

**UNITED STATES DISTRICT COURT  
DISTRICT OF CONNECTICUT**

CHAPCO, INC. and SAMSARA  
FITNESS, LLC  
Plaintiffs,

v.

WOODWAY USA, INC.  
Defendant.

:  
:  
:  
:  
:  
:  
:  
:  
:  
:  
:

CIVIL CASE NO.  
3:15-CV-1665 (JCH)

DECEMBER 8, 2016

**CLAIM CONSTRUCTION RULING**

Plaintiffs Chapco, Inc. and Samsara Fitness, LLC, (“Plaintiffs”) brought this action seeking a declaratory judgment against defendant Woodway USA, Inc. (“Woodway”). The plaintiffs ask the court to declare that the plaintiffs’ “TrueForm Runner” treadmill products do not infringe Woodway’s U.S. Patent Nos. 8,986,169 (the ‘169 Patent) and 9,039,580 (the ‘580 Patent) and to declare that those two patents are invalid. See Am. Compl. (Doc. No. 27). Woodway counterclaimed infringement of the two patents at issue, as well as infringement of U.S. Design Patent Nos. D736,866 and D753,776, not at issue in this Ruling. See Answer to Am. Compl. and Countercls. (Doc. No. 54). Pursuant to the court’s Scheduling Order issued on June 22, 2016, the parties submitted claim construction briefing, which the court now addresses.

## **I. BACKGROUND**

The patent application that would ultimately be granted as the ‘169 Patent was filed on April 2, 2014, as a continuation of Application No. 13/235,065. The ‘169 Patent was issued on March 24, 2015. Woodway filed the application that would ultimately be granted as the ‘580 Patent on March 13, 2015, as a continuation of Application No. 14/243,716. The ‘580 Patent was issued on May 26, 2015. Both patents teach a manual treadmill, that is, a treadmill that runs without a motor.

The plaintiffs seek a declaratory judgment that the “Trueform Runner” does not infringe any of the valid claims of either of the patents at issue. See Am. Compl. Woodway, in turn, seeks a judgment that the “Trueform Runner” infringes claims 11-16 of the ‘169 Patent and claims 1, 4-6, 10-14, 18-20, and 25 of the ‘580 Patent. See Answer. The parties’ Markman Briefings disclosed nine different words or phrases found throughout the claims in both patents that they seek the court to construe: (1) “frame”; (2) “bearing rail”; (3) “a safety device cooperating with the rear shaft”; (4) “coupled”; (5) “rotably coupled”; (6) “bearing rail having a plurality of bearings rotatably coupled to the at least one bearing rail”; (7) “running belt”; (8) “running surface”; and (9) “left side member” and “right side member.”

## **II. LEGAL STANDARD**

A suit claiming patent infringement proceeds in two steps: first, the presiding court must construe the claims at issue in the case and, second, the finder of fact must compare the patented process or device, as described in the construed claims, against the accused device or process to determine whether the accused device or process actually infringes. Cybor Corp v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir.

1998). The first step, claim construction, is vitally important because it is the claims that define precisely what it is that the inventor created. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005). The question of what the claims mean is a question of law and, as such, is exclusively determined by the court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 977-79 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). “Although the claims are construed objectively and without reference to the accused device, only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.” Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999).

The specific words of the claim “should ordinarily be given their ordinary and customary meaning.” 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1321 (Fed. Cir. 2013). The Federal Circuit has clarified that the ordinary and customary meaning is the meaning that a person having ordinary skill in the art in question at the time of the invention would give those words. Id. Importantly, the person having ordinary skill is not reading the claims in a vacuum; instead, they read the claims with an eye to the entire patent, including the specification. Id. When the disputed claim language involves words that can be readily understood even by lay judges, claim construction “involves little more than the application of widely accepted meaning of commonly understood words.” Phillips, 415 F.3d at 1314. In that case, the court may turn to a general purpose dictionary for guidance as to the ordinary and customary meaning. Id.

Although the court strives to give the claims their ordinary and customary meaning, “[i]diosyncratic language, highly technical terms, or terms coined by the inventor are best understood by reference to the specification.” Id. However, it is important to bear in mind that the claims alone describe the metes and bounds of the patent, and therefore “courts must take care not to import limitations into the claims from the specification.” Abbott Labs v. Sandoz, Inc. 566 F.3d 1282, 1288 (Fed. Cir. 2009). Another intrinsic source that the court should look to for how to understand the meaning of disputed terms is the record contained within the prosecution history. Phillips, 415 F.3d at 1314-15. However, the prosecution history should not be utilized to narrow the meaning of a claim unless the patentee intentionally limited or surrendered the scope of the claims “through a clear and unmistakable disavowal.” 3M Innovative Props., 725 F.3d at 1321.

Finally, district courts are not bound to construe every claim just because the parties request it. See Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1207 (Fed. Cir. 2010) (affirming the district court’s decision to not provide additional construction when that decision resolved the dispute over the terms). The court cannot shirk its responsibility to construe claims where the plain and ordinary meaning would allow the parties to reargue construction to the jury. O2 Micro Int’l Ltd. V. Beyond Innovation Tech. Co., 521 F.3d 1351, 1361 (Fed. Cir. 2008). However, where the court’s adoption of the plain and ordinary meaning resolves the dispute between the parties, it is permissible for the court to choose to not give those terms any further

construction. Summit 6, LLC v. Samsung Elecs. Co., Ltd., 802 F.3d 1283, 1291 (Fed. Cir. 2015)

With these standards in mind, the court now turns to the specific claims at issue in the instant matter.

### **III. DISCUSSION**

#### **A. The Term “Frame” Should be Given Its Plain and Ordinary Meaning**

The term “frame” is used in all of the independent claims in both patents as well as many of the dependent claims. Specifically, it can be found in independent claims 1 and 11 and dependent claim 12 of the ‘169 Patent and independent claims 1, 11, 19 and 25, and dependent claims 2, 4, 10, 13, 14, 18, and 21 of the ‘580 Patent. The plaintiffs argue that “frame” should be construed to mean a “structure distinct from the bearing rails,” while Woodway argues that the term should be given its plain and ordinary meaning. See Joint Claim Construction and Prehearing Statement (Doc. No. 68). The court agrees with Woodway that the term “frame” does not require additional construction. See 02 Micro Int’l Ltd. V. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“district courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims”).

In response to Woodway’s argument that “frame” has an ordinary meaning that requires no further elaboration, the plaintiffs argue that the word frame does not have a common understanding, in that a bed frame’s relationship to a bed is different than a door frame’s relationship to a door. See Pls.’ Reply Br. (Doc. No. 66) at 4. Therefore, the plaintiffs believe that the court should construe the term “frame,” as a “structure distinct from the bearing rails.” This construction informs the reader what the frame is

not, but provides no guidance that would inform the reader of what the frame actually is. See Pls.’ Resp. Br. (Doc. No. 59) at 16.

The court concludes that the plaintiffs’ arguments are unpersuasive. The Federal Circuit has stated that, in the absence of intrinsic evidence showing otherwise, district courts should construe the words according to the “usage of skilled artisans at the time of invention.” SmithKline Beecham Corp. v. Apotex, 403 F.3d 1331, 1339 (Fed. Cir. 2005). Looking to the specification, the court finds no evidence that the term “frame” has a specialized definition in the field of treadmills, nor is there evidence that it was given any unusual definition. Instead, the patents explicitly state that the frame was to “have substantially any configuration suitable for providing structure and support for the treadmill.” ‘169 Patent at col. 5, ll. 65-67; ‘590 Patent at col. 5, ll. 65-67. This broad definition conforms with the ordinary and customary meaning of the word “frame”: “A skeletal structure designed to shape or support.” Webster’s II New College Dictionary (1995). Both patents describe a frame that supports the front and rear shafts, with various other parts of the treadmill mounted to it as well. See, ‘580 Patent, Col. 5, ll. 52-55, Col. 27, ll. 25-29; ‘169 Patent Col. 5, ll. 52-55, Col. 27, ll. 25-29. Thus, the court finds that a person having ordinary skill in the art would understand the patents’ use of the term “frame” to be the same as the term’s lay meaning .

Additionally, even if the court had found the term “frame” to be ambiguous, as the plaintiffs argue, construing the term “frame” as a “structure distinct from the bearing rails” would not resolve that ambiguity. A “frame” that is a structure distinct from the bearing rails is clear what it is not, but provides no guidance to a person of ordinary skill

in the art as to what it is (apart from its plain and ordinary meaning). Although negative limitations are generally permissible, see Inphi Corp. v. Netlist, Inc., 805 F.3d 1350, 1356 (Fed Cir 2015), the court should also not construe a term such as to render it indefinite. See Exxon Res. & Eng'g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001). Thus, without any evidence that the term “frame” is unclear and without any proposed resolution to the hypothetical ambiguity asserted by the plaintiffs, the court will not give the term frame any further construction. See 02 Micro, 521 F.3d at 1362.

It bears mentioning that the lack of further construction of the term “frame” by the court does not mean the court believes the frame and the bearing rail are the same limitation. On the contrary, as conceded by Woodway, the bearing rails are “elements separate and distinct from the treadmill frame.” Def’s. Resp. Br. (Doc. No. 64) at 5. As the plaintiffs note, it is bedrock claim construction law that the different terms are presumed to convey different meanings. Pls.’ Resp. Br. at 16 (citing Exxon Chemical Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1557 (Fed. Cir. 1995)); see also App. Med. Res. Corp. v. United States Surgical Corp., 448 F.3d 1324, 1333 n. 3 (Fed. Cir. 2006). In both patents at issue, it is clear that the “frame” limitation is different from the “bearing rail” limitation because there are numerous claims that contain the frame element without mentioning bearing rails. Compare Claim 1, ‘169 Patent, Col. 32 l. 47 with Claim 11, ‘169 Patent, Col. 34, ll. 12-22; see Phillips, 415 F.3d at 1314.

B. The Term “Bearing Rail” Should be Construed as “A Rail with Bearings whose Top Profile Corresponds to the Shape of the Running Surface”

The term “bearing rail” is likewise found throughout the independent and dependent claims of the patents. Specifically, reference to a “bearing rail” can be found in independent claim 11 and dependent claims 12, 14, and 15 of the ‘169 Patent, and independent claims 1, 11, 19, and 25 and dependent claims 3, 4, 5, 18, and 22 of the ‘580 Patent. As with the term “frame,” Woodway argues that the term “bearing rail” should be given its plain and ordinary meaning, while the plaintiffs argue that the term should be construed to mean “a running belt retention system that is a structure distinct from the frame and configured to help achieve the desired shape of the running surface.” Joint Claim Construction and Prehearing Statement at 5. The court finds neither of the proposed constructions satisfactory. Instead the court construes the term “bearing rail” to mean “a rail with bearings whose top profile corresponds to the shape of the running surface.”

To begin, the court declines to adopt the plaintiffs’ proposed limitation of “a structure distinct from the frame” for the reasons set forth above. See supra Section III.a. It remains apparent that the bearing rail is a distinct element from the frame without the need for construction by the court.

The starting point for determining the meaning of a disputed claims begins with the claims themselves. SmithKline, 403 F.3d at 1338-39. The term bearing rail is given some elaboration in claims 5 and 25 of the ‘580 Patent, both of which teach a bearing rail whose top profile corresponds to the curved running surface. ‘580 Patent, Col. 33, ll. 13-17, Col. 36, ll. 9-13. Claim 1 of the ‘580 Patent further provides that the running



belt is “supported by the first bearing rail and the second bearing rail.” ‘580 Patent, Col. 32, ll. 57-59. Claim 11 of the ‘169 Patent describes the running surface of the running belt as being “supported by the top profile of the at least one bearing rail such that the running surface substantially corresponds to the shape of the top profile of the at least one bearing rail.” ‘169 Patent, Col. 34, ll. 22-26. Thus, the claims teach that the bearing rails “support” the running belt and, due to that support, the shape of the running belt corresponds to the shape of the bearing rail. E.g., id.; see also, ‘580 Patent, Col. 34, ll. 51-3 (“A running belt supported by the first and second bearing rails, wherein the running belt follows a curved running surface.”)

The specification further supports the argument that the claims describe a bearing rail whose shape corresponds to the shape of the running belt. The specification of the ‘580 Patent first describes the bearing rails as part of the running belt retention system designed to combat the difficulties associated with maintaining a non-planar shape. See ‘580 Patent, Col. 11, ll. 18-29, 55-66 (“In the exemplary embodiment seen in FIGS. 8-0 . . . [t]he bearing rails 200 are configured to help achieve the desired shape of the running surface.”). This is not to say that the bearing rails alone provide the shape of the running surface. The patents teach that many other devices and techniques work together to ensure that the running surface corresponds to the shape of the bearing rails. See ‘169 Patent, Col. 11-27 (describing numerous options, including but not limited to, adjusting the relative pulley sizes, using toothed endless stabilizing loops or utilizing a synchronizing system).

The plaintiffs propose that the bearing rails must “help achieve the desired shape of the running surface.” The court does not think it accurate to say that in all scenarios covered by the patents, the bearing rails must “help” achieve the shape of the running surface, because it finds the word “help” to introduce further ambiguity. Must the help be active, in that the bearing rails are the device that forces the belt to retain its curved shape, or is it enough for the belt to rest on the curved bearing rails? Instead, the court finds that the specification supports a construction of the bearing rails that contains the limitation “whose top profile corresponds to the shape of the running surface,” as supported by both the claims and the specification. See, e.g., ‘169 Patent, Col. 34, ll. 23-27 (describing the running surface of claim 11 to be supported by and corresponding to the top profile of the bearing rail.”).

The plaintiffs also argue that the “bearing rail” is necessarily a “running belt retention system.” The court finds no support within the claims for this proposition, because the term “running belt retention system” cannot be found within the claims of either patent. The claims should not be read in a vacuum, however, and thus the court must also look to see whether the specification limits the bearing rails to being a belt retention system. See Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (District courts “must look at the ordinary meaning in the context of the written description . . .”).

The plaintiffs assert that the bearing rail necessarily is a running belt retention system because the specification states that “[o]ne of the difficulties associated with using a running surface that has a non-planar shape is inducing the running belt 16 to

assume the non-planar shape. . .” and then describes the bearing rails as part of one embodiment of the “running belt retention systems” that could be used to maintain the non-planar shape of the belt while it is in motion. Pls.’ Resp. Br. at 25 (citing ‘169 Patent, Col. 11 ll. 18-22, ll. 30-38). It is clear from the patents that the bearing rails are part of the system that interacts with the running belt while in motion and, in that way, the shape of the bearing rails does correspond to the shape of the running surface. See ‘580 Patent, Col. 12, ll. 3-5. However, as is often noted, the court should not import limitations from the specification into the claims. SciMed Life Sys. v. Advanced Cardiovascular Sys., 242 F.3d 1337, 1340 (Fed. Cir. 2001) (referring to reading a limitation from the written description into the claims as “one of the cardinal sins of patent law.”).

There is equally a lack of evidence in the specifications that the bearing rails, although disposed in the same shape as the running belt, are a running belt retention system. For example, the patents describe the difficulty of maintaining a convex shape because “[f]ollowing the shape of the bearing rails 200 is not the natural tendency of the running belt for the particular contour seen in FIG. 5.” E.g., ‘580 Patent, Col. 13, ll. 13-Col. 14, ll. 37. If the bearing rails were a running belt retention system, the reader of the patents would expect the patents to explain how the bearing rails combat this natural tendency. Instead, the patents suggest that the running belt could be made to conform to the convex shape by utilizing the weight of the running belt, adjusting the front or rear running belt pulleys, and using structural “endless belts,” but it does not suggest the use of the bearing rails. Id. at Col. 13-Col. 27. The patents make clear that the bearing

rail's top profile merely corresponds to the shape of the running belt. See '169 Patent, Col. 13 ll. 30-36 (utilizing the weight of the running belt "to ensure that the running belt 16 follows the contour of the bearing rails. . ."). These alternative methods demonstrate that, although the bearing rails may be part of a running belt retention system, it is not necessarily one. Thus the court declines to adopt the plaintiffs' proposed construction of "bearing rails" as a "running belt retention system."

Woodway's contention that the term "bearing rail" should be given its plain and ordinary meaning raises its own concerns. The term "bearing rail" contains a latent ambiguity that the court believes needs to be addressed, specifically, whether it refers to a rail that bears weight, or a rail with bearing on it. See Webster's II (defining bearing as "2.a. A part supporting or another machine part or structure. b. A device that supports, guides, and reduces the friction of motion between fixed and moving machine parts."). This ambiguity is relevant to the controversy at hand because of the plaintiffs' arguments that the construction needs to be clear that the "bearing rail" and "frame" are separate parts. Without further construction, the jury might be confused as to the role of the bearing rail, and whether or not it is also part of the frame which supports the treadmill by "bearing" the user's weight. Looking to the claims and the written description, however, the plain terms of the patents resolve this ambiguity, such that the term "bearing rail" would be understood by a person having ordinary skill in the art to be a "rail with bearings."

All of the independent claims which use the term "bearing rail" further describe the bearing to have a plurality of bearings. E.g., '580 Patent, Col. 32, ll. 53-4. Thus, it

is clear that the claims intend the person of ordinary skill in the art of treadmills to read the term “bearing rail” in the context of the claims, and to understand that the bearing rail is a rail that has bearings. Further, both parties acknowledged at oral argument that the term bearing rail referred to a rail with bearings, not a rail that bears weight. Although force from the user clearly transfers through the bearing rails, it is not the bearing rails that endure that force, but the frame instead. As noted above, both parties acknowledge that the frame and the bearing rails are distinct parts, and as such construing the term “bearing rail” to mean a “rail with bearings” will clarify this latent ambiguity.

For the reasons listed above, the court construes the term “bearing rail” to mean “a rail with bearings whose top profile corresponds to the shape of the running surface.”

C. The Phrase “a Safety Device Cooperating with the Rear Shaft” Should be Construed to mean “A Safety Device Adjoined to the Rear Shaft.”

The phrase “a safety device cooperating with the rear shaft” is only found in claim 10 and 11 of the ‘169 Patent.<sup>1</sup> The plaintiffs argue that the patentee disclaimed the broader term “cooperated” in favor of the more limited “mechanically connected” in the proceedings before the PTO. Pls.’ Br. at 23. Woodway disagrees and argues that the phrase requires no additional construction. The dispute centers on what the term “cooperating with” means in the patent to a person of ordinary skill in the art of

---

<sup>1</sup> Claim 10 uses the term “cooperates” instead of “cooperating,” but the court finds no reason to construe these terms separately.

treadmills. The court declines to adopt either parties' position, in favor of construing the term "cooperating with" to mean "adjoined to."<sup>2</sup>

Prosecution history estoppel ensures that the inventor is held to the representations he or she made to the Patent and Trade Office ("PTO") during the application process. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki co., 535 U.S. 722, 733 (2002). If a patentee originally claimed broad subject matter, but in the course of prosecution narrows the scope of the claimed invention in response to a PTO rejection, he or she may not later argue that the narrowing was immaterial to the allowance. Id. For a court to find Prosecution History Disclaimer, it must find the evidence to support it to be "clear and unmistakable." Elbex Video, Ltd. V. Sensormatic Elecs. Corp., 508 F.3d 1366, 1371 (Fed. Cir. 2007). Otherwise, the "[c]laim terms are entitled to a 'heavy presumption' that they carry their ordinary and customary meaning to those skilled in the art in light of the claim term's usage in the patent specification." Id.

The evidence that the plaintiffs marshal does not constitute the necessary "clear and convincing evidence" that the patentee intended "cooperating with" to require mechanical connection. See Id. The plaintiffs recount how the patent examiner rejected applied-for claim 14 (which became claim 11) in light of Magid, because Magid taught a safety device mounted to the front shaft and the examiner believed it would be obvious to a person of ordinary skill to move the safety device to the rear shaft. Non-

---

<sup>2</sup> Although the court recognizes that the term "cooperating" encompasses working together towards an end, the language of claims 10 and 11 of the '169 Patent makes it clear that the safety device is adjoined to the rear shaft "to the rear shaft to permit rotation of the rear shaft in only one direction . . ." '169 Patent, Claim 11, Col. 34, ll. 11-12.

Final Office Action dated June 11, 2014 (Doc. No. 62). In response, the patentee submitted a reply where he stated that moving the safety device to the rear shaft “does change the operation of the device.” Amendment and Reply under 37 CFR 1.111 dated April 2, 2014 (Doc. No. 62-2) at 13. He then goes on to describe why “mounting” the safety device to the rear shaft changes the operation. Id. at 14. The inventor’s reply does disclaim mounting the safety device to the front shaft, but that is not at issue here. Id. at 5.

This correspondence does not constitute “clear and convincing evidence” that the patentee was narrowing the scope of the limitation as to the method by which the safety device cooperated with a shaft, now the rear. The plaintiffs’ conclusory statement that the use of the word mounting and limiting the claim to the rear shaft dictates a mechanical connection is without support in the patent or the record. Therefore, the court declines to construe the claim with that additional limitation.

The court is also not convinced that the “plain and ordinary meaning,” as argued for by Woodway, is the appropriate construction. See Def’s. Resp. Br. at 12. The plain and ordinary meaning of the word cooperating is “work[ing] or act[ing] together toward a common end or purpose.” Webster’s II. “Cooperating with” provides no guidance as to the spatial relationship between the two cooperating devices, such that it might “fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” See Nautilus, Inc. v. Biosig Instruments, Inc., 134 S.Ct. 2120, 2124 (2014). Thus, under the “plain and ordinary meaning” of cooperating, the safety device might cooperate with the rear shaft from the front of the frame, within the guardrail, or even

across the room. The court should avoid construing claims such that they are indefinite if “reasonable efforts at claim construction” result in a definite construction. See Exxon Res. & Eng’g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001). The court therefore construes the term “cooperates with,” in accordance with the intrinsic record to mean “adjoined to.”

Here, the specification provides further guidance as to what “cooperates with” means within the ’169 Patent. The specification describes how, in the exemplary embodiment shown in Figs. 1 and 5, the safety device of a one-way bearing assembly “is disposed about and cooperates with the rear shaft.” ’169 Patent, Col. 28. ll. 7-9. This indicates that the inventor contemplated that the safety device would be disposed about, teaching adjacency and connection with the rear shaft, and not in some remote part of the invention.

Additionally, the prosecution history cited by the plaintiffs supports the court’s construction. As noted above, the inventor stressed to the examiner the importance of mounting the safety device to the rear shaft in order to avoid the examiner’s rejection. Mounting, in turn, suggests that the device must be both adjacent to and connected to the rear shaft. Webster’s II (“5.a. To secure firmly to a support. B. To place or fix on or in a secure place for display, study or use.”). Further, connecting the safety device to the rear shaft would be consistent with the rest of the specification, in that nowhere does the patent describe a safety device not connected in some way to the rear shaft. Thus, the court construes the term “cooperates with” to mean “adjoined to.” The entire disputed phrase is construed as “a safety device adjoined to the rear shaft.”



D. The Term “Coupled” Should be Construed as “the Joining of Two Members Directly or Indirectly to One Another”

The term “coupled” is found throughout the claims in both patents. Woodway argues that the term coupled should be given the construction provided in the specification: “the joining of two members directly or indirectly to one another.” ‘169 Patent, Col. 32, ll. 10-12. The plaintiffs do not contest this definition, although they argue that it may render the term indefinite. Pls.’ Resp. Br. at 32. The patents clearly indicate that the inventor intended to be his own lexicographer, and so the court adopts Woodway’s construction. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 1006 (Fed. Cir. 1995).

The plaintiffs argue that Woodway did not show that the proposed definition comports with or differs from the plain and ordinary meaning of the term “coupled,” which, they argue, undermines Woodway’s position that “coupled” should be so defined. Pls.’ Resp. Br. at 28. The plaintiffs misunderstand the law of claim construction. Although the starting point for claim construction is ordinarily the plain and ordinary meaning to a person of skill in the art, “[t]here is an exception to this general rule when a patentee sets out a definition and acts as her own lexicographer.” Stryker Corp. v. Zimmer, Inc., 837 F.3d 1268, 1272 (Fed. Cir. 2016). In order for the lexicographer exception to apply, the patentee must “clearly set forth a definition of the disputed claim term” with a “clearly express[ed] intent to redefine the term.” Thorner v. Sony Computer Entertainment America, LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (internal citations omitted).

Here, the patentee stated that, “[f]or the purpose of this disclosure, the term ‘coupled’ means the joining of two members directly or indirectly to one another.” E.g., ‘169 Patent, Col. 32, ll. 10-13. This clear statement of what the term coupled “means” satisfies the lexicographer exception. Therefore, the court adopts Woodway’s proposed definition. See 3M Innovative Props., 350 F.3d at (adopting the inventor’s terminology when the patent explained that “‘Embossed’ means . . . .”) (emphasis added).

E. The Term “Rotatably Coupled” Should be Given Its Plain and Ordinary Meaning

The term “rotatably coupled” is found in independent claims 1 and 11 of the ‘169 Patent, and independent claim 1 of the ‘580 Patent. The plaintiffs argue that it should be construed to mean “connected in such a way to permit rotation of one entire element relative to the other element.” Pls.’ Resp. Br. at 29. Woodway argues that “rotatably coupled” should be given its plain and ordinary meaning in light of the definition of “coupled” given in the patents. Def’s. Resp. Br. at 24. The court sees no support in the patents for the plaintiffs’ proposed construction and sees no reason why the plain and ordinary meaning of “rotatably” requires additional construction. Thus, the court will provide no additional construction for the term “rotatably coupled.”

As explained above, supra Section III.D, the patents define “coupled” to mean joining either directly or indirectly. The specification further defines that the joining “maybe be stationary or moveable in nature.” Col. 32, ll. 12-13. Thus, rotatably coupling is contemplated by the definition of coupling such that a person of ordinary skill reading the patents would understand that coupling with potential movement was

contemplated. Rotatably coupled elements are a subset of coupled elements whose coupling must “be moveable in nature.” Id.

The remaining issue is whether the term “rotatably coupled” requires that the entirety of one element be moveable relative to the other element, as the plaintiffs argue, or whether it is enough for some part of the element to be moveable. The court concludes that it is enough for a component of the element to be moveable, and that, therefore, the term rotatably coupled does not require additional limitation because “rotatably coupling” does not limit the rotation to an entire element.

The word “rotatably” is a common variation on the word rotatable, whose meaning is readily understood to be “able to turn on an axis.” Webster’s II. Thus, the plain and ordinary meaning of “rotatably coupled” to a person of ordinary skill in the art of treadmills reading the patents is that the two elements would be joined directly or indirectly such that one element can turn on an axis. However, this does not clear up the parties’ dispute about whether the entire element must be able to rotate, or if it is enough for a component part to rotate.

The plaintiffs’ argument for its proposed construction is without support. The only affirmative support that the plaintiffs marshal for their construction is that the specification describes the front and rear shafts as “rotatably coupled” to the frame. Pls.’ Resp. Br. at 30. However, just because the shafts are not described as having stationary and rotatable parts does not mean that the court should import that limitation into the claim. See SciMed, 242 F.3d at 1340. The court finds no evidence in the

specification that the term “rotatably coupled” was intended to refer only to entire components that could rotate. Thus the court will not limit the term further.

The plaintiffs also argue in a footnote that “nowhere in the specification is the term ‘rotatably coupled’ used in connection with bearings (part 209). Pls. Resp. Br. at 30 n. 3. This misunderstands the law of claim construction. As noted above, the exercise of claim construction begins with the claims themselves. Phillips, 415 F.3d at 1303, 1312-13. While it is technically correct that the specification does not describe rotatably coupled bearings, claim 11 of the ‘169 Patent specifically claims “at least one bearing rail having a plurality of bearings rotatably coupled to the at least one bearing rail.” Col. 34, ll. 13-14.<sup>3</sup> That the bearings are rotatably coupled is relevant to the construction of “rotatably” because, as is noted in Woodway’s Reply Brief, a common form of bearings is comprised of one stationary part and one part which rotates. Def’s. Resp. Br. at 28. Thus, despite the plaintiffs’ argument to the contrary, claim 11 of the ‘169 Patent would be understood by a person of ordinary skill in the art to contemplate a device connected such that one part of the connected element would remain stationary while another part would rotate, because a person of ordinary skill would understand that bearings commonly have a stationary component and a rotatable component.

---

<sup>3</sup> Although the footnote was referencing the specification of the ‘580 Patent, the plaintiffs’ Brief switches between the two patents without noting significant distinctions between them. Specifically, the paragraph containing the relevant footnote is immediately followed by a paragraph that switches between the ‘580 Patent and the ‘169 Patent from sentence to sentence. Pls.’ Resp. Br. at 30. At oral argument, the parties agreed that the terms of the patents should be construed uniformly, and thus the court must consider the claims of both patents to ensure that its construction works with both patents.

For the reasons above, the phrase “rotatably coupled” is clear in conjunction the court’s construction of the term “coupled,” and requires no further construction. See supra Section III.D.

F. The Phrase “Bearing Rail Having a Plurality of Bearings Rotatably Coupled to the at least one Bearing Rail” Should be Given Its Plain and Ordinary Meaning

The phrase “bearing rail having a plurality of bearings rotatably coupled to the at least on bearing rail” is found exclusively in claim 11 of the ’169 Patent. The plaintiffs request that the court construe this term to mean “at least one bearing rail having more than one bearing connected to the bearing rail in such a way that each bearing can rotate relative to the bearing rail.” Joint Claim Construction and Prehearing Statement at 5. Woodway argues that the phrase requires no additional construction. Id. The court agrees with Woodway and will provide no additional construction of the phrase.

Parsing out the phrase at issue reveals that all of the terms that might be at issue have already been analyzed by the court: bearing rail, supra at III.B, and rotatably coupled, supra at III.E. At oral arguments, the plaintiffs conceded that the court’s construction of the underlying terms would render additional construction unnecessary. Claim construction “is not an obligatory exercise in redundancy,” and so the court declines to further construe this phrase because its meaning will be clear from the construction of the component terms. See United States Surgical Corp. v. Ehticon, Inc., 103 F.3d 1554, 1568 (Fed Cir. 1997).

G. The Term “Running Belt” Should be Given Its Plain and Ordinary Meaning

The term “running belt” can be found throughout both patents, specifically in claims 1, 2, 3, 6, 10, 11, 12, 13, and 14 of the ’169 Patent, and claims 1, 11, 19, and 25

of the '580 Patent. The plaintiffs argue that the belt should be construed to mean “a structure different from the endless belts that follows the profile of the bearing rails,” while Woodway argues that the term requires no additional construction. Joint Claim Construction and Prehearing Statement at 5. The court finds that the term “running belt” does not require additional construction because a person of ordinary skill in the art would understand that a running belt is just that, the belt upon which the user runs.

The plaintiffs make two main arguments in support of their position. First, they argue that a running belt is not an endless belt. As with their proposed construction of frame, supra III.A, this definition does not explain to a person of ordinary skill what the running belt is, merely what it is not. As with “frame,” there is no need to construe a term in the patents to demonstrate that they have different meanings when that is apparent from the claims themselves. See supra Section III.A; App. Med., 448 F.3d at 1333 n. 3. The '169 Patent makes clear that the endless belt is a separate limitation because it is mentioned only in a dependent claim that relies on an independent claim including the term “running belt.” See '169 Patent, Col. 34, ll. 48-55. It is also clear that they are not entirely distinct, as claim 14 states that the running belt “comprises” two endless belts supported by a bearing rail, together with the front and rear belt pulleys. Id. A definition that excludes the possibility that the running belt comprises two endless belts would be inappropriate. Thus, the court declines to adopt the portion of the plaintiffs' proposed construction that limits the running belt to be separate from the endless belts because such a construction conflicts with claim 14 of the '169 Patent.

The plaintiffs also argue that the running belt should be construed such that it must follow the profile of the bearing rails. For substantially the same reasons stated above in construing “bearing rails,” supra section III.B, the court declines to further construe the relationship between the belt and the bearing rails. The patents clearly contemplate a running belt not defined by the bearing rails. For example, claim 1 of the ‘169 Patent contains no bearing rail limitation, despite the inclusion of the running belt. Col. 32, ll. 54-60. Further, many of the preferred embodiments of the ‘169 Patent do not mention bearing rails, much less require them to define the profile of the running belt. See, e.g., col. 2, ll. 26-38.<sup>4</sup>

Additionally, defining the term “running belt” to include a requirement that the belt be defined by the bearing rail would be superfluous in every claim that uses the term “running belt” in the ‘580 patent. All four independent claims of the ‘580 Patent require the running belt to be supported, at least partially, by the bearing rail, in order to provide the running belt with its curved surface. See, e.g., col. 32, ll. 57-60. There is no need to construe the term in a patent where the claim itself is clear. See Finjan, 626 F.3d at 1207. Thus, the court declines to do so here.

H. The Term “Running Surface” Should be construed to mean ” “the Portion of the Running Belt upon which a User could Place Part of their Foot”

The term running surface can be found in claims 1, 2, 7, 8, 10 and 11 of the ‘169 Patent and claims 1, 5, 11, 19 and 25 of the ‘580 Patent. The plaintiffs argue that the term should be limited to only that “section of the running belt in between the front and

---

<sup>4</sup> This embodiment does include a reference to a bearing assembly. Id. That bearing assembly is a one-way bearing assembly that functions as a safety device, not a bearing rail.

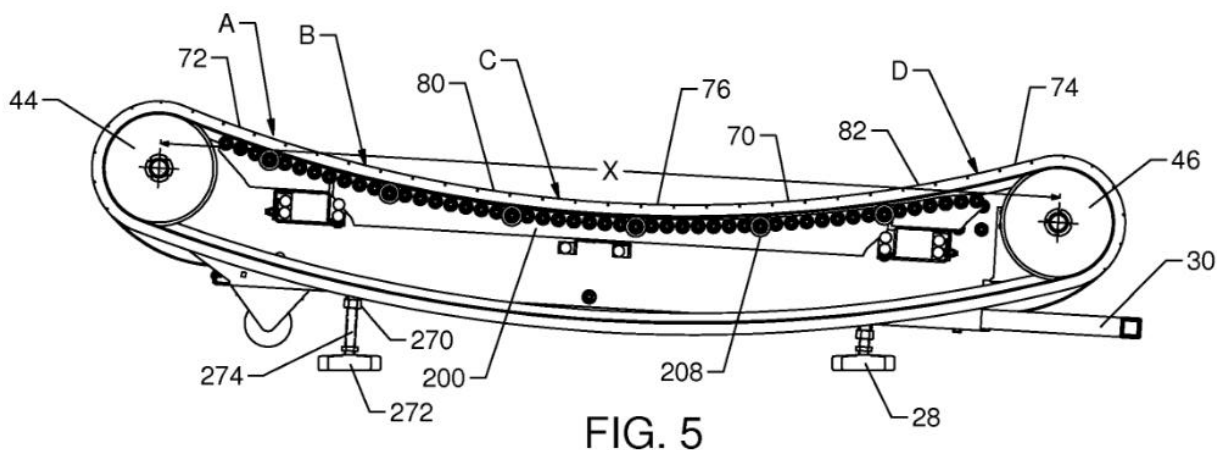
rear shafts intended for contact with the user's foot." Woodway argues that the term requires no additional construction, as its meaning is clear to a person of ordinary skill in the art because the words have no specialized or technical meaning. The court agrees that the term "running surface" needs no further construction because its meaning is clear on its face.

The plaintiffs argue that the patents teach a curved running surface, and that "the claimed non-planar surface ensures that the user's foot strikes between the two shafts." Pls.' Resp. Br. at 26. However, their claim is not supported by the specifications. Although it is true that the running surface is described as beginning adjacent to the front shaft assembly and ending adjacent to the rear shaft assembly, the belt is wrapped around the shaft and so all of the belt, even the part underneath the shaft, is technically adjacent to the shafts. See e.g., Col. 6, ll. 54-Col. 7 ll. 5. Thus, the section of the specification cited by the plaintiffs does not support their proposed limitation.

Additionally, the figures cited by the plaintiffs are not a clear "intentional disclaimer, or disavowal, of claim scope by the inventor." Phillips, 415 F.3d. at 1316. The figures show four different places where the user could place their foot, all of which are between the shafts. E.g., '169 Patent, Fig. 5, Col. 7, ll. 66-Col. 8, ll. 16. However, the patents make no representations about where the user should not place their foot. There are many positions other than the four shown, none of which are disclaimed by the patents, and so no person of ordinary skill in the art reading the patents would think that the treadmill required the user's foot to strike one of four specific places.



A person of ordinary skill reading the patents would understand that in common use of a treadmill, the user's foot might end up beyond position A or behind position D in Fig. 5, reproduced below:



'169 Patent, Fig. 5. For example, a user's first step onto the treadmill could easily be behind position D. A foot placement beyond position A might not be preferred, but there is nothing to prevent a user with a long stride from placing their foot that far forward. These positions may be uncommon placements of the user's foot, but neither the patents' claims nor the specifications include any indication that the inventor intentionally disclaimed them. The specifications provide various examples as to where a user's foot could strike, but there is no evidence that these were meant to be exclusive or even the most extreme bounds. See '580 Patent, Col. 7, ll. 66-Col. 8 ll. 16 (describing position A-C as "possible locations where a user may position her feet").

The description of several possible locations for the user's foot to strike does not constitute a clear disclaimer that the inventor did not intend the user's foot to land

elsewhere. Phillips, 415 F.3d. at 1316. For example, the patents contemplate a user's foot landing between A and C, as demonstrated by B, and there is no reason to think that the patentee intended no further distinctions between the marked zones. See, e.g., '169 Patent, Col. 8, ll. 2-8. The patents also do not mark a specific point as the outer zone where a user's foot (or part thereof) can land, such that it would no longer be on the running surface. Id. The patents illustrate that the running surface is the part of the running belt upon which a user might place their foot during use. The court will construe the term running surface to mean "the portion of the running belt upon which a user could place part of their foot."

I. The Terms "Left Side Member" and "Right Side Member" Should be Construed as "The Structural Components Comprising the Left Side of the Frame," and "The Structural Components Comprising the Right Side of the Frame," Respectively

The final contested terms are "left side member" and "right side member," which can be found in dependent claims 2 and 21 of the '580 Patent. The only differentiation between the terms is that one is on the left and one is on the right. Thus, the question for the court is what a person of ordinary skill in the art would understand a "side member" to be. The plaintiffs urge the court to adopt the construction, "the left side of the frame" and "the right side of the frame," while Woodway argues that, because it is not asserting infringement of claims 2 or 21 of the '580 Patent, the court should not construe these terms. Joint Claim Construction and Prehearing Statement at 5. The court agrees with Woodway and declines to construe the terms because there is no active controversy about their meaning. See Vivid Techs, Inc. v. Am. Sci. & Eng'g, Inc. 200 F.3d 795, 803 (Fed. Cir. 1999).

The plaintiffs contend that, because it is possible for Woodway to amend its infringement contentions to include these claims, the court should construe them now. Pls.' Resp. Br. at 31. However, without a current controversy about the meaning of those terms, any opinion rendered by the court as to their construction would be a prohibited advisory opinion. Vivid Techs., 200 F.3d at 803. The only evidence that these claims are in dispute that the plaintiffs point the court to is that the "left side members" and "right side members" remain numbered in Woodway's Supplemental Preliminary Infringement Contentions. Pls.' Reply Br. at 10. While it is true that the Supplemental Preliminary Infringement Contentions do number the left and right side members, at no point do the contentions mention them, or even make clear that those numbers correspond to those parts. See Pls.' Reply Br., Ex. 28, Appendix B. In fact, the only way the court could identify parts 12 and 13 as the left side member and right side member, respectively, was to reference to the original Preliminary Infringement Contentions because neither "left side member" nor "right side member" can be found within the Supplemented Infringement Contentions. Compare Id. with Pls.' Reply Br., Ex. 27. Appendix B. It appears clear to the court that Woodway is no longer asserting infringement of the claims including these terms and there is no controversy before the court that requires the court to construe these terms.

Although the plaintiffs are correct that court can look to asserted and unasserted claims to determine an asserted claims meaning, see Phillips, 415 F.3d at 1314, that exercise does not include construing a term when it is only in the unasserted claims. See Vivid Techs., 200 F.3d at 803. The court should only look to unasserted claims as

a source of comparison for asserted claims, both because claim terms are normally used consistently throughout a patent and because differences among claims can also be instructive. Phillips, 415 F.3d at 1314. Further, the plaintiffs’ only suggestion that the unasserted claims could be instructive on an asserted claim is just that: a suggestion. Pls.’ Resp. Br. at 31; Pls.’Reply Br. at 10. The plaintiffs nakedly assert that the terms “left side member” and “right side member” inform the bearing rail construction, but at no point do they offer any argument how.

The court declines to construe the terms “left side member” and “right side member” because there is no material dispute about them. See GPNE Corp. v. Apple Inc., 830 F.3d 1365, 1372-73 (Fed. Cir. 2016).

#### **IV. CONCLUSION**

For the reasons stated above, the court construes the disputed terms according to the table below:

Disputed Term	The Plaintiffs’ Construction	Woodway’s Construction	Court’s Construction
Frame	A structure distinct from the bearing rails.	Plain and ordinary meaning.	No further construction necessary.
Bearing Rail	A running belt retention system that is a structure distinct from the frame and configured to help achieve the desired shape of the running surface.	Plain and ordinary meaning.	A rail with bearings whose top profile corresponds to the shape of the running surface.
A safety device cooperating with the rear shaft	A safety device mechanically connected to the rear shaft.	Plain and ordinary meaning.	A safety device adjoined to the rear shaft.

Coupled	The joining of two members directly or indirectly.	The joining of two members directly or indirectly.	The joining of two members directly or indirectly.
Rotatably coupled	Each part is connected in such a way to permit rotation of one entire element relative to the other element.	Plain and ordinary meaning.	No further construction necessary.
A bearing rail having a plurality of bearings rotatably coupled to the at least one bearing rail	At least one bearing rail having more than one bearing connected to the bearing rail in such a way that each bearing can rotate relative to the bearing rail.	Plain and ordinary meaning.	No further construction necessary.
Running belt	A structure different from the endless belts that follows the profile of the bearing rails.	Plain and ordinary meaning.	No further construction necessary.
Running surface	Section of the running belt in between the front and rear shafts intended for contact with the user's foot.	Plain and ordinary meaning.	The portion of the running belt upon which a user could place their foot during normal operation.
Left side member and right side member	The left side of the frame and the right side of the frame.	Should not be construed.	The court declines to construe this term.

**SO ORDERED.**

Dated at New Haven, Connecticut this 8th day of December, 2016.

/s/ Janet C. Hall  
Janet C. Hall  
United States District Judge