

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GARMIN INTERNATIONAL, INC.,
Petitioner,

v.

SARIS EQUIPMENT, LLC,
Patent Owner.

IPR2024-01294
Patent 10,434,394 B2

Before MICHAEL J. FITZPATRICK, BARRY L. GROSSMAN, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

FITZPATRICK, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioner, Garmin International, Inc., filed a Petition to institute an *inter partes* review of claims 1, 12, 25, and 26 of U.S. Patent No. 10,434,394 B2 (“the ’394 patent”) pursuant to 35 U.S.C. § 311(a). Paper 1 (“Pet.”). Patent Owner, Saris Equipment, LLC, did not file a preliminary response, and the deadline for doing so has passed. *See* Paper 4 (Notice triggering a preliminary response deadline of December 18, 2024); *see also* 37 C.F.R. § 42.107(b) (“The preliminary response must be filed no later than three months after the date of a notice indicating that the request to institute an *inter partes* review has been granted a filing date.”).

Institution of an *inter partes* review requires “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Determining whether a reasonable likelihood has been met has been delegated to the Board. *See* 37 C.F.R. § 42.4(a) (“The Board institutes the trial on behalf of the Director.”). For the reasons explained below, there is a reasonable likelihood that Petitioner would prevail with respect to at least one claim. Accordingly, we grant the Petition.

A. Related Matters

The parties are not aware of any related matters. Pet. 76; Paper 3, 1.

B. Real Parties In Interest

Petitioner identifies Garmin International, Inc., Garmin USA, Inc., Garmin Corporation, and Garmin Ltd., as real parties in interest. Pet. 76.

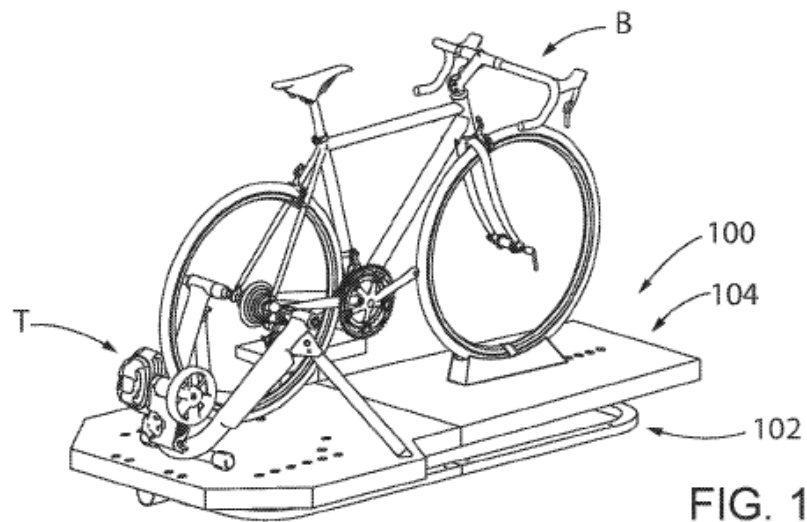
Patent Owner identifies itself as the only real party in interest for Patent Owner. Paper 3, 1.

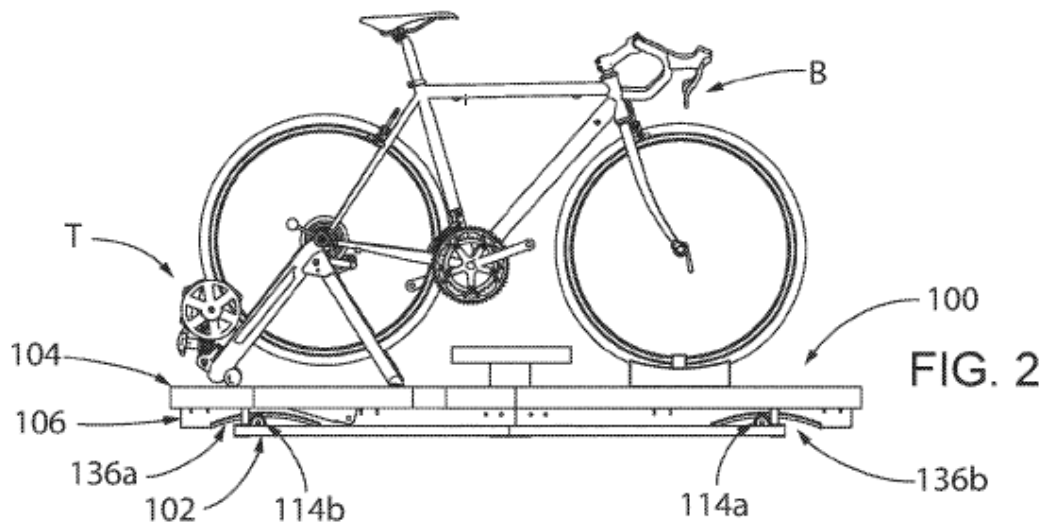
C. The '394 Patent

The '394 patent is titled “Movable Support for Exercise Equipment.” Ex. 1001, code (54). The '394 patent explains that “[v]arious types of indoor exercise equipment are designed to mimic or simulate exercise activities that are typically done in an outdoor environment.” *Id.* at 1:16–18. For example, treadmills allow users to walk or run indoors as opposed to outdoors, and stationary cycles or bicycle trainers (on which conventional bicycles can be mounted), allow users to experience cycling-type exercise indoors as opposed to outdoors. *Id.* at 1:18–25.

An object of the '394 patent is that users can “more realistically experience movement that occurs in an outdoor environment when using an item of exercise equipment in an indoor environment.” *Id.* at 1:38–41. Relatedly, another object of the '394 patent is “to provide a support system for an item of exercise equipment that allows movement of the item of exercise equipment in different directions to enhance the user’s experience.” *Id.* at 1:45–48.

Figures 1 and 2 of the '394 patent are reproduced below.





Figures 1 and 2, reproduced above, show isometric and side elevation views, respectively, “of a movable support [100] for an item of exercise equipment in accordance with the present invention, in which the item of exercise equipment is in the form of a bicycle [B] mounted to a bicycle trainer [T].” Ex. 1001, 6:4–11. The movable support includes base 102, platform 104, and frame 106. *Id.* at 9:27–30. The base “is adapted to be positioned on a supporting surface such as a floor.” *Id.* “The bicycle B and trainer T are positioned on an upwardly facing surface defined by the platform 104.” *Id.* at 9:30–31. The platform is secured to the frame, and the frame is movable relative to the base “in response to input forces applied by the user to the pedals of bicycle B during use.” *Id.* at 9:31–36.

Figure 9 is reproduced below.

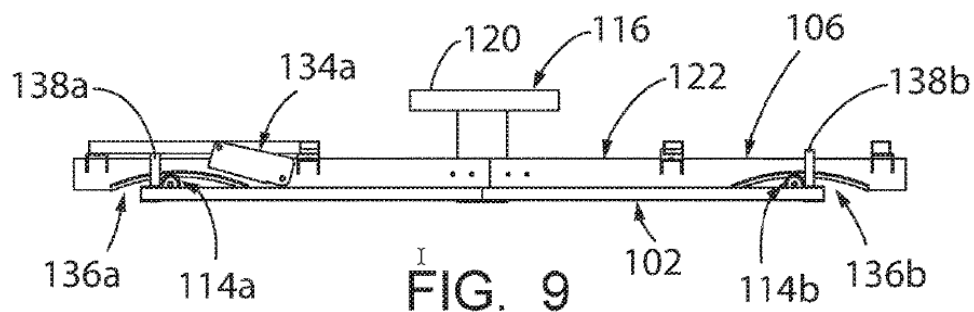


Figure 9, reproduced above, shows “a side elevation view of the movable exercise equipment support base and frame.” Ex. 1001, 6:29–30. As shown in Figure 9, “the frame 106 includes a longitudinal frame member 122 that overlies the base 102 and that extends beyond the ends of base 102.” *Id.* at 9:61–63. The longitudinal frame member includes “rear and front engagement areas 136a, 136b, respectively,” which “rest on and are supported by the rear and front grooved rollers 114a, 114b, respectively.” *Id.* at 10:26–30. This arrangement

allow[s] frame 106, and thereby platform 104 and bicycle B and trainer T supported thereabove, to move in an axial or fore-aft direction relative to the base 102 in response to input forces applied by the user to the pedals of bicycle B. The rear and front engagement areas 136a, 136b are identically constructed, and have an arcuate configuration that provides movement of the frame 106 upwardly and downwardly as the frame 106 is moved in the axial or fore-aft direction relative to the base 102. In this regard, the frame 106 is gravity biased toward an axially neutral position, as shown in FIG. 9, due to the arcuate configuration of the engagement areas 136a, 136b. The frame 106 can be moved rearwardly and upwardly relative to the base 102 as shown in FIG. 10, as well as forwardly and upwardly relative to the base 102 as shown in FIG. 11, in reaction to forces that are experienced by the platform 104 and frame 106 in response to application of input forces by the user to the pedals of the bicycle B.

Id. at 10:30–47.

The '394 patent was filed on December 20, 2018, and claims priority to three applications, the earliest of which was filed August 17, 2017. *Id.*, codes (60), (63), 1:7–12. The Petition presumes, without conceding, that the challenged claims were effectively filed on August 17, 2017. *See* Pet. 9 (“Because the prior art relied upon in this Petition pre-dates the '394 Patent’s earliest possible priority date of August 17, 2017, Petitioner simply

assumes this priority date applies. Petitioner . . . reserves the right to later challenge its entitlement to that priority date.”).

D. The Challenged Claims

Inter partes review is sought for claims 1, 12, 25, and 26. Pet. 1. Claims 1, 12, and 25 are independent, and claim 26 depends from claim 25. Ex. 1001, 32:2–28 (claim 1), 33:36–64 (claim 12), 35:52–36:16 (claims 25 and 26). Claim 1 is illustrative and reproduced below.

1. A support for an item of exercise equipment that experiences forces in a fore-aft direction during use, comprising:

a lower member adapted for placement on a support surface that lies in a support surface plane; and

an upper member interconnected with the lower member via a movable interconnection, wherein the upper member is configured to support the item of exercise equipment above the support surface, and wherein the movable interconnection of the upper member with the lower member is configured to enable the upper member to move forwardly and rearwardly in the fore-aft direction relative to the lower member in response to fore-aft forces that are transferred to the upper member from the item of exercise equipment in response to use of the item of exercise equipment;

wherein the movable interconnection of the upper member with the lower member is further configured to provide upward and downward movement of the upper member relative to the support surface during movement of the upper member forwardly and rearwardly in the fore-aft direction relative to the lower member, and wherein the upper member is oriented parallel to the support surface plane during movement of the upper member relative to the lower member in the fore-aft direction and during upward and downward movement of the upper member relative to the support surface.

Id. at 32:2–28.

E. The Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Claim(s) Challenged	35 U.S.C. §	Basis
1, 12, 25	102 ¹	Zwinkels ²
1, 12, 25	103	Zwinkels
1, 12, 25, 26	103	Zwinkels, Papadopoulos ³

Pet. 15.

II. ANALYSIS

A. Claim Construction

The challenged claims should be read in light of the specification, as it would be interpreted by one of ordinary skill in the art. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). Thus, we generally give claim terms their ordinary and customary meaning. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning is the meaning that the term would have to a person of ordinary skill in the art in question.” (internal quotation marks omitted)); *see also*

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, which was enacted September 16, 2011, amended 35 U.S.C. § 103. AIA § 3(c). That amendment became effective eighteen months later on March 16, 2013. *Id.* at § 3(n). Because the earliest effective filing date of the claims of the ’394 patent is after March 16, 2013, any citations herein to 35 U.S.C. §§ 102 and 103 are to their AIA version. *Id.* at § 3(n)(1); Ex. 1001, code (60) (listing related applications, the earliest filed of which was filed on August 17, 2017).

² US 2011/0136630 A1, published June 9, 2011 (“Zwinkels”). Ex. 1004.

³ WO 2018/027216 A1, filed August 7, 2017, and published Feb. 8, 2018 (“Papadopoulos”). Ex. 1005.

37 C.F.R. § 42.100(b) (stating that claims are construed in IPRs according to the same standard as used in federal court).

Petitioner does not propose an express construction of any term of claim 1. *See* Pet. 14 (“Petitioner submits that for the purposes of this proceeding, the terms of the challenged claims should be given their plain and ordinary meaning, and no terms require specific construction.”).

At this stage of the proceeding, we discern no need to provide an express construction of any term of any claim.

B. Level of Ordinary Skill in the Art

Petitioner contends a person of ordinary skill in the art of the ’394 patent “would have had a bachelor’s degree in mechanical engineering, or equivalent training, and approximately 1–2 years of experience working with exercise equipment, such as bicycles and/or bicycle trainers. Additional education can substitute for less work experience, and vice versa.” Pet. 13–14 (citing Ex. 1003 ¶¶20–23).⁴

Because Petitioner’s formulation of the level of ordinary skill in the art appears consistent with the ’394 patent and the asserted prior art, and because there is no argument to the contrary at this stage of the proceeding, we apply it in our analysis below.

C. Ground 1

Petitioner argues that claims 1, 12, and 25 are anticipated by Zwinkels (Ex. 1004). Pet. 17.

⁴ Exhibit 1003 is a declaration executed by Alan Côté and submitted by Petitioner in support of the Petition.

1. Zwinkels (Ex. 1004)

Zwinkels was filed November 4, 2010, and published June 9, 2011. Ex. 1004, codes (22), (43). Petitioner argues that, based on its filing date, “Zwinkels is thus prior art under at least 35 U.S.C. § 102(a)(2).” Pet. 15. On the record presented, we agree. In addition, the current record supports that, based on its publication date, Zwinkels is prior art also under 35 U.S.C. § 102(a)(1).

Zwinkels “relates to a training apparatus arranged for supporting a bicycle, comprising a ground-supported or supportable frame that is at least provided with a supporting roll or rollers for a bicycle back wheel that are movable in the frame.” Ex. 1004 ¶6.

Figure 3 is reproduced below.

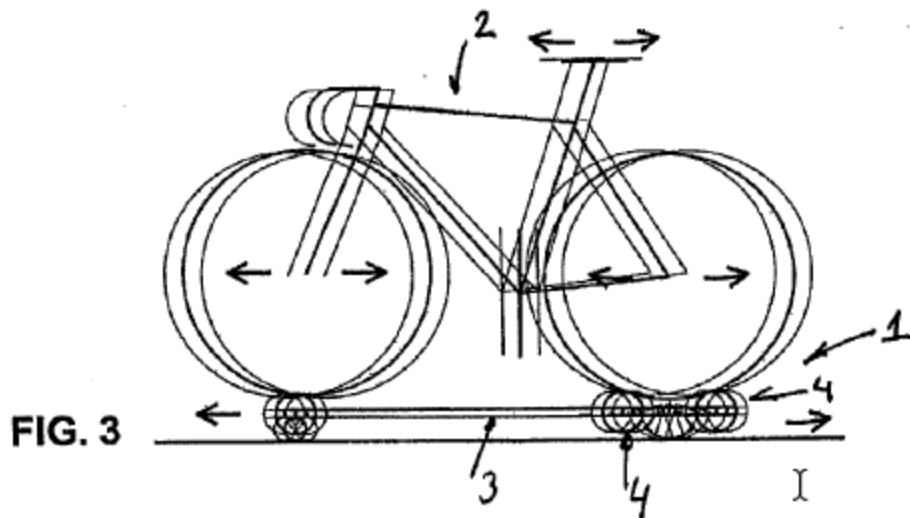


Figure 3, reproduced above, “shows schematically a first embodiment [of] the training apparatus [1] of the invention supporting a bicycle [2].” Ex. 1004 ¶14. The training apparatus includes “a ground-supported or -supportable frame 3” with “supporting roll or rollers 4 for a bicycle back wheel.” *Id.* ¶28.

[T]he supporting roll or rollers 4 for a bicycle back wheel 5 are movable in the frame 3 so as to allow for their movement in vertical direction. The construction is arranged such that the suspension of said roll or rollers enables relative horizontal movements of said roll or rollers 4 induced by acceleration or deceleration of the bicycle 2 (as indicated with the arrows) to co[n]vert into vertical movements, thereby compensating and/or attenuating said horizontal movements by gravity.

Id. ¶31. Likewise, in some embodiments, “the frontwheel 10 of the bicycle 2 is supported by a roll 4 that allows for back-and forth movement in the horizontal direction which is counter acted by a vertical movement induced by said horizontal movement.” *Id.* ¶37.

Figures 4–7 “show schematically different embodiments of the suspension of the rollers [4] of the apparatus of the invention for supporting a bicycle back wheel” as well as the front wheel, in applicable embodiments. *Id.* ¶15; *see also id.* ¶37 (“The suspension of the roll 4 that supports the frontwheel 10 is accordingly implemented in the manner as explained with reference to FIGS. 4–7.”). Figure 5 is discussed below in relation to one of the limitations of claim 1.

2. Application of Zwinkels to Claim 1

Petitioner maps Zwinkels to claim 1, limitation by limitation. Pet. 20–44. We address each below, starting with the preamble.

a) “A support for an item of exercise equipment that experiences forces in a fore-aft direction during use, comprising:”

Petitioner argues that Zwinkels discloses the preamble, assuming it is limiting. Pet. 20. In particular, Petitioner quotes its disclosure of “a training apparatus arranged for supporting a bicycle.” *Id.* (quoting Ex. 1004 ¶6).

Petitioner also quotes Zwinkels’s disclosure “that the training apparatus is configured ‘to convert relative horizontal movements of the roll or rollers into vertical movements.’” *Id.* (quoting Ex. 1004 ¶20). There is a reasonable likelihood that Zwinkels teaches the preamble of claim 1.

b) “a lower member adapted for placement on a support surface that lies in a support surface plane”

Petitioner argues that Zwinkels’s frame constitutes the recited “lower member” of claim 1. Pet. 22. In particular, Petitioner directs us to its disclosure that “training apparatus 1 compris[es] a ground-supported or – supportable **frame 3**.” *Id.* at 23 (Petitioner’s emphasis) (quoting Ex. 1004 ¶28).

There is a reasonable likelihood Zwinkels teaches “a lower member adapted for placement on a support surface that lies in a support surface plane,” as recited in claim 1.

c) “an upper member interconnected with the lower member via a movable interconnection, wherein the upper member is configured to support the item of exercise equipment above the support surface”

Petitioner argues that Zwinkels’s rollers 4 connected to each other via connecting link 7 together constitute the recited “upper member” of claim 1. Pet. 28–33. In particular, Petitioner points out that the rollers 4 support the bicycle’s wheels and the rollers themselves are interconnected to the frame (i.e., the asserted lower member) by pendulum arms 6 that are fixed to the frame at pivoting points. Pet. 28 (citing Ex. 1004 ¶¶24–25, Fig. 5); *see also id.* at 28–30.

There is a reasonable likelihood Zwinkels teaches “an upper member interconnected with the lower member via a movable interconnection, wherein the upper member is configured to support the item of exercise equipment above the support surface,” as recited in claim 1.

d) *“wherein the movable interconnection of the upper member with the lower member is configured to enable the upper member to move forwardly and rearwardly in the fore-aft direction relative to the lower member in response to fore-aft forces that are transferred to the upper member from the item of exercise equipment in response to use of the item of exercise equipment”*

Petitioner argues that Zwinkels’s pendulum arms 6 enable the rollers to move forwardly and rearwardly relative to the frame. Pet. 33–38. For example, paragraph 20, as cited by Petitioner, discloses that the rollers “are movably suspended in the frame in vertical direction, wherein the suspension of said roll or rollers is arranged to convert relative horizontal movements of the roll or rollers into vertical movements thereby compensating and/or attenuating said horizontal movements by gravity.” Ex. 1004 ¶20 (cited at Pet. 34). Further, Zwinkels attributes the forward and rearward movement to the use of the bicycle by the person exercising on it. See Ex. 1004 ¶27 (describing the “horizontal movements induced by the accelerations and decelerations of the training cyclist”) (cited at Pet. 35). Petitioner also cites multiple figures that illustrate forward and rearward movement. Pet. 35–37 (reproducing Ex. 1004, Figs. 3, 5, and 6).

There is a reasonable likelihood Zwinkels teaches “wherein the movable interconnection of the upper member with the lower member is configured to enable the upper member to move forwardly and rearwardly in

the fore-aft direction relative to the lower member in response to fore-aft forces that are transferred to the upper member from the item of exercise equipment in response to use of the item of exercise equipment,” as recited in claim 1.

- e) *“wherein the movable interconnection of the upper member with the lower member is further configured to provide upward and downward movement of the upper member relative to the support surface during movement of the upper member forwardly and rearwardly in the fore-aft direction relative to the lower member.”*

Petitioner argues that Zwinkels’s pendulum arms 6 enable the rollers to move upward and downward relative to the frame while the rollers are also moving forwardly and rearwardly relative to the frame. Pet. 39–42. For example, paragraph 24, as cited by Petitioner, discloses that the pendulum arms connecting the rollers at fixed pivoting points on the frame “provides an easy and effective solution for absorbing and attenuating horizontal movements by converting these horizontal movements to vertical movements.” Ex. 1004 ¶24 (cited at Pet. 39). Petitioner also reproduces Figures 5 and 6, which illustrate the displacement of rollers in both the vertical and horizontal directions. Pet. 40 (citing Ex. 1004, Figs. 5–6).

Figure 5 is reproduced below.

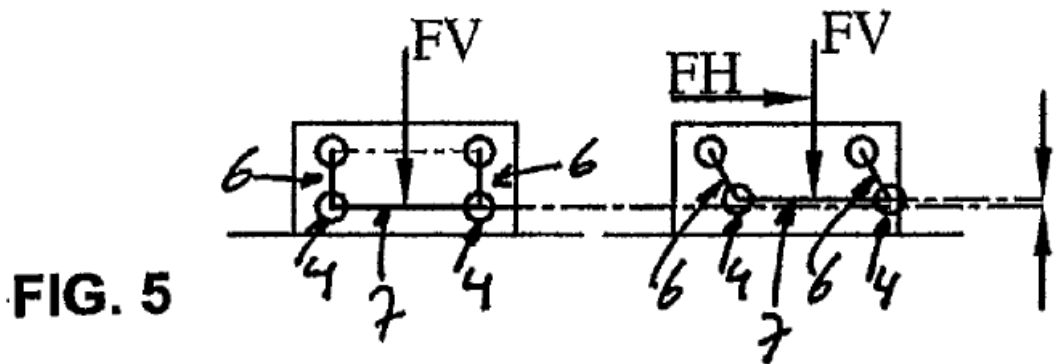


Figure 5, reproduced above, “shows the embodiment in which there are two rollers 4 for the bicycle back wheel.” Ex. 1004 ¶34. Figure 5 shows two configurations of the embodiment on left and right sides. Ex. 1004 ¶34, Fig. 5. The configuration “at the left of FIG. 5 shows the pendulum arms 6 in a resting position, whereas the [configuration] on the right shows the pendulum arms 6 after they have due to the connecting link 7 concertedly moved to the right due to a force FH, causing that the rollers 4 have moved vertically upwards.” Ex. 1004 ¶34.

There is a reasonable likelihood Zwinkels teaches “wherein the movable interconnection of the upper member with the lower member is further configured to provide upward and downward movement of the upper member relative to the support surface during movement of the upper member forwardly and rearwardly in the fore-aft direction relative to the lower member,” as recited in claim 1.

f) “wherein the upper member is oriented parallel to the support surface plane during movement of the upper member relative to the lower member in the fore-aft direction and during upward and downward movement of the upper member relative to the support surface”

Petitioner argues that Zwinkels’s rollers are oriented parallel to the ground or floor at all times. Pet. 42–44. Petitioner argues that this is clearly shown in Figure 5, which we reproduced in the immediate section above. See Pet. 43 (citing and annotating Ex. 1004, Fig. 5). We agree.

There is a reasonable likelihood Zwinkels teaches “wherein the upper member is oriented parallel to the support surface plane during movement of the upper member relative to the lower member in the fore-aft direction and during upward and downward movement of the upper member relative to the support surface,” as recited in claim 1.

3. Conclusion Regarding Claim 1

Petitioner has demonstrated a reasonable likelihood of prevailing on its challenge to claim 1 as unpatentable under 35 U.S.C. § 102 as anticipated by Zwinkels.

D. Remaining Claims of Ground 1 and Grounds 2 and 3

The threshold for institution is a reasonable likelihood of Petitioner prevailing as to any single claim. 35 U.S.C. § 314(a). “Once that single claim threshold is satisfied, it doesn’t matter whether the [P]etitioner is likely to prevail on any *additional* claims.” *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018). Thus, because we have decided to grant review of claim 1, we do the same for all claims challenged and all grounds raised. *Id.*; see also 37 C.F.R. § 42.108(a) (“When instituting *inter partes* review,

the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.”).

III. CONCLUSION

For the reasons discussed above, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in establishing that at least one of the challenged claims is unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that the Petition is granted and *inter partes* review is hereby instituted as to claims 1, 12, 25, and 26 of U.S. Patent No. 10,434,394 B2 on the grounds presented; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial on the grounds of unpatentability authorized above; the trial commences on the entry date of this decision.

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