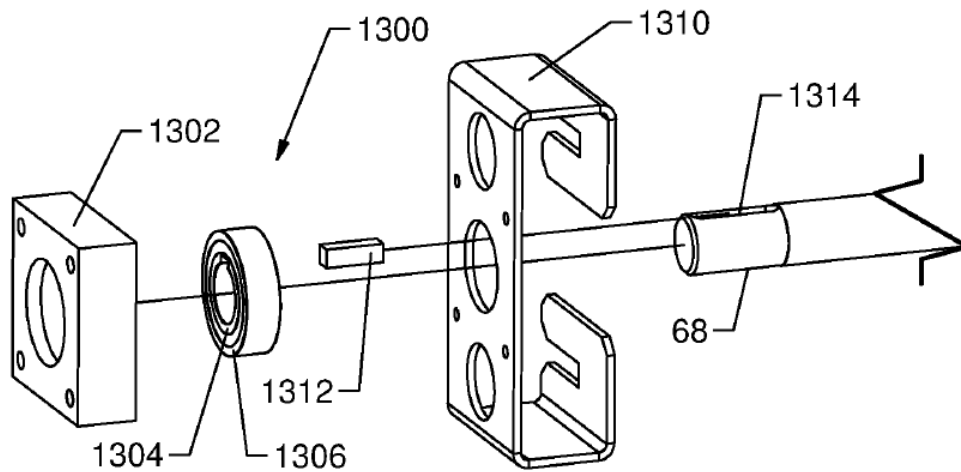


FIG. 36

Figure 36 depicts one embodiment of a one-way bearing assembly. *Id.* at 4:37–39. One-way bearing assembly 1300 restricts motion by permitting rotation of front and rear shaft assemblies 44, 46 in only one direction. *Id.* at 27:15–19. One-way bearing assembly 1300 has inner ring 1304 and an outer ring 1306. *Id.* at 27:22–26. Disposed between inner ring 1304 and outer ring 1306 are sprags (not shown) that are asymmetric and, thus, allow for motion in one direction and prevent rotation in the opposite direction. *Id.* at 27:26–29. Housing 1302 is fixed to a bracket 1310 that is connected to, and

preferably directly mounted to, the frame 40 to fix the location of the housing 1302 and prevent movement of the housing 1302 in response to the rotation of the rear shaft 68. *Id.* at 27:29–33. Key 1312 is fixed to inner ring 1304 and cooperates with keyway 1314 in rear shaft 68, and, thus, inner ring 1341 rotates with rear shaft 68. *Id.* at 27:43–46.

If a force is applied by the user to the running belt 16 that urges the rear shaft 68 to rotate counterclockwise, the one-way bearing assembly 1300 provides a counter force, preventing the counterclockwise rotation of the rear shaft 68 and the forward rotation of the running belt 16. Specifically, as the rear shaft 68 begins to move counterclockwise, the interaction of the key 1312 and the keyway 1314 begins to drive the inner ring 1304 of the one-way bearing assembly 1300 rearward. The Sprags become wedged between the inner ring 1304 and the outer ring 1306, preventing the counterclockwise rotation of the inner ring and key 1312 disposed therein. The key 1312, by virtue of its inability to rotate, provides a counterforce to the keyway 1314 as the keyway continues to attempt to rotate counterclockwise. By preventing the keyway 1314 from moving counterclockwise, the one-way bearing assembly 1300 thus prevents the rear shaft 68, the rear running belt pulleys 66, and running belt 16 from rotating counterclockwise as seen in FIGS. 1 and 5.

Id. at 27:53–28:4.

The '005 patent discloses another embodiment of a safety device having a one-way bearing assembly. *Id.* at 28:5–12, Fig. 38. Additionally, the '005 patent discloses other safety systems to prevent undesirable forward rotation of running belt 16, such as a cam locking system, taper locks, a user operated pin system, or a band brake system with a lever. *Id.* at 29:30–35.

E. Illustrative Claim

Petitioner challenges claims 1–4, 6–13, 15 and 16 of the '005 patent. Claims 1, 9, and 15 are independent. Claims 2–4 and 6–8 depend directly or indirectly from claim 1, claims 10–13 depend directly or indirectly from claim 9, and claim 16 depends from claim 15. Claim 1 is illustrative and reproduced below, with limitation labels added in brackets.

1. [1(a)] A manually powered treadmill, comprising:
 - [1(b)] a frame;
 - [1(c)] at least one front running belt pulley coupled to the frame;
 - [1(d)] at least one rear running belt pulley coupled to the frame and spaced a distance from the at least one front running belt pulley;
 - [1(e)] a running belt at least partially supported by at least one of the at least one front running belt pulley and the at least one rear running belt pulley, wherein the running belt includes a running surface, at least a portion of which is curved;
 - [1(f)] a safety device coupled to the frame and the running belt, the safety device having a first element and a second element, the first element substantially surrounding the second element or the second element substantially surrounding the first element;
 - [1(g)] wherein one of the first and second elements of the safety device and the running belt freely rotate in a first direction of rotation relative to the frame, however, in a second direction of rotation, opposite the first direction of rotation, the one of the first and second elements is substantially prevented from rotation relative to the frame to substantially prevent or resist rotation of the running belt relative to the frame.

Ex. 1001, 32:60–33:16.

F. Evidence and Asserted Grounds

Petitioner asserts that claims 1–4, 6–13, 15, and 16 would have been unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–4, 6, 7, 9–13, 15, 16	103	Socwell, ⁴ Magid, ⁵ Sclater ⁶
1–4, 6–13, 15, 16	103	Tollkien, ⁷ Sclater

Petitioner relies upon the Declarations of Robert Giachetti, Ph.D. (Exs. 1003, 1036) to support its patentability analysis.

To support its patentability arguments, Patent Owner relies upon the Declaration of Kim B. Blair, Ph.D. Ex. 2018. To support its secondary consideration arguments, Patent Owner relies upon Eric A. Weber. Ex. 2020.

II. ANALYSIS

A. Legal Standards

“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

⁴ U.S. Patent No. 5,897,461, issued Apr. 27, 1999 (Ex. 1011).

⁵ U.S. Patent No. 5,538,489, issued July 23, 1996 (Ex. 1012).

⁶ Neil Sclater & Nicholas P. Chironis, *Mechanisms & Mechanical Devices Sourcebook*, Third Ed. (McGraw-Hill 2001) (Ex. 1017).

⁷ DE 19922822 B4, issued July 15, 2004 (Ex. 1031).

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). “[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *U.S. v. Adams*, 383 U.S. 39, 50–51 (1966)). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various non-exhaustive factors may be considered, including: “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007) (quoting *Env’tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983)).

Petitioner contends that a person of ordinary skill in the art (“POSA”) “would have had a bachelor’s degree in mechanical engineering and at least

one year of machine design experience related to power transmission equipment and a demonstrated understanding of the biomechanics of exercise, including knowledge in the field of anthropometry (*i.e.*, the study of human proportions).” Pet. 4 (citing Ex. 1003 ¶¶ 48, 44–49 (supporting testimony of Dr. Giachetti)); Pet. Reply 6–7. Petitioner additionally states that “[t]his description is approximate and additional development experience could make up for less education and vice versa.” Pet. 4.

Patent Owner argues that a POSA “would be a person with a bachelor of science degree in mechanical engineering *or* at least two years of experience in the treadmill industry, including experience and knowledge of the design, construction, testing, and operation of manual treadmills.” PO Resp. 4 (emphasis original) (citing Ex. 2018 ¶¶ 61–66 (supporting testimony of Dr. Blair)). Patent Owner argues that its proposed level does not exclude the inventors of the ’005 patent, who do not have a mechanical engineering degree. PO Resp. 4; PO Sur-reply 1–2. Patent Owner, however, states that the patentability analysis would not change whether we adopt Petitioner’s or Patent Owner’s definition. PO Resp. 4.

Petitioner disagrees with Patent Owner’s proposed definition and argues that both education and industry experience are necessary for a POSA to understand the ’005 Patent. Pet. Reply 1 (Ex.1003 ¶¶ 44–49).

We do not adopt Patent Owner’s definition of the level of ordinary skill in the art because it is overly broad, so as to encompass a POSA with only a mechanical engineering degree and no knowledge related to treadmills. A POSA should have some knowledge related to treadmills as the ’005 patent and the prior art all relate to the field of treadmills. *See generally* Exs. 1001, 1009–1013; *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Both Petitioner and Patent Owner's definitions encompass a person who has at least a degree in mechanical engineering degree. Pet. 4; PO Resp. 4. Petitioner's definition additionally requires a POSA to have knowledge of exercise biomechanics, including anthropometry, and Patent Owner's definition encompasses a person having knowledge of design, construction, testing, and operation of manual treadmills. Patent Owner argues that any definition that requires a POSA to be a degreed engineer with a demonstrated understanding of exercise biomechanics, including anthropometry, would necessarily exclude certain named inventors. *Id.* at 4. We agree with Patent Owner that that experience and knowledge of treadmills is required, but the knowledge of exercise biomechanics, including anthropometry, is not.

Accordingly, we determine that a POSA would have a Bachelor's of Science degree in mechanical engineering and at least one year of experience in the treadmill industry, including experience and knowledge of the design, construction, testing, and operation of manual treadmills overall.

However, our analysis and conclusions as to patentability would not change if we had adopted either Petitioner's or Patent Owner's definitions. We note that the parties do not indicate that the outcome of our patentability analysis would differ based on the definition of a POSA. *See* Pet. 4; PO Resp. 4; Pet. Reply 1; Pet. Sur-reply 1.

C. Claim Construction

We construe each claim "in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100(b). Under this standard, claim terms are generally given their plain

and ordinary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). Only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019).

In the Petition, Petitioner states that claim terms should be construed according to their ordinary and customer meaning. Pet. 13–14. After the Petition was filed in the related litigation, the district court issued a Markman Order (Ex. 1033) construing the terms “substantially prevent” and “safety device.”

1. “*substantially prevent*”

The district court construed “substantially prevent” as “restricts rotation to allow for only one rotational direction of movement.” Ex. 1033, 16. In this proceeding, we need not construe this claim term as there is no related dispute.

2. “*safety device*”

For the ’005 patent, the district court construed “safety device” as “a device that includes the elements recited and restricts rotation to allow for only one rotational direction of movement or resists rotation in one direction of rotation.” Ex. 1033, 23.

Both parties indicate that we should adopt the district court’s construction. PO Resp. 6; Pet. Reply 2. We, thus, construe “safety device” as “a device that includes the elements recited and restricts rotation to allow for only one rotational direction of movement or resists rotation in one direction of rotation.”

3. “*bearings*”

Claim 6 depends from claim 1 and recites the additional limitation — “a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.” *Id.* at 33:31–34. Claims 13 and 16 recite the same additional limitation as claim 6. *Id.* 34:13–16, 34:44–47.

Both Petitioner and Patent Owner indicate that we should construe the term bearings to have its plain and ordinary meaning. *See* Pet. 13–14; PO Resp. 5. The parties, however, disagree as to what the plain and ordinary meaning requires of the claimed bearings.

Patent Owner argues, based on the disclosure of the ’005 patent, that each of the bearings of the claimed plurality of bearings are required to be located below the running belt and have a weight bearing relationship with the running belt. PO Resp. 8–9; PO Sur-reply 5–6. Patent Owner asserts that “[s]imply being a ‘roller’ that contacts or is attached to the running belt is not enough to make something a ‘bearing.’” PO Resp. 9.

Petitioner disagrees and argues that “[t]he plain and ordinary meanings of ‘*bearing*’ is ‘a mechanical element that provides a means for low friction movement between two surfaces.’” Pet. Reply 3 (citing Ex. 1003 ¶ 65; Ex. 1036 ¶ 11; Ex. 1051, 163)⁸. Petitioner argues that Patent

⁸ Patent Owner argues that we should not consider Petitioner’s Reply and Exhibits 1036 and 1051 because the Reply and Exhibits relate to new arguments which should have been made in the Petition. PO Sur-Reply 4–5. We do not agree. Petitioner may rely upon Exhibits 1036 and 1051 to response to arguments raised in the Patent Owner’s Response. *See* PO Resp. (a); *Axonics, Inc. v. Medtronics, Inc.*, 75 F.4th 1374, 1380–1382 (Fed. Cir. 2023) (“we have continued to recognize that a petitioner is entitled under the APA to respond to new claim construction arguments made by a patent owner.”)

Owner’s proposed construction is inconsistent with the plain language of the claims and the plain and ordinary meaning of the term bearings. Pet. Reply 3.

Petitioner’s arguments are persuasive, and we do not construe the term bearing to require a bearing to be located below the running belt and have a weight bearing relationship with the running belt. To do so would be inconsistent with the plain language of the claims, the ’005 patent’s disclosure, and ordinary and customary meaning of bearing.

The claims recite “a plurality of bearing coupled to the frame, *at least one bearing* of the plurality of bearings configured to at least partially support the running belt.” Ex. 1001, 33:31–34 (emphasis added). The plain claim language requires the plurality of bearings to be coupled to the frame but is otherwise silent as to a location, such as, below the belt. The plain claim language does not require *all* of the bearings of the plurality of bearings to support the running belt. It only requires *at least* one bearing to *at least partially* support the running belt. To require *all* of the bearings to be positioned under the running belt and to bear at least some of the weight of the belt, would be inconsistent with the plain claim language.

Dr. Blair testifies:

A POSA would understand that the “plurality of bearings” must all be positioned below and have some kind of weight-bearing relationship with the running belt based on the ’005 Patent specification.

Ex. 2018 ¶ 73. Dr. Blair points to an exemplary embodiment in the ’005 patent that has all the bearings arranged together in bearing rails and has the bearing rails located under the belt. *Id.* ¶ 73 (citing Ex. 1001, 11:20–23, 11:39–43, Figs. 6, 8–9).

But, the '005 patent tell us that the constructions and arrangements shown in its exemplary embodiments are merely examples and may be altered or varies in position. Ex. 1001, 15:15–21; 15:36–57. And, exemplary embodiments must not into the claims reciting broader language. *See Superguide Corp. v. DirecTV Enter., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”). We find Dr. Blair’s testimony unpersuasive because Dr. Blair’s testimony attempts to import claim limitations from the '005 patent’s specification into the claims.

Dr. Blair also testifies that “for a structure to constitute a ‘bearing,’ it must support the belt either directly or indirectly and must bear some or all of the weight of the belt.” Ex. 2018 ¶ 80. According to Dr. Blair, because the '005 patent uses the term bearing to describe structures that support a belt sliding on top of it and uses other terms like rollers and wheels to describe structures that sit above the belt, a POSA would construe the term bearing to require the bearing to be position below the belt such that the belt slides on the bearing. *Id.* ¶¶ 74–80.

We note that the '005 patent also uses the term bearing to describe another structure not related to the belt – the safety device. *See* Ex. 1001, 27:13–29:29; *see also id.* at 28:65–67 (“the one-way bearing may include rollers”). Dr. Blair’s testimony does not account for how a POSA would have understood the term bearing in light of these additional descriptions.

See Ex. 2018 ¶¶ 70–80. For this additional reason, we find Dr. Blair’s testimony unpersuasive.

Dr. Giachetti testifies that “[a] bearing is a general term for a mechanical element that provides a means for low friction movement between two surfaces.” Ex. 1003 ¶ 65 (citing Ex. 1016, 2-1 (“Bearings allow smooth, low friction motion between two surfaces.”)); *see also* Ex. 1016, 2-5–2-8 (describing roller bearings); Ex. 1051, 163 (defining bearing as “in machinery, any part of a machine in or on which another part revolves, slides, etc.”); Ex. 1001, 11:39–43 (“bearings 208 are configure to rotate, thereby decreasing the friction experienced by the running belt 16 as the belt moves along the top profile 210”); Ex. 1036 ¶ 11.

We find Dr. Giachetti’s testimony persuasive as it is consistent with the ’005 patent use of the term bearing, the plain language of the claims, and the ordinary and customary meaning of the term bearing.

We, thus, adopt Petitioner’s proposed construction and construe bearing to be “a mechanical element that provides a means for low friction movement between two surfaces.”

We need not construe explicitly any other claim terms to reach our decision. *See Realtime Data*, 912 F.3d at 1375 (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Ground 1: Unpatentability over Socwell, Magid, and Sclater

Petitioner asserts that claims 1–4, 6, 7, 9–13, 15, and 16 are unpatentable over Socwell, Magid, and Sclater. Pet. 20–65.

1. Summary of Socwell

Socwell is a U.S. patent titled “Exercise Treadmill” and issued on April 27, 1999. Ex. 1011, codes (45), (54). Socwell discloses “a novel curved deck treadmill which provides a structurally supported arcuate shaped, movable surface on which a user may exercise.” *Id.* at 3:26–29. In one embodiment, the curved deck treadmill does not have a motor. *Id.* at 11:54–60.

Socwell's Figure 1 is reproduced below.

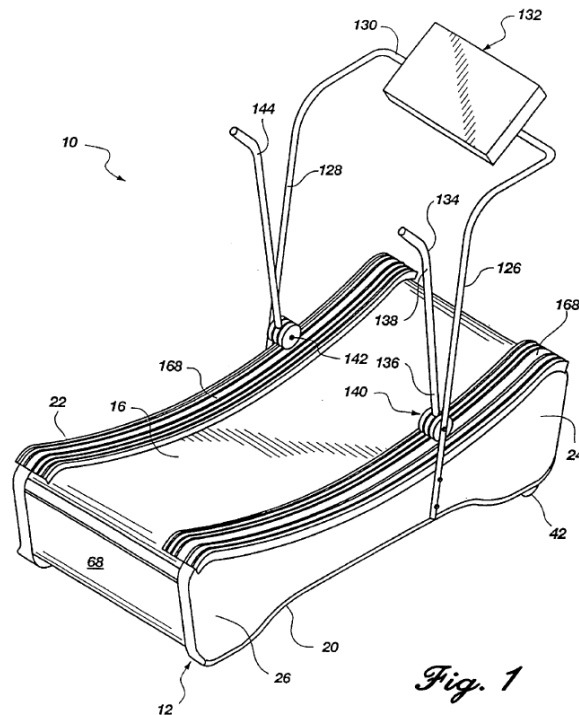


Figure 1 “is a perspective view of one presently preferred embodiment of a curved deck treadmill.” *Id.* at 4:35–36. Curved deck treadmill 10 comprises a support frame 12 having first side 20 and second side 22, with deck 56 between. *Id.* at 5:23–26.

Socwell's Figure 2 is reproduced below.

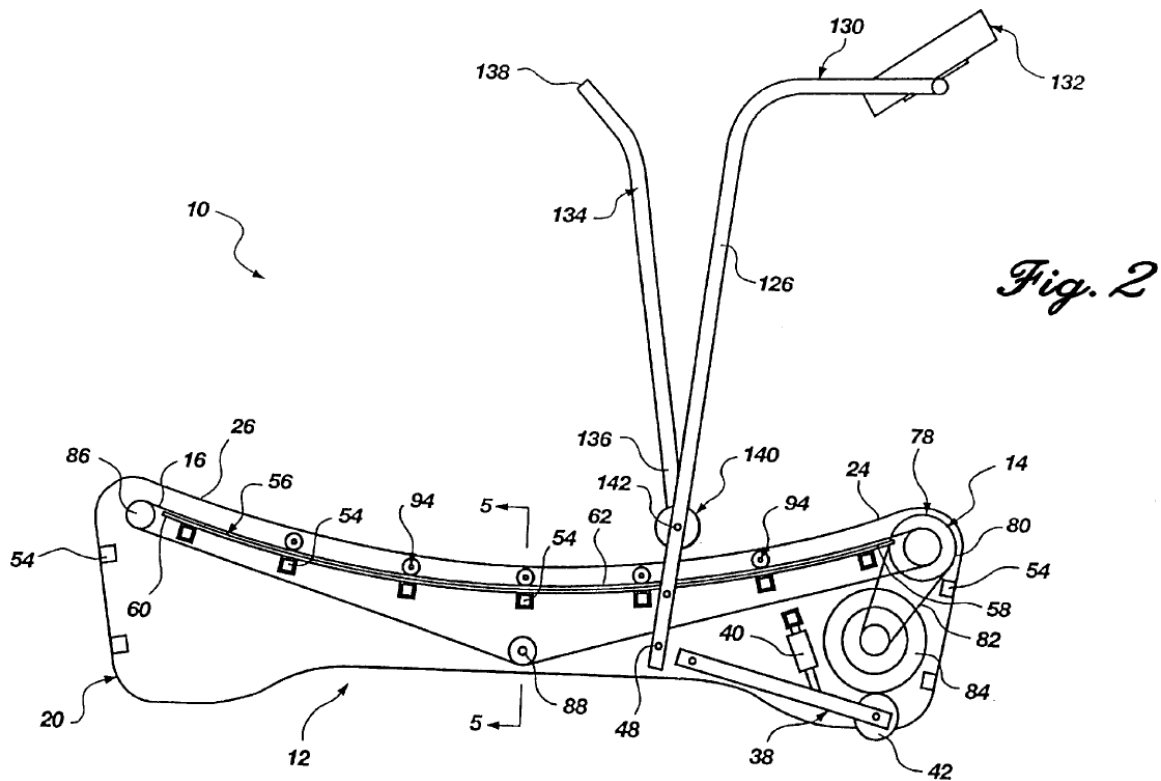


Figure 2 “is a side elevational view of the embodiment of [Figure 1] exposing one presently preferred arrangement of the internal components of the present invention.” *Id.* at 4:38–40. In one embodiment, deck 56 has first end 58, second end 60, and intermediate portion 62 between. *Id.* at 5:26–28. Roller assembly 14 is provided between first roller 78 and second roller 86. *Id.* at 5:33–38. Belt 16 is rotatably mounted on roller assembly 14 in relation to deck 56 and provides “a structurally supported arcuate shaped, movable surface on which a user may exercise.” *Id.* at 5:42–45.

Socwell's Figure 5 is reproduced below.

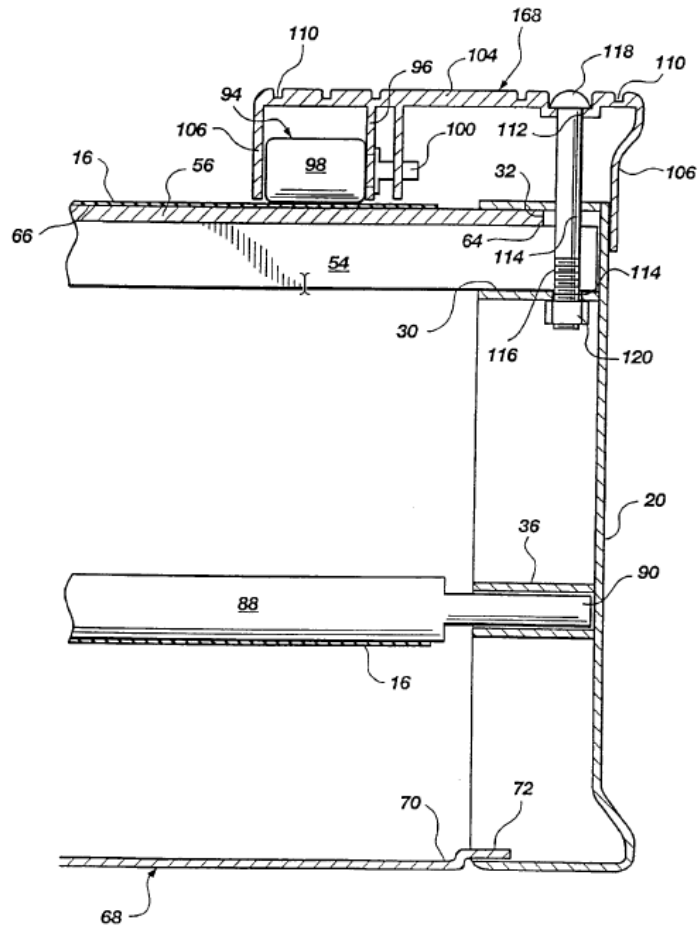


Fig. 5

Figure 5 depicts belt securing assembly 94. Belt securing assembly 94 retains endless belt 15 in a curvilinear configuration, substantially flush with deck 56. *Id.* at 10:5–9. Belt securing assembly 94 includes mounting bracket 96, which holds roller 98 so that roller 98 engages belt 16. *Id.* at 10:17–21.

2. Summary of Magid

Magid is a U.S. patent titled “Walker Apparatus with Left and Right Foot Belts” and issued on July 23, 1996. Ex. 1012, codes (45), (54).

Magid's Figure 2 is reproduced below.

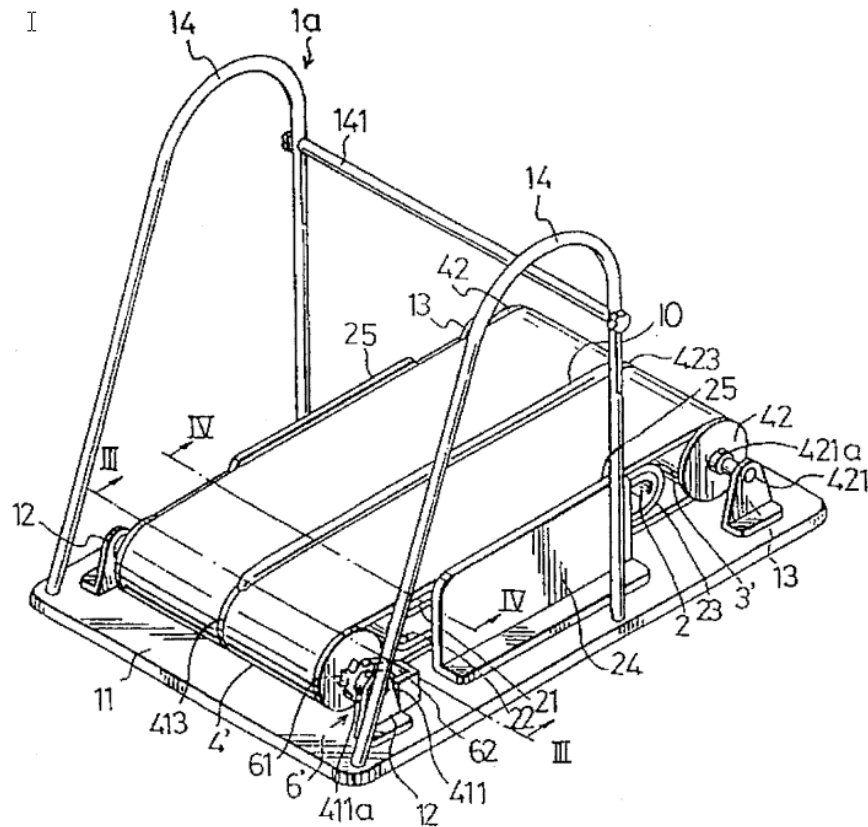


FIG. 2

Figure 2 depicts Magid’s preferred embodiment of a walker apparatus — an exercise walker. *Id.* at 3:41–44. The exercise walker comprises base 11, having two-foot belts 4, 4’, a pair of front rollers 41, and a pair of rear rollers 42. Figure 2 shows unidirectional control means 6, 6’, which permits only unidirectional movement of foot belts 4, 4’. *Id.* at 4:47–49. Magid states:

A unidirectional control means 6, 6' is installed to permit only unidirectional movement of the left and right foot belts 4, 4'. In this embodiment, the control means 6, 6' includes a pair of ratchet gears 61 attached to outer ends of the front rollers 41 and mounted rotatably on the first shaft 411, and a pair of pawls 62 secured to the base 11 and engaging one of the ratchet gears 61 to permit only unidirectional rotation of the front rollers 41, thereby preventing bidirectional movement of the foot belts 4, 4'. A releasable means (not shown) may be provided to release selectively the pawls 62 from the ratchet gears 61 in a known manner to permit reciprocating movement of the foot belts 4, 4' when desired. Of course, the ratchet gears may be attached to the rear rollers 42 to achieve the same result.

Id. at 4:46–60.

3. *Summary of Sclater*

Sclater is titled “Mechanisms and Mechanical Devices Sourcebook, Third Edition.” Ex. 1017, cover. Chapter 9 of Sclater is titled “Coupling, Clutching, and Braking Devices” and describes basic mechanical clutches, including a cam and roller clutch. *Id.* at 302–303. A cam and roller clutch is “[an] over-running clutch [that] is better suited for higher-speed free-wheeling than a pawl-and-ratchet clutch.” *Id.* at 303. For a cam and roller clutch,

[t]he inner driving member has cam surfaces on its outer rim that hold light springs that force the rollers to wedge between the cam surfaces and the inner cylindrical face of the driven member. While driving, friction rather than springs force the rollers to wedge tightly between the members to provide positive clockwise drive. The springs ensure fast clutching action. If the driven member should begin to run ahead of the driver, friction will force the rollers out of their tightly wedged positions and the clutch will slip.

Id.

Sclater also discusses spring-loaded pins and sprags in a one-way clutch and describes them as having “[s]prags combined with cylindrical rollers in a bearing assembly [that] can provide a simple, low-cost method for meeting the torque and bearing requirements of most machine applications” and can serve as a roller bearing, and with the clutch’s torque rating dependent on the number of sprags. Ex. 1017, 312.

Sclater further provides “details of overriding clutches” and explains a friction clutch is quieter than a ratchet and pawl. Ex. 1017, 316. In discussing ways to apply overrunning clutches, Sclater explains that “[t]hese clutches allow freewheeling, indexing and backstopping,” and “they will solve many design problems.” *Id.* at 318.

Figure 1 from Sclater’s page 318 is reproduced below.

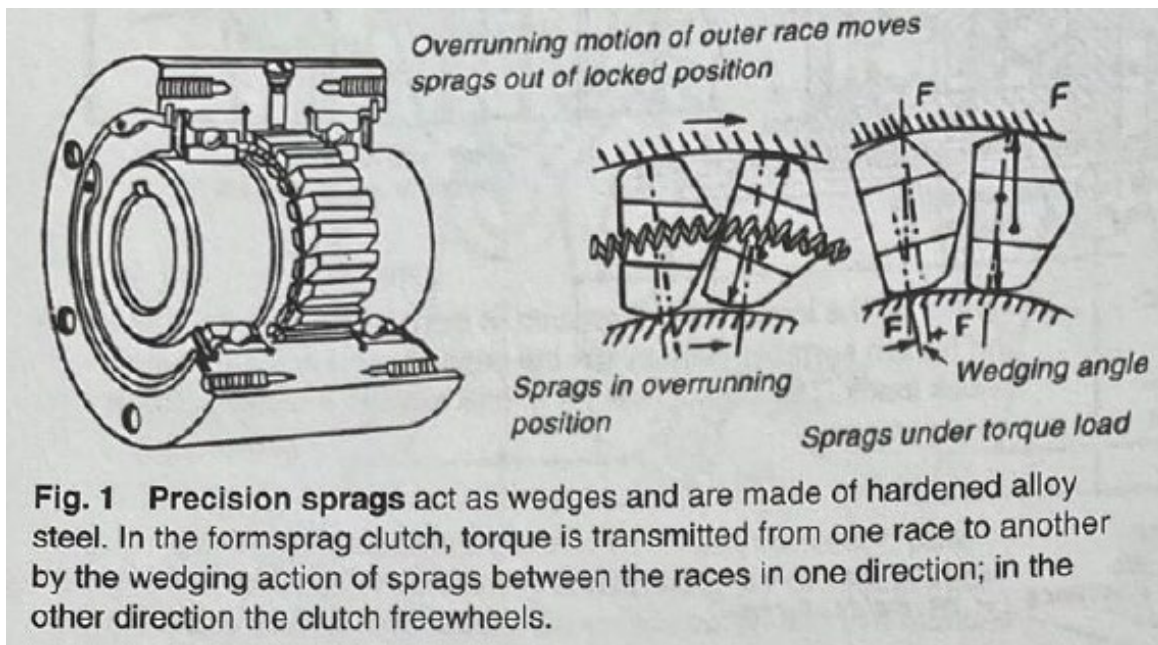


Figure 1 illustrates “precision sprags” which are an example of an overrunning clutch. *Id.* at 318. This clutch transmits torque from one race to another by the wedging actions of sprags between the races in one direction and, in the other direction, the races freewheel. *Id.*

Sclater states that application for sprag-type clutches “include overrunning, backstopping, and indexing” and the selection of an overrunning sprag clutch “requires a review of the torque to be transmitted, overrunning speed, type of lubrication, mounting characteristics, environment conditions, and shock conditions that might be encountered.” Ex. 1017, 320.

Figure 2 from Sclater’s page 320 is reproduced below.

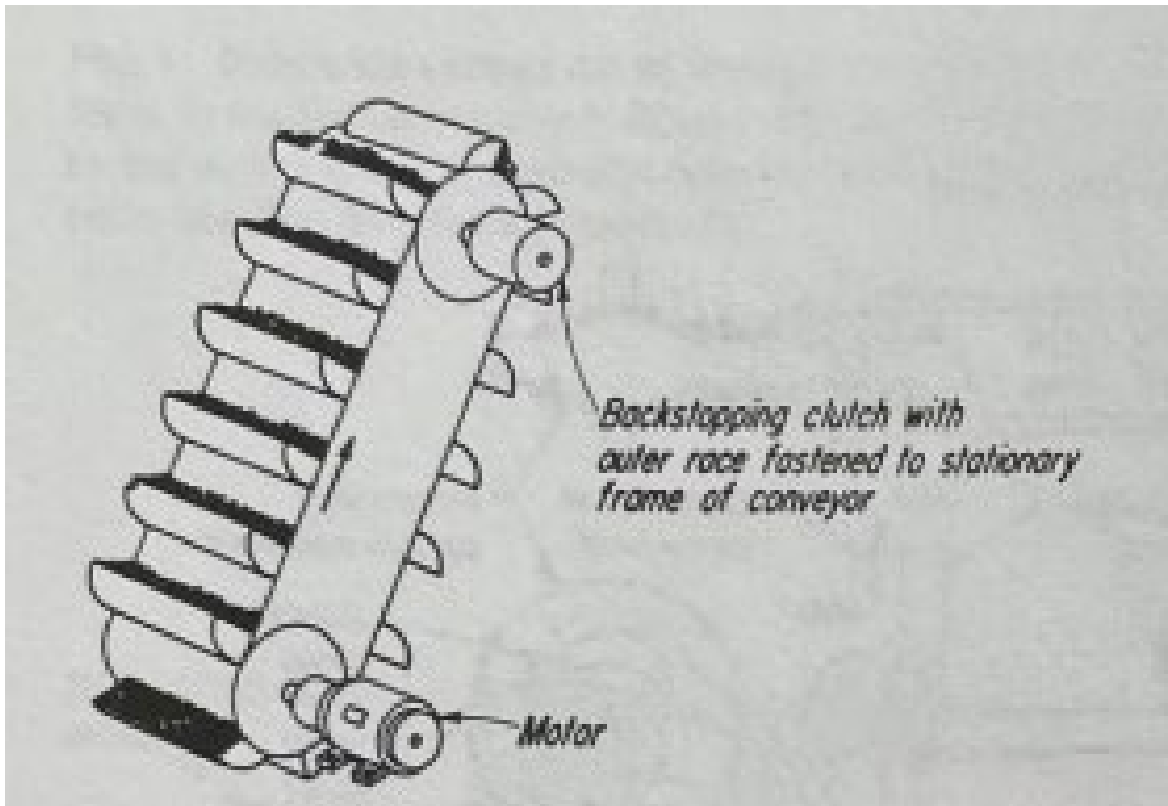


Figure 2 depicts an example application of backstopping. *Id.* at 320. A vertical conveyor carrying buckets and having a motor and a backstopping clutch with an outer race fastened to the stationary frame of the conveyor.

4. *Independent claim 1*

Petitioner contends that claim 1 is unpatentable over Socwell, Magid, and Sclater. Pet. 33–55.

*a) Limitation 1(a): A manually powered treadmill, comprising:*⁹

Petitioner contends that Socwell discloses a manually powered treadmill. Pet. 33–34 (citing Ex. 1011, Abstr., 3:26–29; Ex. 1003 ¶¶ 152–154, 202, 224).

Based on the current record, we determine that Petitioner’s analysis and evidence sufficiently shows that Socwell discloses limitation 1(a), the preamble.

b) Limitation 1(b): a frame;

Limitation 1(c): at least one front running belt pulley coupled to the frame;

Limitation 1(d): at least one rear running belt pulley coupled to the frame and spaced a distance from the at least one front running belt pulley; and

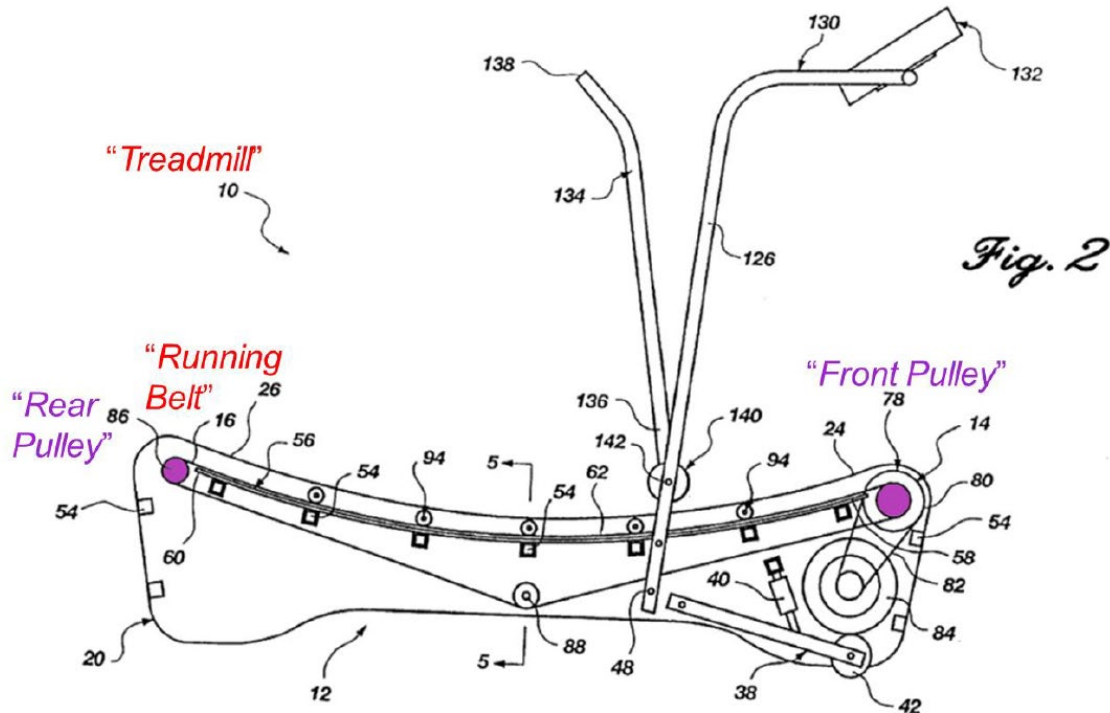
Limitation 1(e): a running belt at least partially supported by at least one of the at least one front running belt pulley and the at least one rear running belt pulley, wherein the running belt includes a running surface, at least a portion of which is curved;

Petitioner contends, and Patent Owner does not dispute, that Socwell discloses the treadmill having a frame (i.e., frame 12); front running belt pulley (i.e., first roller 78), a rear running belt pulley (i.e., second roller 86), and a running belt (i.e., belt 16) with a curved running surface, arranged as recited in limitations 1(b)–1(e). Pet. 35–39 (citing Ex.1011, 4:13–18,

⁹ We do not need to determine whether the preamble is limiting as it is undisputed that Socwell discloses a manually powered treadmill.

5:23–26, 5:33–45, 6:23–25, 6:27–45, 9:57–65, 10:17–26, Fig. 1, Fig. 2, Fig. 4, Fig. 5; Ex.1003 ¶¶ 155–163, 203–206, 225–227).

Reproduced below is Socwell’s Figure 2, with Petitioner’s annotations.



Ex.1011, Fig.2 (Annotated)

Annotated Figure 2 depicts a side elevational view of the treadmill, with Petitioner’s annotations pointing to front pulley 78, rear pulley 86, and running belt 16. Ex. 1011, 4:35–40; Pet. 29. Annotated Figure 2 shows the curved running surface of running belt. 16.

We determine that Petitioner’s analysis and evidence sufficiently shows that Socwell discloses limitations 1(b)–(e).

- c) *Limitation 1(f): a safety device coupled to the frame and the running belt, the safety device having a first element and a second element, the first element substantially surrounding the second element or the second element substantially surrounding the first element; and*

Limitation 1(g): wherein one of the first and second elements of the safety device and the running belt freely rotate in a first direction of rotation relative to the frame, however, in a second direction of rotation, opposite the first direction of rotation, the one of the first and second elements is substantially prevented from rotation relative to the frame to substantially prevent or resist rotation of the running belt relative to the frame.

Petitioner contends that the combination of Socwell, Magid, and Sclater teaches limitations 1(f) and 1(g). In particular, Petitioner relies upon the combination of Magid and Sclater as teaching the claimed safety device. *See* Pet. 20–33, 39–46.

Petitioner first asserts that Magid teaches a treadmill having a safety device (i.e., unidirectional control means 6, 6') mounted to the front or rear shaft assembly to prevent bidirectional movement of the belt and teaches the safety device including ratchet gear 61 coupled to one of the shafts and a pawl coupled to a base. Pet. 40–42 (citing Ex. 1012, 4:46–59; Ex. 1003 ¶¶ 164–169, 207–209, 229). Petitioner argues: “It would have been obvious to a POSA to combine Socwell’s treadmill with Magid’s control means to permit only unidirectional movement of the running belt to reduce the risk of a user stepping onto the running belt of the treadmill and losing their balance when the belt moves in the forward direction.” Pet. 24 (citing Ex. 1003 ¶ 137); *see also* Pet. 20–26 (explaining that it was known that injury could occur if a treadmill belt moved in an unexpected direction (citing Ex. 1011,

1:32–67, 2:45–48; Ex. 1013, 1:30–37; Ex. 1019, 3–4; Ex. 1020, 8; Ex. 1003 ¶¶ 71–73, 131–137).

Petitioner next asserts that Sclater teaches a sprag-type one-way bearing assembly that has an outer race (i.e., first element) that substantially surrounds an inner race (i.e., second element), with a plurality of sprags and rolling elements between the inner race and outer race. Pet. 42–43 (citing Ex. 1017, 312). The sprags act as wedges so that torque is transmitted from one race to another in one direction but not the other direction. Ex. 1017, 312, 318; Ex. 1003 ¶¶ 171–175. Petitioner argues: “A POSA would have been further motivated to substitute Sclater’s one-way sprag-type bearing assembly for Magid’s ratchet-and-pawl one-way clutch mechanism to obtain predictable results, e.g., reduced noise and improved durability, while maintaining the backstopping functionality and resultant safety benefits of Magid.” Pet. 26 (citing Ex. 1003 ¶ 141); *see also* Pet. 27–33 (explaining that ratchet-and-pawl mechanism was known to be noisy and less durable (citing Ex. 1003 ¶¶ 142–151; Ex. 1017, 303, 316, 320; Ex. 1018, 38–43, 52–53)).

After reviewing Petitioner’s evidence and analysis, we are persuaded that the combination of Socwell, Magid, and Sclater teaches limitations 1(f) and 1(g). We are persuaded by Petitioner and Dr. Giachetti’s testimony that a POSA would have combined the manual curved treadmill disclosed in Socwell with the known technique of a one-way clutch to prevent belt motion in a forward direction as disclosed in Magid in order to prevent a user from falling off the treadmill while mounting or dismounting. Pet. 20–26 (citing Ex. 1003 ¶¶ 71–73, 82–83, 131–139); *see also* Pet. Reply 18–20 (citing Ex. 1036 ¶¶ 80–83). We further are persuaded by Petitioner and Dr. Giachetti’s testimony that a POSA would have been motivated to substitute

sprag-type clutch, as disclosed in Sclater, for Magid’s ratchet-and-pawl one way clutch for “reduced noise and improved durability, while maintaining the backstopping functionality and resultant safety benefits of Magid.” Pet. 26–32 (citing Ex. 1003 ¶¶ 141–151); *see also* Pet. Reply 21–22 (citing Ex. 1036 ¶¶ 88–100).

Patent Owner disputes that a POSA would have been motivated to combined either Magid or Sclater with Socwell. PO Resp. 26–42; PO Sur-reply 13–17.

Patent Owner first argues that a POSA would not have combined Magid with Socwell because Magid teaches the “criticality of a two-belt design in which the walking belts are positioned parallel to one another and of ensuring that the device is capable of therapeutic use” whereas Socwell’s one-belt design is directed to non-therapeutic, recreational exercising. PO Resp. 26–28 (citing Ex. 1011, 1:10–12, 3:46–52, Ex. 1012, 1:46–52, 5:19–27, Fig. 1; Ex. 2018 ¶¶ 118–142). Patent Owner alleges, a POSA “would not have been motivated to look to and combine Magid’s teachings with a single-belt exercise device, such as that taught in Socwell,” because the purpose of Magid’s treadmill is different than that of the Socwell’s treadmill. *Id.* at 28 (citing Ex. 2018 ¶ 127). Specifically, Patent Owner asserts that Magid’s need of a “control means to prevent one of the belts from moving in the opposite direction while the other remains stationary or moves in the correct direction during normal use” is not present in Socwell’s single-belt treadmill. *Id.* at 28–29 (citing Ex. 2018 ¶¶ 129–130).

Patent Owner’s arguments relating to the differences between Magid’s two-belt system and Socwell’s single-belt system are not persuasive because Petitioner is not incorporating Magid’s two-belts into Socwell’s treadmill or Socwell’s single-belt into Magid’s treadmill; rather Petitioner is modifying

Socwell to include a safety device, as taught by Magid. “[T]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.” *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1333 (Fed. Cir. 2020).

Patent Owner’s allegation that a skilled artisan would not have looked to Magid’s two-belt treadmill for therapeutic use and combine its teachings with Socwell’s single-belt device for exercise and recreational use, because of the alleged different purposes of Magid’s and Socwell’s apparatuses (PO Resp. 30) is not adequately supported. We do not agree with Patent Owner’s characterization of Magid as being narrowly related to two-belt walkers used just for therapy. *See id.* at 30. As Petitioner points out, Magid discloses that its walker can be broadly used by people exercising, and Socwell discloses that its treadmill can be for therapeutic purposes. Pet. Reply 18; Ex. 1011, 3:1–9, 3:5–57, 13:38–47; Ex. 1012, 1:53–56, 3:23–27.

Patent Owner alleges, “[a]t the very least, a reader of Magid would be discouraged from combining it with elements of Socwell, particularly where those references criticize the features emphasized in Magid,” because “the design and engineering requirements of a treadmill having a curved running surface differ from those of a treadmill with a flat or uniplanar running surface.” PO Resp. 29–30 (citing Ex. 2018 ¶¶ 137–142).

We are not persuaded by Patent Owner that Magid “effectively teaches away from Petitioner’s proposed modification” because a skilled artisan “would not recognize the teachings of Magid to be necessary or even compatible with that of Socwell.” *Id.* at 29. “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the

applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Patent Owner points to differences between Socwell and Magid, but we are not persuaded that those differences – number of belts, use as a therapeutic device as opposed to a recreational exercise device, use of handles – would discourage a POSA from making the proposed combination which relates to a safety device.

Patent Owner next argues that because Magid is focused on a two-belt therapeutic walker device, a POSA would not have looked to Magid and combined its teachings with a single-belt treadmill for a user of ordinary abilities. *Id.* at 27. Patent Owner argues that a POSA would only look to teaching of other treadmills having curved or multi-planar running surfaces and not to treadmills having flat or uniplanar surfaces. *Id.* at 30.

We do not agree with Patent Owner’s characterization of Magid as being narrowly related to two-belt walkers used just for therapy. Magid discloses that its walker can be broadly used by people exercising. Ex. 1012, 1:53–59, 7:61–67.

Patent Owner next argues that Petitioner’s motivations to combine are fraught with hindsight bias because “Petitioner does not adequately explain why a POSA would have been specifically motivated to select the mechanism Petitioner relies on, rather than one of the dozens of other options Sclater present[s].” PO Resp. 32–42; *see also* PO Sur-reply 15–17. In particular, Patent Owner argues that Sclater does not specifically disclose that the sprag type clutch relied upon by Petitioner reduces noise and improves durability. PO Resp. 32–42.

The test for obviousness is not whether the claimed invention is expressly disclosed in the references, but whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of

the *combined teachings* of those references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). In an obviousness analysis, it is not necessary to find precise disclosure directed to the specific subject matter claimed because inferences and creative steps that a person of ordinary skill in the art would employ can be taken into account. *See KSR*, 550 U.S. at 418. In this regard, “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 421. “[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.* at 420. As the U.S. Supreme Court has stated, obviousness requires an “expansive and flexible” approach that asks whether the claimed improvement is more than a “predictable variation” of “prior art elements according to their established functions.” *Id.* at 415, 417. “A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *Id.* at 421 (citing *Graham*, 383 U.S. at 36). “Rigid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it.” *KSR*, 550 U.S. at 421.

Petitioner’s evidence sufficiently shows that it would have been obvious to a POSA “to substitute Sclater’s one-way sprag-type bearing assembly for Magid’s ratchet-and-pawl one-way cluster mechanism to obtain predictable results, e.g., reduced noise and improved durability.” Pet. 26; Ex. 1003 ¶ 141.

Magid broadly describes its safety device as “[a] unidirectional control means 6, 6’” and describes the unidirectional control means 6, 6’ as being a ratchet and pawl mechanism in one embodiment. Ex. 1012, 4:47–55. This suggests that unidirectional control means 6, 6’ could be a unidirectional control mechanism other than the ratchet-and-pawl described

in one embodiment of Magid. *See also id.* at 7:61–67 (stating that Magid’s invention is not limited to the preferred embodiments).

Sclater teaches using a sprag-type clutch for back stopping a conveyor belt. Ex. 1017, 320. A POSA would know that sprag-type clutches were also known for use in exercise equipment. *See* Ex. 1003 ¶¶ 97, 84–91; Ex. 1018, 52–53.

Dr. Giachetti testifies that “[s]ome common mechanical clutches include ratchet clutches and cam type one-way clutches, such as sprag clutches.” Ex. 1003 ¶ 81. Dr. Giachetti testifies that “[r]atchet and pawl clutch mechanisms make noise during operation” because an audible “click” sound is made when the pawl collides with a gear tooth on the ratchet. Ex. 1003 ¶ 143; *see also id.* ¶ 83 (“A ratchet clutch having a pawl that contacts the gear during overrunning is loud, as compared to other mechanical clutches.”). Similarly, Sclater teaches that a friction-type clutch is quieter than a ratchet and pawl mechanism. Ex. 1017, 316. Sclater states:

Sprags combined with cylindrical rollers in a bearing assembly can provide a simple, low-cost method for meeting the torque and bearing requirements of most machine applications. Designed and built by Est. Nicot of Paris, this unit gives one-direction-only torque transmission in an overrunning clutch. In addition, it also serves as a roller bearing.

Id. at 312.

Dr. Giachetti also testifies that roller clutches are better suited for high-speed freewheeling than ratchet clutches because “the pawl may skip past a few teeth before backstopping the ratchet gear, whereas the sprags are always in contact with the races and do not need to find a discrete gear tooth to engage” and “because there are multiple sprags, they distribute the load over a larger surface area.” Ex. 1003 ¶ 144 (citing Ex. 1017, 303, 320).

Finally, Dr. Giachetti testifies that “[a] POSA would have considered a sprag-type one-way clutch bearing [suitable] for an exercise equipment application, such as a treadmill.” Ex. 1003 ¶ 147 (citing Ex. 1018, 52–53 (a catalogue describing a sprag type one-way clutch as an option for “exercise equipment”).

Given the testimony of Dr. Giachetti as to the knowledge of a POSA and the supporting evidence from Sclater, Petitioner has sufficiently shown that it would have been obvious to a POSA to substitute a one-way sprag type bearing clutch for Magid’s ratchet and pawl one-way mechanism in order to reduce noise and improve durability.

Patent Owner’s arguments are unpersuasive because they are rigidly focused on the alleged lack of a sufficiently particular disclosure of motivation in Sclater, without taking full account of an ordinarily skilled artisan’s “knowledge, creativity, and common sense.” *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013).

Based on the current record, we determine that Petitioner’s analysis and evidence sufficiently disclose limitations 1(f)–(g).

d) Secondary Considerations

We have considered Patent Owner’s arguments and evidence concerning secondary considerations, discussed below, as part of our obviousness analysis for this ground. Patent Owner’s evidence of secondary considerations, however, does not outweigh Petitioner’s showing that claim 1 would have been obvious over Socwell, Magid, and Sclater.

e) Conclusion as to claim 1

After considering Petitioner’s evidence and analysis, and taking into account Patent Owner’s arguments and evidence, including evidence of secondary considerations, we determine that Petitioner has shown by a

preponderance of the evidence that claim 1 is unpatentable over Socwell, Magid, and Sclater.

5. Independent Claims 9 and 15 and Dependent Claims 2–4, 7, and 10–12

Petitioner relies upon the same evidence and analysis to challenge independent claims 9 and 15 as Petitioner relies upon to challenge independent claim 1. Pet. 20–49. Patent Owner makes no additional arguments specifically directed to claims 9 and 15.

Petitioner maps the additional limitations of dependent claims 2–4, 7, and 10–12 to the combination of Socwell, Magid, and Sclater. Pet. 55–57, 61–65. Patent Owner makes no arguments directed to the additional limitations of claims 2–4, 7, and 10–12.

After considering Petitioner’s evidence and analysis and taking into account Patent Owner’s arguments and evidence, including evidence of secondary considerations, we determine that Petitioner has shown by a preponderance of the evidence that claims 2–4, 7, 9–12, and 15 are unpatentable over Socwell, Magid, and Sclater.

6. Dependent Claims 6, 13, and 16

Claim 6 depends from claim 1 and recites the additional limitation — “a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.” Ex. 1001, 33:31–34. Claim 13 depends from claim 9, and claim 16 depends from claim 15. Both claims 13 and 16 recite the same additional limitation as claim 6. *Id.* at 34:13–16, 34:44–47.

Socwell's Figure 5, with annotations by Petitioner, is reproduced below.

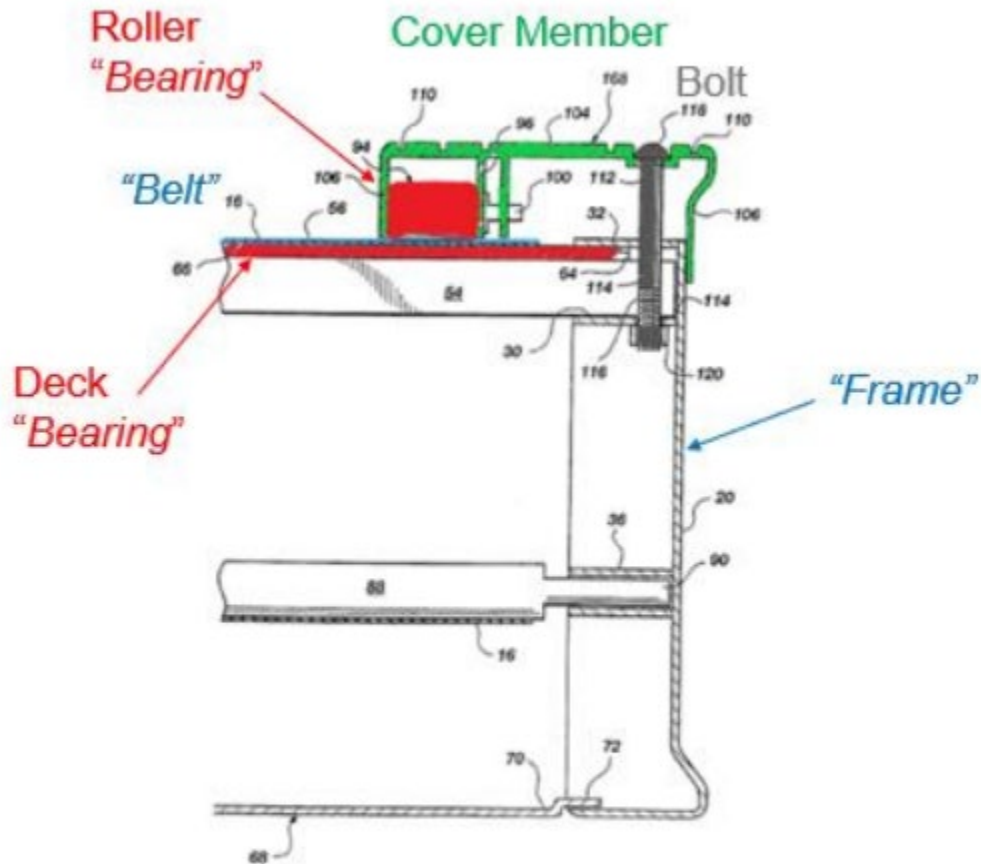


Fig. 5

Ex.1011, Fig.5

Annotated Figure 5 depicts belt securing assembly 94. Ex. 1011, 1:15. Petitioner annotated Figure 5 to show the bearings (i.e., roller 98 and deck 56) in red and belt 16 in blue. Pet. 61.

Petitioner relies upon Socwell’s curved deck 56 and rollers 98 as collectively teaching the claimed plurality of bearings. *Id.* at 59–61. Petitioner argues that “at least the deck 56 supports the belt 16.” *Id.* at 61 (citing Ex. 1003 ¶ 197).

Applying its proposed construction of the term bearing, Patent Owner argues that neither belt securing assembly 94 nor roller 98 constitute a bearing and, thus, Socwell only discloses, at most, a single bearing, deck 56. PO Resp. 7–11.

We, however, did not adopt Patent Owner’s proposed construction of the term bearing and construed the claim term bearing to require a mechanical element that provides a means for low friction movement between two surfaces.

Applying our construction, we are persuaded by Petitioner that Socwell’s rollers 98 and deck 56, collectively, meet the claimed plurality of bearings and deck 56 meets the limitation requiring at least one bearing of the plurality of bearings configured to at least partially support the running belt.

After considering Petitioner’s evidence and analysis and taking into account Patent Owner’s arguments and evidence, including evidence of secondary considerations, we determine that Petitioner has shown by a preponderance of the evidence that claims 6, 13, and 16 are unpatentable over Socwell, Magid, and Sclater.

E. Ground 2: Unpatentability over Tollkien and Sclater

Petitioner contends that claims 1–4, 6–13, 15 and 16 are unpatentable over Tollkien and Sclater. Pet. 66–100.

1. Summary of Tollkien

Tollkien is a German patent titled “Treadmill for Fitness Training and Vehicle with a Treadmill” and published on December 7, 2002. Ex. 1031, code (43), (54). Tollkien discloses a first embodiment of a treadmill with a curved running surface. *Id.* ¶¶ 8, 15, 18–21, Fig. 1. Tollkien discloses a

second embodiment of a vehicle with a treadmill drive. *Id.* ¶¶ 22–26, Fig. 2, Fig. 3.

Tollkien’s Figure 1 depicts the first embodiment and is reproduced below.

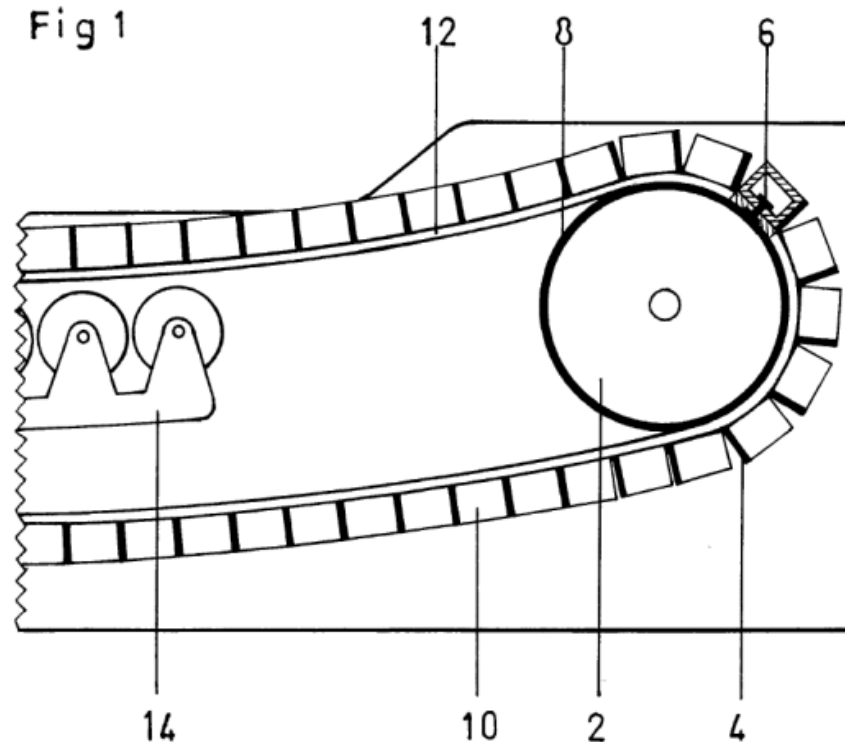


Figure 1 depicts “a section of a treadmill in a partially cutaway side view.” *Id.* ¶¶ 15, 18. The treadmill has cross members 10, with plastic strips 4, attached to belt 12. *Id.* ¶ 18. The treadmill also has rubber roller 2 that frictionally engages belt 12. *Id.* ¶ 20. “[R]unners 14 placed underneath the running surface prevent the belt from bouncing when in use.” *Id.* “The running surface is formed by cross members 10 that are transverse to the direction of movement, which are attached with rivets 6 to a continuous belt 12.” *Id.* ¶ 18.

Tollkien's Figures 2 and 3 depicts the second embodiment and are reproduced side-by-side below.

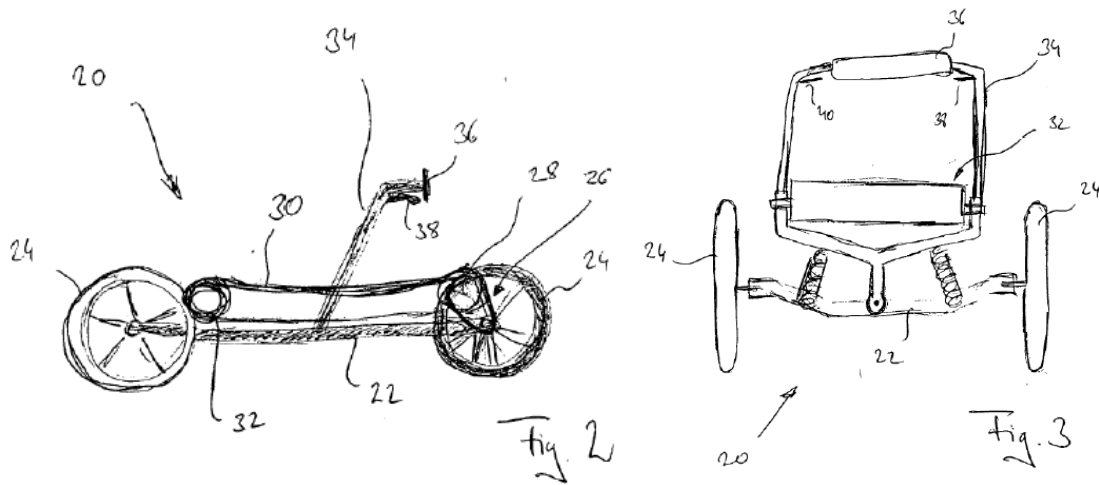


Figure 2 is a schematic “of a side view of a vehicle powered by means of a treadmill.” *Id.* ¶¶ 16, 22. Figure 3 is a schematic of a front view. *Id.* ¶¶ 17, 22. Vehicle 20 has a chassis 22 and wheels 24 and two rear wheels 24 are powered by chain drive 26 driven by rear roller 28. *Id.* ¶ 22. Rear roller 28 is moved by belt 30, which is “analogous to the belt 12.” *Id.* Curved belt 30 circulates around rollers 28 and 32. *Id.* Rail 34 is the height of the user’s pelvis, and rail 34 has braking and steering levers 38, 40. *Id.*

2. Independent Claim 1

To meet limitations 1(f) and 1(g), Petitioner relies upon a combination of Tollkien and Sclater and, unlike for Ground 1, does not rely upon Magid to teach that the solution to the problem of unexpected forward motion of the running belt is providing a unidirectional control means (e.g., a ratchet-and-pawl clutch). Pet. 66–89. For this ground, to teach the solution of preventing forward belt motion by using a one-way clutch, the Petition relies upon the testimony of Dr. Giachetti. Pet. 69–70 (citing Ex. 1003 ¶ 244). Dr. Giachetti testifies that: “A POSA would have understood that preventing

forward belt motion would solve this problem, and that there were dozens of off-the-shelf one-way clutches available.” Ex. 1003 ¶ 244.

We find Dr. Giachetti’s testimony, alone, insufficient to establish by a preponderance of the evidence that a POSA, given Tollkien and Sclater, would have been motivated to look to one-way sprag-type clutches to solve the problem of unexpected forward motion of the running belt of a treadmill. Without a reference, like Magid, teaching that it was known to use a one-way clutch mechanism on a treadmill to prevent unexpected forward motion, we are persuaded by Patent Owner that Petitioner’s combination is impermissibly based in hindsight. *See* PO Resp. 42–47.

After considering Petitioner’s evidence and analysis, and taking into account Patent Owner’s arguments and evidence, we determine that Petitioner has failed to show by a preponderance of the evidence that claim 1 is unpatentable over Tollkien and Sclater.

3. Remaining Claims

Petitioner’s challenges to the remaining claims under Ground 2 incorporate Petitioner’s proposed combination of Tollkien and Sclater, used to challenge claim 1 under Ground 2. Pet. 66–100.

For the same reasons explained in connection with claim 1 under Ground 2, we determine that Petitioner fails to show by a preponderance of evidence that claims are unpatentable over Tollkien and Sclater.

F. Secondary Considerations of Nonobviousness

1. Legal Standards

Objective evidence of non-obviousness “may often be the most probative and cogent evidence in the record” and “may often establish that an invention appearing to have been obvious in light of the prior art was

not.” *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012). Thus, notwithstanding what the teachings of the prior art would have suggested to one skilled in the art, secondary considerations (objective evidence of nonobviousness) may lead to a conclusion that the challenged claims would not have been obvious. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Thus, our obviousness analysis includes consideration and weighing of Patent Owner’s indicia of nonobviousness.

In order to accord substantial weight to secondary considerations in an obviousness analysis, “the evidence of secondary considerations must have a ‘nexus’ to the claims, *i.e.*, there must be ‘a legally and factually sufficient connection’ between the evidence and the patented invention.” *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) (quoting *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988)); *Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1417 (Fed. Cir. 2022).

Although the patent owner bears the initial burden of proving a nexus (*WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999)), a presumption of nexus may be appropriate if the patent owner shows “the asserted objective evidence is tied to a specific product and that product ‘embodies the claimed features, and is coextensive with them.’” *Polaris Indus, Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000) (emphasis added)); *Quanergy*, 24 F.4th at 1417. On the other hand, “[w]hen the [product] is not coextensive with the patented invention—for example, if the patented invention is only a

component of a commercially successful machine or process,” the patent owner is not entitled to a presumption of nexus. *Demaco*, 851 F.2d at 1392.

A patent owner may establish nexus, either through (1) the use of a rebuttable presumption that arises when certain conditions are met or (2) a direct showing of nexus.

2. *Rebuttable Presumption of Nexus*

In the first, a patent owner may rely on a rebuttable presumption of nexus as follows:

As first recognized in *Demaco* . . . , a patentee is entitled to a rebuttable presumption of nexus between the asserted evidence of secondary considerations and a patent claim if the patentee shows that the asserted evidence is tied to a specific product and that the product “is the invention disclosed and claimed.” 851 F.2d at 1392 (emphasis added). That is, presuming nexus is appropriate “when the patentee shows that the asserted objective evidence is tied to a specific product and that product ‘embodies the claimed features, and is coextensive with them.’” *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000)) . . .

. . . Whether a product is coextensive with the patented invention, and therefore whether a presumption of nexus is appropriate in a given case, is a question of fact.

Fox Factory, Inc. v. SRAM LLC, 944 F.3d 1366, 1373 (Fed. Cir. 2019).

The court in *Fox Factory* further explained, with respect to a presumption of nexus, that “the degree of correspondence between a product and a patent claim falls along a spectrum,” and that “[a]lthough we do not require the patentee to prove perfect correspondence to meet the co-extensiveness requirement, what we do require is that the patentee demonstrate that the product is essentially the claimed invention.” *Id.* at 1374. The court in *Fox Factory* rejected the patent owner’s argument that

the co-extensiveness requirement is simply an inquiry into “whether the patent claims broadly cover the product that is the subject of the evidence of secondary considerations.” *Id.* at 1377. Thus, simply showing that a patent claim broadly covers the commercial product being asserted as objective evidence of nonobviousness is not enough to show they are coextensive. *Id.* That is because “[a] patent claim is not coextensive with a product that includes a ‘critical’ unclaimed feature that is claimed by a different patent and that materially impacts the product’s functionality.” *Id.* at 1375. In contrast, “if the unclaimed features amount to nothing more than additional insignificant features, presuming nexus may nevertheless be appropriate.” *Id.* at 1374. Based on the facts of the case in *Fox Factory*, the court found that “nexus may not be presumed” because “there are one or more features not claimed by the [challenged patent] that materially impact the functionality” of the products on which patent owner’s presumption argument is based and the court rejected arguments that the patent claims broadly cover the product. *Id.* at 1376–1377.

Patent Owner argues that different models of its curved manual treadmills practice and are coextensive with the claims of the ’005 patent. PO Resp. 49–51. They are 1) the CURVE treadmill (a.k.a SpeedBoard treadmill and CURVE Legacy treadmill), 2) Curve XL treadmill, 3) Curve LTG treadmill, 4) Curve FTG treadmill, 5) Curve 3.0 treadmill, 6) Curve Trainer, and 7) EcoMill and EcoMill Legacy treadmills. *Id.*

To support its argument, Patent Owner relies upon a claim chart purporting to show how the CURVE family of treadmills meet the claimed invention and the testimony of Dr. Blair. *Id.* at 51–58 (citations omitted); Ex. 2018 ¶¶ 176–177; Ex. 2025.

However, Patent Owner and Dr. Blair indicate that a number of its curved manual treadmills had different distinguishing features—features that are unclaimed. Patent Owner indicates that the Curve XL offered a larger running surface, that the Curve LTG treadmill is a lighter duty version, that Curve FTG treadmill has different handrails and additional features for providing different levels of resistance, that the Curve 3.0 has upgraded software and sophisticated electronics, and the Curve Trainer has a less steep curve that provides a quieter and quicker acceleration, and the EcoMill and EcoMill Legacy has an onboard generators system that produces power for the display and USB charging station. PO Resp. 49–50; Ex. 2018 ¶ 178. Further, as Petitioner points out, we note that Patent Owner’s evidence points to unclaimed features such as a durable WOODWAY membrane technology, displays, heart-rate monitors, speed outputs, adjustable resistance, sophisticated load cells, data acquisition boards and software, and runner feedback system. Pet. Reply 25–26 (citing Ex. 1037, 27:13–24, 28:20–29:13; Ex. 2028, 77–79); Ex. 2057, 3.

Patent Owner broadly assert that these unclaimed features are not significant for the purposes of establishing nexus. PO Resp. 19–20. But neither Patent Owner nor Dr. Blair sufficiently explains why these features are insignificant and, at best, Dr. Blair’s testimony shows that the ’005 patent’s claims broadly cover the CURVE treadmill only. PO Resp. 46–48; PO Sur-reply 19–21; Ex. 2018 ¶¶ 176–177.

After reviewing Patent Owner’s evidence of coextensions, we determine that Patent Owner’s evidence does not sufficiently establish that the different models of its curved manual treadmills are coextensive with the claims of the ’005 patent. Patent Owner, thus, is not entitled to a presumption of nexus.

3. *Direct Showing of Nexus*

“A finding that a presumption of nexus is inappropriate does not end the inquiry into secondary considerations,” however. *Fox Factory*, 944 F.3d at 1373. “To the contrary, the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Id.* at 1373–74 (quoting *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996)). “Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention,” meaning that “there must be a nexus to some aspect of the claim not already in the prior art.” *In re Kao*, 639 F.3d 1057, 1068–69 (Fed. Cir. 2011).

Ultimately, we must weigh Patent Owner’s objective evidence in the context of whether the claimed invention as a whole would have been obvious to a skilled artisan. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1331–32 (Fed. Cir. 2016). Only if the patent owner presents a *prima facie* case of nexus does the burden of production shift to the patent challenger to adduce evidence showing that any commercial success or industry praise was due to extraneous factors other than the patented invention. *Demaco*, 851 F.2d at 1393.

a) *Commercial Success*

“Evidence of commercial success, or other secondary considerations, is only significant if there is a nexus between the claimed invention and the commercial success.” *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311–12 (Fed. Cir. 2006). “When a patentee can demonstrate commercial success, usually shown by significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent, it is

presumed that the commercial success is due to the patented invention.” *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997).

Patent Owner argues that it enjoyed 100% market share of the curved, manual treadmill market and made significant sales. PO Resp. 58–62; PO Sur-reply 21–23; Paper 32. Citing to the testimony of Mr. Weber, Patent Owner asserts that “[t]he commercial success of Patent Owner’s products was based on the key features of the claimed invention.” *Id.* at 62 (citing Ex. 2020 ¶¶ 34–41).

Mr. Weber is Patent Owner’s Director of Sales and Marketing. Ex. 2020 ¶ 2. Mr. Weber testifies that safety is a critical factor for commercial success and in particular the use of a safety mechanism to control unintended rotation of the running belt. *Id.* ¶ 34 (“Woodway’s line of curved, manual treadmills would not be commercially successful without such a safety feature”). *Id.* ¶¶ 37–41. As Patent Owner’s employee, Mr. Weber is an interested party.

Petitioner argues that Patent Owner’s evidence does not establish that Patent Owner is commercially successful in the field of manual treadmills and not just curved manual treadmills and that Patent Owner’s evidence does not establish a nexus between its sales and the claimed safety mechanism. Pet. Reply 28–33.

We agree with Petitioner that Patent Owner has not sufficiently established a nexus between its sales and the alleged commercial success. We do not credit Mr. Weber’s testimony that the alleged commercial success of Woodway’s curved, manual treadmills was due to the safety mechanism. As Petitioner points out, Patent Owner does not provide sufficient evidence to correlate the sales with the safety device. For example, Mr. Weber’s

testimony indicates that Woodway did not advertise the safety features. Pet. Reply 31 (citing Ex. 1037, 45:10–15, 45:17–21, 46:7–8).

4. *Industry Praise*

“Evidence that the industry praised a claimed invention or a product that embodies the patent claims weighs against an assertion that the same claim would have been obvious.” *Lectrosonics, Inc. v. Zaxcon, Inc.*, IPR2018-01129, Paper 33 at 68 (PTAB Jan. 24, 2020) (citing *WBIP*, 829 F.3d at 1334).

Patent Owner argues that its “CURVE line of treadmills garnered significant attention and praise in the industry.” PO Resp. 62–63; PO Sur-reply 24. For support, Patent Owner asserts that its Curve Legacy was nominated for an Innovation Award by FIBO (Ex. 2020 ¶ 56, Ex. 2057), cites the testimony of Mr. Weber, Patent Owner’s Director of Sales and Marketing (Ex. 2020 ¶¶ 43–55), and certain publications (Ex. 2045, 5; Ex. 2046, 3, 5; and Ex. 2052, 1). PO Resp. 63. Additionally, Mr. Weber’s testimony refers to certain publications that are at Exhibits 2047–2057.

We have reviewed all of Patent Owner’s cited evidence and determine that it is insufficient to show industry praise. *See* Pet. Reply 29. Although Patent Owner’s evidence praises the CURVE lines to some extent, the praise is because of features not claimed and not for the claimed invention, which includes the claimed safety device. *See* Exs. 2047–2057; Ex. 1037, 67:8–16. For example, Exhibit 2057 indicates that the Curve Legacy was nominated for the Innovation Award by FIBO because it is “environmentally friendly,” “has . . . no wear and tear components,” “not necessary to replace the deck or running belt,” includes “[a] durable WOODWAY membrane technology,” and provides “direct feedback.” Ex. 2057, 3. Additionally, Exhibit 2047 is insufficient because it is Patent Owner’s own press release

and, thus, is praise from itself. None of the cited evidence mentions the claimed safety device feature. *See* Exs. 2045–2057.

5. *Copying*

“[C]opying requires evidence of efforts to replicate a specific product, which may be demonstrated through internal company documents, direct evidence such as disassembling a patented prototype, photographing its features, and using the photograph as a blueprint to build a replica, or access to the patented product combined with substantial similarity to the patented product.”

Wyers v. Master Lock Co., 616 F.3d 1231, 1246 (Fed. Cir. 2010).

Patent Owner argues that “a number of companies” have launched products that are close copies of products in its CURVE line. PO Resp. 64–67; *see also* PO Sur-reply 24. As evidence of copying, Patent Owner relies upon the testimony of its employee Mr. Weber that a number of companies have products that are allegedly copies of Patent Owner’s CURVE line of products. PO Resp. 64 (citing Ex. 2020 ¶¶ 57–68). Mr. Weber’s testimony relies upon certain photographs to show the alleged copying (Exs. 2058–2065). Petitioner also alleges copying by a licensee and Patent Owner. PO Resp. 64–67.

Petitioner responds that Patent Owner’s evidence does not show evidence of an effort to replicate a specific product. Pet. Reply 33–34.

We have reviewed all of Patent Owner’s cited evidence and determine that it is insufficient to show copying of the claimed invention. Exhibits 2058–2065 make no mention of a feature resembling the claimed safety device. We also do not credit the conclusory testimony of Mr. Weber, Patent Owner’s Director of Sales and Marketing, concerning his observations of alleged copying by others. Ex. 2020 ¶¶ 57–67. Finally,

Patent Owner's evidence does not sufficiently show copying of a specific product.

6. *Long-Felt But Unsolved Need & Passage of Time*

Long-felt need can be shown by evidence that indicates that the prior art had a recognized need for a solution to the problem, and that others had tried and failed to find a solution to that problem. *Millennium Pharms., Inc. v. Sandoz Inc.*, 862 F.3d 1356, 1369 (Fed. Cir. 2017).

Patent Owner asserts that “[b]efore the priority date of the ’005 patent, no one had successfully commercialized a curved, manual treadmill.” PO Resp. 67–68; PO Sur-reply 25. Patent Owner additionally argues that the length of time between the cited prior art and the patent shows nonobviousness. PO Resp. 68–69.

Petitioner argues that Patent Owner's evidence fails to show that other POSA tried and failed to find a solution. Pet. Reply 34–35.

We have reviewed all of Patent Owner's cited evidence and determine that it is insufficient to show copying of the claimed invention. Patent Owner's evidences does not sufficiently show that a POSA recognized a need that was long-felt or that others had tried and failed to solve the problems. None of the cited evidence describes failed efforts of others to solve the specific problems addressed by the claimed invention, such as a safety device that prevents bidirectional movement.

7. *Conclusion as to Secondary Considerations*

We have considered all of Patent Owner's arguments and evidence concerning secondary considerations. We determine that Patent Owner has not sufficiently establish a nexus between the unique features of the claimed invention and the evidence of secondary considerations. We, thus, give Patent Owner's evidence little weight.

III. MOTION TO EXCLUDE

Patent Owner moves to exclude Exhibits 1036, 1041–1044, 1046, and 1053. Paper 43 (“Mot.”). Petitioner filed an Opposition (Paper 44 (“Pet. Opp. to Mot.”), and Patent Owner filed a Reply (Paper 47 (“PO Reply to Mot.”)).

1. Exhibit 1036

a) FRE 401–402

Patent Owner first moves to exclude Exhibit 1036 (the Second Declaration of Robert Giachetti, Ph.D. P.E) under FRE 401–402. Mot. 4 (citing FRE 401–402 in the heading). Patent Owner’s Motion, however, includes no substantive arguments directed to whether Giachetti Declaration is relevant admissible evidence or irrelevant inadmissible evidence. Mot. 4–7. In its Reply, Patent Owner states: “While the Motion to Exclude does not expressly detail Exhibit 1036’s lack of relevance under FRE 401–402, the irrelevance is plain. Petitioner’s provision of new arguments in Reply, which is not allowed, renders such arguments irrelevant.” PO Reply to Mot., 1, n.1.

Patent Owners argument is unpersuasive because it is a mere assertion without adequate explanation. The party moving to exclude evidence bears the burden of proving that it is entitled to the relief requested—namely, that the material sought to be excluded is inadmissible under the Federal Rules of Evidence. *See* 37 C.F.R. §§ 42.20(c), 42.62(a). Patent Owner’s mere assertion does not meet Patent Owner’s burden to show that Exhibit 1036 is irrelevant inadmissible evidence.

In any event, we agree with Petitioner that “Dr. Giachetti’s Declaration is relevant under FRE 401 and 402 because it identifies and explains technical issues that the PO’s Response/Expert failed to explain or

accurately address, and therefore has a tendency to make a fact more or less probable than it would be without the evidence.” Pet. Opp. to Mot., 1.

We, thus, do not exclude Exhibit 1036 under FRE 401 and 402.

b) FRE 602

Patent Owner next moves to exclude Exhibit 1036 under FRE 602 because allegedly Dr. Giachetti’s “declaration presents as ‘facts’ information that is outside Dr. Giachetti’s personal knowledge.” Mot. 4.

Patent Owners argument is unpersuasive because, in this proceeding, Dr. Giachetti is testifying as an expert witness. *See* Pet. Opp. to Mot. 2 (“Dr. Giachetti is a testifying expert pursuant to [FRE] 703”). FRE 602 states that “[t]his rule does not apply to a witness’s expert testimony under Rule 703.” Fed. R. Evid. 602.

We, thus, do not exclude Exhibit 1036 under FRE 602.

c) FRE 702 and 703

Patent Owner also moves to exclude Exhibit 1036 under FRE 702 and 703 because allegedly “Dr. Giachetti’s testimony is not based on sufficient facts or data or the product of reliable principles and methods reliably applied in this case.” Mot. 4–5; PO Sur-reply to Mot. 1–4. Patent Owner alleges that certain of Dr. Giachetti’s statements are not supported by an underlying source or citations to evidence. Mot. 4–5; Paper 47, PO Sur-reply to Mot. 1–4.

Patent Owner’s arguments are unpersuasive because the arguments go to the weight to be given to Dr. Giachetti’s testimony and not to the admissibility of Dr. Giachetti’s testimony. There is no requirement to cite to an “underlying source” for every statement in an expert’s report. *Kennedy v. Collagen Corp.*, 161 F.3d 1226, 1231 (9th Cir. 1998) (internal citation

omitted) (“Disputes as to . . . lack of textual authority for [an expert’s] opinion, go to the weight, not the admissibility, of his testimony.”).

We, thus, do not exclude Exhibit 1036 under FRE 702 or 703.

d) 37 C.F.R. § 42.23(b)

Patent Owner finally moves that Exhibit 1036 should be excluded under 37 C.F.R. § 42.23(b) because “Exhibit 1036 cites to new evidence to support new arguments that could have been made in the Petition.” Mot. 5–7.

Our Rule 37 C.F.R. § 42.23(b) addresses the proper scope of a reply. The Consolidated Trial Practice Guide explains that a motion to exclude is not a vehicle for addressing argument or evidence that a party believes exceeds the proper scope of reply. Consolidated Trial Practice Guide, 79.

We, thus, do not exclude Exhibit 1036 based upon 37 C.F.R. § 42.23(b).

e) Conclusion as to Exhibit 1036

Patent Owner’s Motion as to Exhibit 1036 is denied.

2. Exhibits 1041–1044, 1046, and 1053

Patent Owner moves to exclude Exhibits 1041–1044, 1046, and 1053. Mot. 8–11. Patent Owner’s motion as to these exhibits is moot because we do not rely upon any of these exhibits to reach our decision on patentability. We, thus, dismiss Patent Owner’s Motion to Exclude as to Exhibits 1041–1044, 1046, and 1053.

IV. CONCLUSION¹⁰

After considering the evidence and arguments presented in the Petition and Preliminary Response, we determine Petitioner has established by a preponderance of the evidence that claims 1–4, 6, 7, 9–13, 15, and 16 are unpatentable and failed to establish by a preponderance of the evidence that claim 8 is unpatentable.

In summary:

Claim(s)	35 U.S.C. §	Reference(s)/Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1–4, 6, 7, 9–13, 15, 16	103	Socwell, Magid, Sclater	1–4, 6, 7, 9– 13, 15, 16	
1–4, 6–13, 15, 16	103	Tollkien, Sclater		1–4, 6–13, 15, 16
Overall Outcome			1–4, 6, 7, 9– 13, 15, 16	8

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Patent Owner’s Motion to Exclude is *denied in part and dismissed in part*.

ORDERED that claims 1–4, 6, 7, 9–13, 15, and 16 are unpatentable,

¹⁰ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

ORDERED that claim 8 is not unpatentable, and

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Patent 11,465,005 B2

FOR PETITIONER:

John M. Halan
Andrew B. Turner
Rebecca J. Cantor
Kyle G. Konz
Reza Esfahani
BROOKS KUSHMAN P.C.
jhalan@brookskushman.com
atruener@brookskushman.com
rcantor@brookskushman.com
kkonz@brookskushman.com
resfahani@brookskushman.com

FOR PATENT OWNER:

Richard J. McKenna
Kadie M. Jelenchick
Sarah Rieger
FOLEY & LARDNER LLP
rmckenna@foley.com
kjelenchick@foley.com
srieger@foley.com