UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

WOODWAY USA, INC.
Patent Owner.

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U.S. Patent No. 9,039,580 to Bayerlein et al.

Case No.: IPR2023-00836

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# PETITIONER'S REQUEST FOR REHEARING

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# I. INTRODUCTION

Pursuant to 37 C.F.R. § 42.71(d), Petitioner, LifeCORE Fitness, LLC, requests rehearing for claim 25 of U.S. Patent No. 9,039,580 ("the '580 Patent"). In its Final Written Decision ("FWD," Paper 44) of October 22, 2024, the Board:

> A. misapprehended claim 25 to implicitly construe the phrase "*bearing rails define a curved top profile*" to exclude two or more linear bearing rails that together define a curved top profile—overlooking the '580 Patent disclosure that: "a linear portion may replace **all** or a portion of the curve"[1] (Ex.1001, 10:32-33) to define the curve; and
>
> B. misapprehended claim 25 to implicitly construe the phrase "*disposing a running belt on the plurality of bearings*" to require the running belt to be positioned above all bearings and to exclude bearings positioned above the running belt—overlooking the '580 Patent disclosure of a running belt with an endless belt *disposed on* the belt slats by being disposed above and below the belt slats.

Petitioner respectfully requests rehearing to address unsupported factual findings and clear legal error in the Final Written Decision. Upon rehearing, the Board should find claim 25 unpatentable.

# II. BASIS FOR RELIEF REQUESTED

## A. The Board misapprehended claim 25 to implicitly construe the phrase "*wherein the first and second bearing rails define*

[1] Emphasis added by Petitioner unless otherwise noted.

***a curved top profile*" to exclude linear bearing rails.**

Independent claim 25 requires:

25. A method, comprising:

providing a manually powered treadmill, the manually powered treadmill having a frame with a front end and rear end;

providing a first bearing rail and a second bearing rail, the first and second bearing rails each comprising a plurality of bearings and extending longitudinally on the frame, **wherein the first and second bearing rails <u>define</u> a curved top profile**;

disposing a running belt on the plurality of bearings of the first bearing rail and the second bearing rail such that the running belt follows a top curved running surface corresponding to **<u>the</u> curved top profile of the first and second bearing rails**;

permitting movement of the running belt in a first direction; and

substantially preventing movement of the running belt in a second direction opposite the first direction.

(Ex.1001, claim 25.)

The Board did not expressly construe "*wherein the first and second bearing rails **<u>define</u>** a curved top profile*." However, as quoted below, the Board agreed with Patent Owner's implied construction of "*define*" to exclude bearing rails comprising linear segments, such as those disclosed by Chickering:

> The language of claim 25, thus, requires the first and second bearing rails to have a curved top profile. . . . We agree with Patent Owner that Chickering does not disclose support arms 14 and 19 (i.e., the claimed bearing rails) defining or having a curved top profile, as required by claim 25.

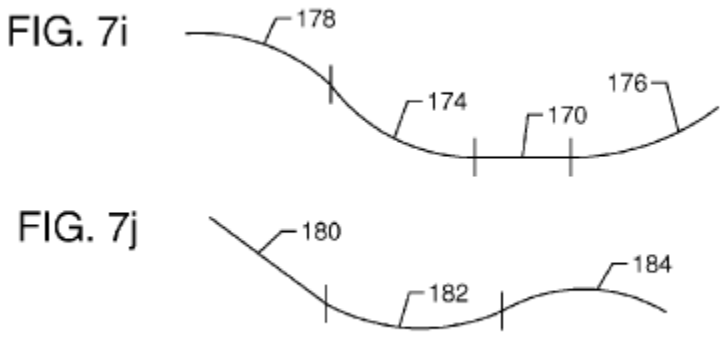
(FWD, 31.)

More specifically, as explained in the Reply, Patent Owner's argument that Chickering's support arms 14 and 19 "do not have any curved components" implied a construction that each segment of a bearing rail defining a curved top profile must have a curved shape. (Reply, 9-10; POR, 14.) But claim 25 does not require that each segment has a curved shape. "Instead claim 25 requires that the '*the first and second bearing rails define a curved top profile*.'" (Ex.1036, ¶29.) As explained below, Patent Owner's implicit construction of "*bearing rails define a curved top profile*" is narrower than it is defined in the '580 Patent.

### 1. The specification does not limit the "*bearing rails*" to being formed in a curved shape.

As explained in the Reply, "[t]he '580 Patent discloses, with reference to Figures 7b-7j, curved running surfaces that are 'collectively' defined by 'concave, convex, or linear' portions"—the latter being portions 170 and 180. (Reply, 9-10; Ex.1036, ¶30; Ex.1001, 9:26-32 ("Each portion has a particular geometric configuration that is concave, convex, or linear, collectively, the portions define the

non-planar running surface.”).)




**Ex.1001, Figs.7i, 7j**

The ’580 Patent further discloses that “multiple linear portions may be included in a profile of a non-planar surface.” (Ex.1001, 10:33-35; Ex.1036, ¶¶31-33.) On Sur-Reply, Patent Owner argued that “no intrinsic evidence suggests that a curved running surface can be defined entirely by linear portions.” (Sur-Reply, 12-13.) However, the ’580 Patent explicitly provides: “a linear portion may replace **all** or a portion of the curve.” (Ex.1001, 10:33-35.) As Petitioner explained during Oral Argument, this quote confirms that “the '580 patent does disclose a profile made up of only linear portions.” (Paper 43, 118:10-17.)

Patent Owner further argued that this disclosure in the ’580 Patent “relate[s] to the shape of the ***running surface***, not a top profile defined ***by the bearing rails*** . . . .” (Sur-Reply, 11, emphasis in original.) However, the ’580 Patent further discloses that “the shape of the top profile of the **bearing rails** can necessarily be

any of the shapes and/or have any of the variations (e.g., in length of portions, etc.) discussed above in FIGS. 7a through 7j with reference to possible shapes of the running surface." (Ex.1001, 12:32-38.) In other words, the specification specifically correlates the possible shape of the bearing rail top profile to the specification definition that a curve may comprise linear portions that collectively define the curved top profile.

Accordingly, the Board's construction of the phrase "*wherein the first and second bearing rails **define** a curved top profile*" to exclude Chickering's support arms (linear "*bearing rails*") is too narrow and overlooks disclosure in the '580 Patent specification. The specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

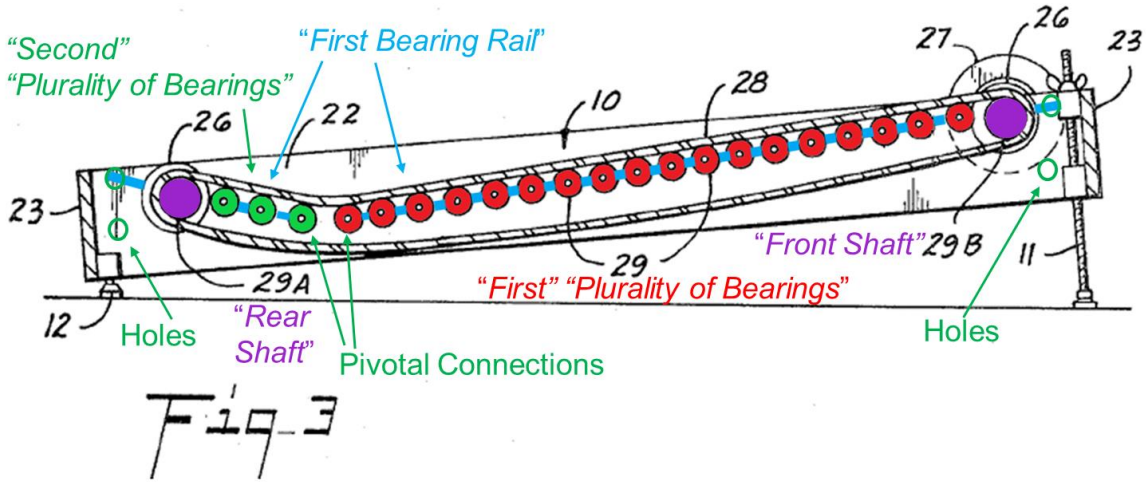
**2. The other claim limitations do not limit the "*bearing rails*" to being formed in a curved shape.**

Claim 25 requires "*wherein the first and second bearing rails **define** a curved top profile . . . **the** curved top profile of the first and second bearing rails*." The claim does not require that the bearing rails are formed in a curved shape, only that they "*define a curved top profile*." The second reference to the curved top profile in claim 25 does not include the word "*define*" however it refers back to the "*define[d]*"

curved top profile by way of antecedent basis (i.e., ***the*** *curved top profile of the first and second bearing rails*.") "[T]he context in which a term is used in the asserted claim can be highly instructive." *Phillips v. AWH Corp*., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc).

### 3. The Petition demonstrated that Chickering's teachings render obvious the "*bearing rails define a curved top profile*" limitation.

As explained in the Petition, Chickering's support arms 14, 19, as illustrated in Figures 1 and 2, satisfy the "*bearing rails*" claim limitations. (Pet., 26-31.) Petitioner further explained that a POSA would have been motivated to modify Chickering's single belt embodiment of Figure 3 to include the support arms 14, 19 of Figures 1 and 2 ("*bearing rails*" (blue)) to allow a user to adjust the tread surface inclination, as taught with reference to Figure 1. (Pet., 29-30; Ex.1003, ¶¶153, 203, ¶¶156, 204.)




**Ex.1013, Fig.3 (Annotated)**

As illustrated in Figure 3 above, Chickering's support arms 14, 19 ("*first and second bearing rails*"), despite being formed straight or linear, collectively define a curved top profile as defined by the '580 Patent. (Pet., 30-31; Ex.1013, 1:74-2:4; Fig.1; Ex.1003, ¶¶221-225.)

Accordingly, LifeCORE requests rehearing regarding the "*bearing rails define a curved top profile*" limitation of claim 25.

### B. The Board misapprehended claim 25 to implicitly construe the phrase "*disposing a running belt on the plurality of bearings*" to require the running belt to be positioned vertically above the plurality of bearings.

Independent claim 25 requires "***disposing a running belt on the plurality of bearings*** *of the first bearing rail and the second bearing rail* ***such that*** *the running belt follows a top curved running surface corresponding to the curved top profile of the first and second bearing rails; . . . .*"

While the Board did not expressly construe the phrase "*disposing a running belt on the plurality of bearings,*" its analysis indicates that it implicitly construed the term to require the belt to be located above the bearings.[2] For example, the Board

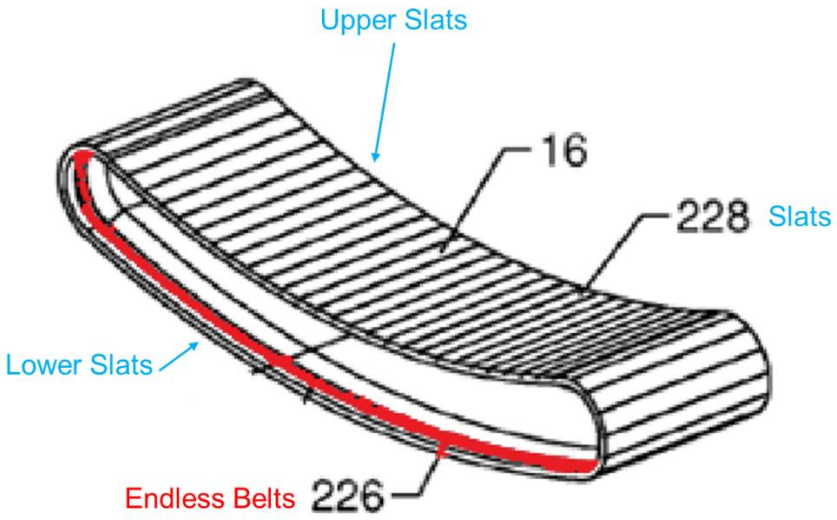
[2] In IPR2023-00849 the Board stated that "the plain and ordinary meaning of the term 'disposing a running belt on the plurality of bearings' is that the belt is above the bearings, i.e., the bearings are below the belt." (Paper 42, 23.)

found that "[a]t most, Socwell's belt 16 is disposed on one bearing, deck 56, and not a plurality of bearings" (FWD, 46)—i.e., the Board excluded the Socwell rollers 98 ("*bearings*") located above the belt.

Patent Owner argued that "*bearings*", "*support*", and "*disposed ... on*" all require the belt to be on top of the bearings in a weight-bearing relationship. (POR, 17-18, 26-27; Reply, 3; Ex.1036, ¶12.) This implied claim construction is wrong. In accordance with the '580 Patent's use of the phrase "*disposed on*," the Socwell belt 16 is "*disposed on*" both the deck 56 and rollers 98 which collectively provide the "*plurality of bearings*." (Pet., 73-74.) That is all claim 25 requires. (Ex.1036, ¶¶42-45.)

**1. The specification does not limit the term "disposed on" to arrangements in which an element is positioned vertically above another element.**

The '580 Patent uses the phrase "disposed on" to refer to arrangements where one component "disposed on" another is not on top of or in a weight-bearing relationship with the other component. For example, the '580 Patent discloses endless belts 226 being "disposed on" the slats 228 of the running belt 16—whether such belts are above or below the slats: "The endless belts 226 are shown disposed on opposite sides of the running belt 16, generally interior to the outer, lateral edge of the slats 228." (Reply, 5; Ex.1001, 14:6-9; Ex.1036, ¶44.)




**Ex.1001, Fig.6 Excerpt (Annotated)**

The endless belt 226 extends in a continuous loop about the running belt 16 such that it is necessarily positioned above the lower slats 228 (as annotated in red in the above figure) and **below** the upper slats 228. (Reply, 6; Ex.1036, ¶45.) The Board's implied construction of "*disposing ... on*" to exclude bearings positioned above the running belt overlooks the '580 Patent's use of the phrase "disposed on" to describe above and below arrangements. The specification "is the single best guide to the meaning of a disputed term." *Vitronics*, 90 F.3d at 1582.

**2. The other claim limitations do not limit the running belt to be positioned vertically above the bearings.**

Claim 25 further requires that the running belt follows the top curved running surface **as a result** of being disposed on the bearings, *i.e.*, "*disposing a running belt on the plurality of bearings of the first bearing rail and the second bearing rail* ***such***

***that*** *the running belt follows a top curved running surface*."

Socwell describes its deck 56 and rollers 98 ("*plurality of bearings*")—as fulfilling this limitation exactly:

> Referring now to FIG. 5, the curved deck treadmill 10 may include one or more belt securing assemblies 94 which provide a means for retaining the endless belt 16 in a curvilinear configuration being substantially flush with the upper surface 66 of the deck 56. Preferably, the belt securing assemblies 94 provide a means for substantially conforming the inherent flexible nature of the belt 16 to the arcuate configuration of the intermediate portion 62 of the deck 56. In design, one or more belt securing assemblies 94 may be disposed in spaced-apart relation along the upper surface 66 of the intermediate portion 62 of the deck 56, as shown in FIG. 2, to sufficiently retain the belt 16 in operable disposition to the deck 56.
>
> In one presently preferred embodiment of the present invention, the belt securing assembly 94 comprises a roller 98. . . .[T]he roller 98 may engage the belt 16, thereby substantially retaining a side portion of
>
> the belt 16 substantially flush with the deck 56.

(Ex.1011, 10:5-23.)

Thus, the Board's narrow implied construction conflicts with the "*such that*" limitation: i.e., "***disposing a running belt on the plurality of bearings*** *of the first bearing rail and the second bearing rail* ***such that*** *the running belt follows a top curved running surface*." This further confirms that the implied construction is

wrong. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Phillips* at 1314.

The Federal Circuit's holding in *Weber, Inc., v. Provisur Tech., Inc*., 92 F.4th 1059 (Fed. Cir. 2024) is instructive. In *Weber*, the Federal Circuit reversed the PTAB's overly narrow construction of the term "disposed over" to require that the "feed apparatus and its conveyor belts and grippers are 'positioned above and in vertical and lateral alignment with' the food article loading apparatus and its lift tray assembly." *Weber*, 92 F.4th at 1069-1070. The Court noted:

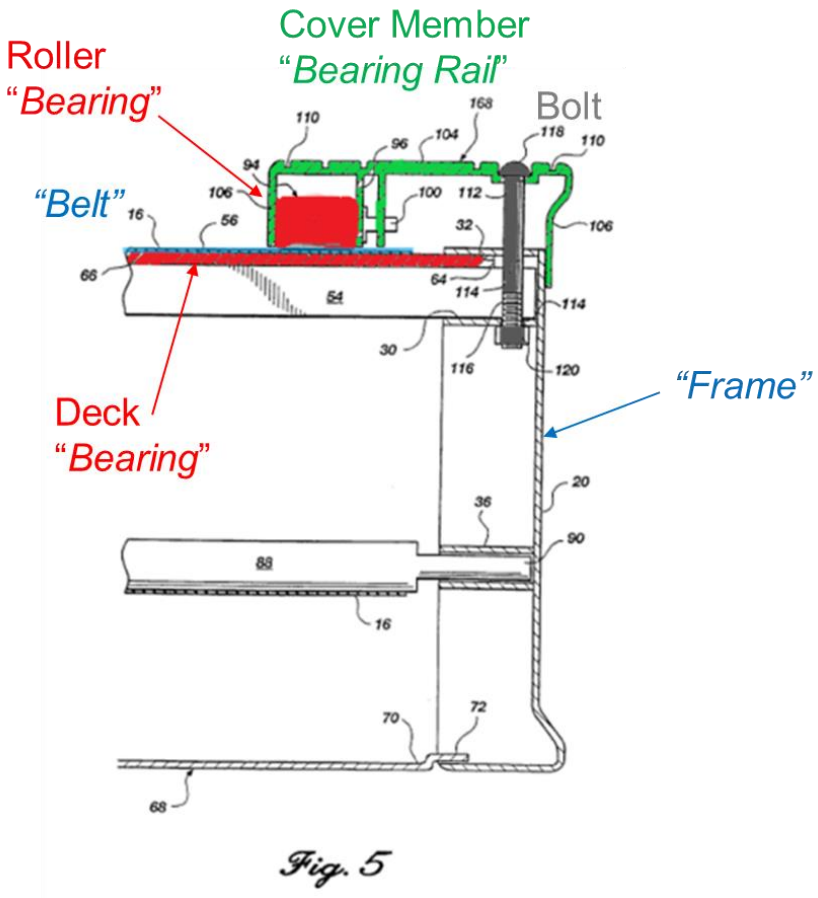
> The claim language contains no restrictions that would require direct alignment of the conveyor belts and lift tray assembly from the two apparatuses. 'Had the patent drafter intended to limit the claims' to address the alignment of the conveyor belts and lift tray assembly between the apparatuses, 'narrower language could have been used in the claim.'

*Id.* at 1069 quoting *Cyntec Co. v. Chilisin Elecs. Corp*., 84 F.4th 979, 986 (Fed. Cir. 2023).

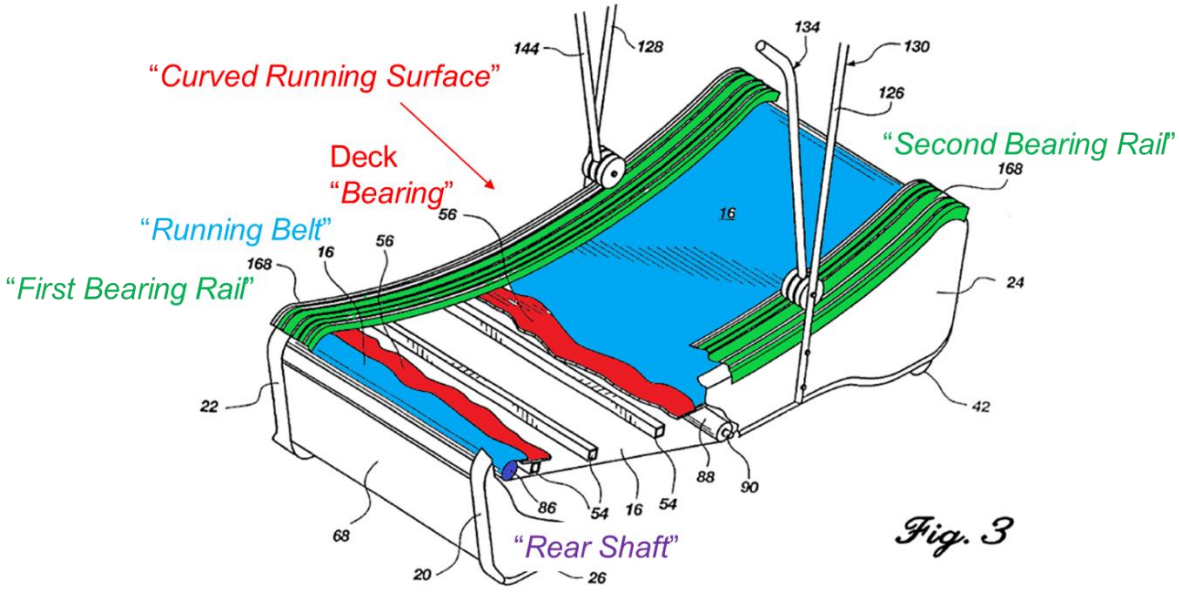
Like the claims in *Weber*, claim 25 contains no restrictions that would require direct alignment of the running belt above the bearings. On the contrary, the "*such that*" limitation of claim 25 suggests something more, e.g., arranging bearings above the running belt, "***such that*** *the running belt follows a top curved running surface*." Therefore, the Board's implied construction is not correct.

### 3. The Petition demonstrated that Socwell discloses "*disposing a running belt on the plurality of bearings.*"

As explained in the Petition, Socwell's rollers 98 and the deck 56 collectively provide a "*plurality of bearings*." (Pet., 69-71; Ex.1003, ¶¶344-349.) Socwell further discloses a running belt 16 that is disposed on and supported between the curved deck 56 and the rollers 98 ("*plurality of bearings*") *such that the running belt follows a top curved running surface*." (Pet., 73-75; Ex.1011, 10:17-26, 4:13-19, Fig.5; Ex.1003, ¶¶355-358.)




**Ex.1011, Fig.5 (Annotated)**




**Ex.1011, Fig.3 (Annotated)**

Accordingly, LifeCORE requests rehearing regarding the "disposing a running belt on the plurality of bearings" limitation of claim 25.

## III. CONCLUSION

For the reasons set forth above, Petitioner respectfully requests rehearing of the Final Written Decision of the '580 Patent, and upon rehearing, the Board should find claim 25 unpatentable.

Respectfully submitted,

Dated: November 21, 2024

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## Certificate of Service

The undersigned hereby certifies that on November 21, 2024, a complete and entire copy of **PETITIONER'S REQUEST FOR REHEARING**, was served via electronic mail to the attorneys listed below at rmckenna@foley.com; kjelenchick@foley.com; srieger@foley.com.

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This paper complies with the type-volume limitation of 37 C.F.R. § 42.24(a)(1)(v). The paper contains 13 pages excluding the parts of the paper exempted by § 42.24(c).

This paper also complies with the typeface requirements of 37 C.F.R. § 42.6(a)(ii) and the type style requirements of § 42.6(a)(iii)&(iv).

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Dated: November 21, 2024

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