

United States District Court,  
W.D. Washington, at Seattle.

**The NAUTILUS GROUP, INC,**  
Plaintiff.

v.

**ICON HEALTH & FITNESS, INC,**  
Defendant.

No. C02-2420RSM

**Feb. 16, 2005.**

## **ORDER RE: CLAIM CONSTRUCTION**

**RICARDO S. MARTINEZ, District Judge.**

### ***INTRODUCTION***

Having conducted a hearing pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995), regarding claim construction of the patents at issue in this case, the Court now issues the following Memorandum Order construing the parties' ten disputed claims. Of primary importance is the term "mounted on the base in cantilevered fashion with one end of each of the rods being free." Plaintiff urges the Court to adopt, *inter alia*, its broad construction of the term. ( *See* Dkt. # 324). Defendant argues that the Court should adopt a narrower construction, as did the Honorable Marsha J. Pechman, United States District Judge, previously in this case. ( *See* Dkt. # 325). The parties have also proposed various constructions of the additional terms at issue. ( *See* Dkt. # 319).

### ***II. DISCUSSION***

#### **A. Background**

The instant lawsuit has been pending in this Court since December of 2002. The claims involve alleged infringement of the patents for the BowFlex(TM) exercise machine. The BowFlex machine employs cables attached to one end of a flexible rod or rods as a resistance mechanism, self-contained in a compact home exercise machine. The rods are mounted vertically, with one end fixed to a base, and the other end either free or attached to a cable. In 1984, the inventor applied for a patent on the machine, and the United States Patent and Trademark Office ("PTO") subsequently issued two patents, U.S. Patent No. 4,620,704 and U.S. Patent No. 4,725,057. These patents will be referred to as the '704 and '057 patents. Between 1986 and 2002, sales from the BowFlex machine generated revenues of nearly one billion dollars.

In October of 2002, defendant introduced the CrossBow(TM) (now CrossBar(TM)) exercise machine. The machine uses a similar cable and flexible rod system of resistance. However, unlike the BowFlex, the CrossBar has rods which are mounted horizontally on the middle of the machine's main structure, with

cables attaching at both ends of the rod or rods. As of this date, profits from the sale of CrossBar machines exceed \$84 million.

On December 3, 2002, plaintiff filed the instant action alleging patent infringement by defendant. Plaintiff then filed a motion for preliminary injunction to stop the sale of the CrossBar machine. Judge Pechman, the judge to whom this case was formerly assigned, addressed the motion, along with cross-motions for summary judgment filed by plaintiff and defendant. The motions focused primarily on a term contained in the '057 patent, "mounted on the base in cantilevered fashion." In ruling on the motions, Judge Pechman construed the term, and adopted defendant's proposed narrow construction. On that basis, Judge Pechman granted summary judgment of no infringement to defendant, and denied plaintiff's motion for a preliminary injunction. Plaintiff immediately appealed Judge Pechman's decisions to the Federal Circuit Court of Appeals.

On November 18, 2003, the Federal Circuit issued its decision, reversing Judge Pechman's rulings, and offering its opinion on the term "in cantilevered fashion with one end of each of the rods being free." (Dkt.# 243, Ex. 1). The Federal Circuit concluded that this Court had erred in construing the term, and remanded the case. Defendant then filed petitions for rehearing and rehearing *en banc*, both of which were denied by the Federal Circuit. After the Federal Circuit Court of Appeals issued its mandate, Judge Pechman vacated her prior orders. The case was subsequently transferred to the undersigned District Judge.

The parties now ask this Court to construe several claim terms contained in both the '057 and the '704 patents. The terms essentially fall into two groups. The first group of claim terms relates to the way the flexible rods are mounted on the machine. The second group of claim terms relates to how the cable is connected to the rods and other structures, and how that cable is routed through the machine to allow the user to exercise.

## **B. Applicable Law for Claim Construction**

Determining patent infringement is a two-stage process for the Court. First the Court must construe the claims at issue. This is a pure question of law for the Court, even if the case is designated to go to a jury trial. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995). After the claims have been properly construed, the fact-finder will compare the claims to the allegedly infringing product or process. The comparison is conducted on an element-by-element basis.

To determine the scope of the claims at issue, the Court will first look to intrinsic evidence—the claims themselves, the specifications contained in the patent, and the prosecution history of the patent. *Metabolite Laboratories, Inc. v. Laboratory Corp. of America Holdings*, 370 F.3d 1354, 1373 (Fed.Cir.2004). Intrinsic evidence is "the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). A court may also consider extrinsic evidence such as expert testimony, other unrelated patents or technical documents, or other relevant evidence; however, the Federal Circuit Court of Appeals has cautioned against the courts' reliance on extrinsic evidence in certain situations. *See Vitronics*, 90 F.3d at 1583 (explaining that when the intrinsic evidence alone will resolve any disputed claim term, it is improper to rely on extrinsic evidence); *but see Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed.Cir.1999) (finding that extrinsic evidence should be considered by the court even where the claim language appears to be clear); *Plant Genetic Systems, Inc. N.V. v. DeKalb Genetics Corp.*, 315 F.3d 1335, 1346 (Fed.Cir.2003) (holding that *Vitronics* does not bar the courts from ever considering extrinsic evidence, and finding trustworthy extrinsic

evidence appropriate, and even preferred, for consideration).

Claim construction must always remain focused on the actual language of the patent claim. *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1201-02 (Fed.Cir.2002); *In re Hiniker Co.*, 150 F.3d 1362, 1269 (Fed.Cir.1998) (quoting Rich, J. ., "the name of the game is the claim."). There is a "heavy presumption" in favor of the ordinary meaning of the words in the term. *Resonate, Inc. v. Alteon Websystems, Inc.*, 338 F.3d 1360, 1364 (Fed.Cir.2003). Definitions found in dictionaries, encyclopedias and treatises can be helpful in determining such ordinary meaning. *See, e.g., Texas Digital Systems, supra*, at 1202; *see also Golight, Inc. v. Wal-Mart*, 355 F.3d 1327, 1331 (Fed.Cir.2004); *Riverwood Int'l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1357 (Fed.Cir.2003). However, the presumption in favor of the ordinary meaning may be overcome when:

the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history[,] ... if the intrinsic evidence shows that the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention ... [or] if the term "chosen by the patentee so deprives the claim of clarity" as to require resort to the other intrinsic evidence for a definite meaning. Last, as a matter of statutory authority, a claim term will cover nothing more than the corresponding structure or step disclosed in the specification, as well as equivalents thereto, if the patentee phrased the claim in step-or means-plus-function format.

*CCS Fitness v. Brunswick Corp.*, 288 F.3d 1359, 1366-1367 (Fed.Cir.2002) (internal citations omitted).

In addition, the Court must be mindful of the principle of claim differentiation. In *Comark Comms., Inc. v. Harris Corp.*, 156 F.3d 1182 (Fed.Cir.1998), the Federal Circuit Court of Appeals explained that "[t]here is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant." *Comark Comms.*, 156 F.3d at 1187 (citation omitted). However, the doctrine cannot be used to overcome the plain language of the claim terms themselves. *Mycogen Plant Science, Inc. v. Monsanto Co.*, 243 F.3d 1316, 1328 (Fed.Cir.2001).

Claims are also read in light of the patent specifications. Terms must be used the same way in both the claims and the specification. However, the specification must not be used to read requirements or limitations into the claim that are not there as a result of the words in the claims themselves. *Texas Digital*, 308 F.3d at 1204. Furthermore, the Federal Circuit has "cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification." *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1328 (Fed.Cir.2002).

When considering the effect of the prosecution history on the disputed claim terms, the Court may use arguments made to the PTO during the patent application process to help interpret the claim language. However, the prosecution history cannot be used to limit the scope of a claim "unless the applicant took a position before the PTO that would lead a competitor to believe that the applicant had disavowed coverage of the relevant subject matter." *Schwing GmbH v. Putzmeister AG*, 305 F.3d 1318, 1324 (Fed.Cir.2002).

In construing claims known as "means-plus-function" claims, the Court has additional considerations. Under 35 U.S.C. s. 112, a patentee may describe his or her invention in a claim by describing what it does. The

statute states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. s. 112, para. 6. Whether claim language should be interpreted as a means-plus-function limitation under section 112 is a question of law. *Linear Technology Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1318 (Fed.Cir.2004). Use of the word "means" creates a rebuttable presumption that the disputed term is a means-plus-function term. *Id.* at 1319. In determining whether the presumption has been rebutted, the Court looks to the language of the claim to determine whether the claim discloses a sufficiently definite structure to perform entirely the recited function. *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 527 (Fed.Cir.1996).

If a claim is found to be a means-plus-function claim, it is construed in two steps. First, the Court must identify the function recited in the claim. *ACTV Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1087 (Fed.Cir.2003). Second, the Court must determine the structure that corresponds to and performs the function. *Id.* The corresponding structure disclosed in the specification must be "clearly linked" to the claimed function. *B. Braun Medical, Inc. v. Abbot Labs*, 124 F.3d 1419, 1424 (Fed.Cir.1997). However, "the statute [does not] permit incorporation of the structure from the written description beyond that necessary to perform the claimed function." *Micro Chem., Inc. v. Great Plains Chem. Co., Inc.*, 194 F.3d 1250, 1258 (Fed.Cir.1999). Importantly, the "corresponding structure need not include all things necessary to enable the claimed invention to work. It is equally true, however, that corresponding structure must include all structure that actually performs the recited function." *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 296 F.3d 1106, 1119 (Fed.Cir.2002).

With all of these principles in mind, the Court now turns to the claims at issue in the instant case.

### **C. Construction of Terms in '704 and '057 Patents**

Before addressing each of the separate disputed claims, it is important to note that this Court does not write on a blank slate. The Federal Circuit Court of Appeals has offered this Court guidance on the term "cantilevered fashion." Defendant urges this Court to give little weight to that guidance, arguing that the claims should be construed in view of the full record currently before this Court. While the Court will not ignore the Federal Circuit's previous rulings in this case, the Court will construe each and every disputed claim in light of the full record and evidence before it.

In addition, the Court notes that some of the disputed claim terms are contained in means-plus-function claims, which are construed differently from non means-plus-function claims. The Court will address each claim in the Order presented by the parties in their joint claim chart.

Finally, while the Court may reference certain expert testimony that has been presented in support of a party's position, it will not consider those portions of the expert testimony that have been previously stricken from the record. ( *See* Dkt. # 381).

#### ***1. Claim Term One- "One End"***

The term "one end" is found in all of the disputed claims. Plaintiff asks this Court to construe the term as

encompassing any free end of the rod, not limited to a single end. Plaintiff bases its argument on dictionary definitions from Miriam Webster's Ninth New Collegiate Dictionary and The New Shorter Oxford English Dictionary, as well as the specific claims and figures in the '704 and '057 patents. Plaintiff also introduces extrinsic evidence in the form of the Federal Circuit's November 18, 2003, decision and expert testimony from R. Lee Rawls.

Defendant asks this Court to construe the term as limited to a single tip of the rod. Defendant bases its argument on a dictionary definition from Merriam Webster's Ninth New Collegiate Dictionary, as well as the specific claims and figures in the '704 and '057 patents. Defendant also introduces extrinsic evidence in the form of Judge Pechman's October 6, 2003, Order Granting Summary Judgment of No Infringement Under the Doctrine of Equivalents, and expert testimony from Evan R. Flavell.

The Court finds plaintiff's argument more persuasive. The patent claims:

In an exercise machine: a base, a plurality for resilient rods mounted on the base in cantilevered fashion *with one end of each of the rods being free*, a flexible cable adapted to be pulled upon by a person using the machine, and means for connecting the cable selectively to one or more of the rods so that the rods to which the cable is connected bend in bow-like fashion and thereby produce a force which opposes the pull on the cable, the magnitude of the force depending at least in part upon the number of rods to which the cable is connected.

'057 Patent at 7:50-60 (emphasis added). The pertinent language is also used in the '704 patent claims. '704 Patent at 7:30-33. In the context of the patent, the Court finds that the term "one end" means one portion or section of a rod *that includes* one of the rod's two extremities. Both parties have presented the same dictionary definition of "one" which means "a single particular unit." *Merriam Webster's Ninth New Collegiate Dictionary*, at 824 (1990). However, plaintiff also points to the definition of the word "end" meaning "a part of anything which includes either of its two extremities." *The New Shorter Oxford English Dictionary*, at 815 (1993). In this case, a broader definition of "one end" is the most consistent with the use of the words by the inventor. *See Tehrani v. Hamilton Medical, Inc.*, 331 F.3d 1355, 1361 (Fed.Cir.2003). In the detailed description portion of the patent, the inventor envisions rods with free ends that allow the rods to bend in a bow-like fashion in order to produce resistance. '704 Patent at 3:58-4:10 and '057 Patent at 3:31-54. This description does not preclude rods that have more than one free end.

Furthermore, this broader definition is consistent with the Federal Circuit's prior ruling in this case, in which that Court explained that a rod with two free ends literally includes one free end, and therefore, the limitation of the term requires only at least one free end. (Dkt. # 243, Ex. 1 at 6). Finally, plaintiff's expert, Mr. Rawls, has testified that a person of ordinary skill in the art would understand the term "one" to mean one or more than one. (Dkts. # 303 at 5 and # 316 at 5-6).

Accordingly, this Court construes the term "one end" to encompass a rod with two free ends, and the term "end" to encompass a portion of the rod that includes either of its two extremities.

## ***2. Claim Term Two- "Free"***

The term "free" is found in Claims 1-5, 7, 11-13, and 16-18 of the '057 patent, and in Claims 1-5, 7 and 11 of the '704 patent. Plaintiff asks this Court to construe the term as the portion of the rod extending from the base to the extremity of the rod, which is not restrained from moving, and encompassing a rod with either

one or two "free" ends. Plaintiff bases its argument on the specific claims contained in the '057 and '704 patents. In addition, plaintiff introduces extrinsic evidence in the form of the Federal Circuit's November 18, 2003, decision and expert testimony from R. Lee Rawls.

Defendant asks this Court to construe the term "free" as an end of the rod that is unsupported except through the rod itself and therefore is able to move such that when it moves, the rod bends in a bow like fashion. Defendant bases its argument on a dictionary definition from Merriam Webster's Ninth New Collegiate Dictionary, as well as the specific claims and figures in the '704 and '057 patents. Defendant also offers extrinsic evidence in the form of expert testimony from Evan R. Flavell.

In the context of this patent, the term "free" is used to refer to an end of one of the rods. For example, "one end of each of the rods being free," "the free ends of the rods," and "the other end being free." '057 Patent at 7:52, 7:63-64 and 7:66-67 and '704 Patent at 7:33. The specifications of the patents describe a "free end" as the portion of the rod that "extends upward from retainer 36 and base 10." '057 Patent at 3:44-45 and '704 Patent at 4:3-5. The specification further details "[t]he rods are thus free to bend in bow-like fashion, as illustrated in FIGS. 12-22, and produce a force in opposition to the force which bends them." '057 Patent at 3:51-54.

The common definition of "free" is "not hampered or restricted," "not fastened" or "not confined to a particular place." *Webster's Ninth New Collegiate Dictionary*, at 490 (1990). It does not appear that, in the context of the patent, this definition applies exactly. For example, while the ends of the rods are described as being "free," they are in fact, somewhat restricted by the bolts holding each rod in place, and by the cable attached to the rod. Thus, the common definition must be somewhat altered to define the term "free" as it applies to the rods. The Court finds that a combination of the parties' definitions-the unsupported portion of the rod that is free to move about relative to the fixed mounting point so that the rod is able to bend in a bow-like fashion-embodies the meaning of free in this context.

This definition is supported by plaintiff's expert testimony. Mr. Rawls testified that the term "free" means "a portion of the rod extending from the base to the opposite tip of the rods, which is free to move about relative to the fixed mounting point." (Dkt. # 316 at 7). Mr. Rawls emphasizes that this definition recognizes that a rod may have two free ends, and does not require a rod to have one free end and one fixed end. (Dkt. # 316 at 7). This follows the Court's determination, *infra*, that a rod mounted in cantilevered fashion may also encompass two free ends. Furthermore, the Federal Circuit Court of Appeals has also noted that the language of the claims does not require a fixed end limitation. ( *See* Dkt. # 243, Ex. 1 at 6-7). Accordingly, the Court finds that the proper construction of the term "free" is the unsupported portion of the rod that is free to move about relative to the fixed mounting point so that the rod is able to bend in a bow-like fashion.

### ***3. Claim Term Three- "Secured in a Fixed Position"***

The term "secured in a fixed position" is found in Claims 1-5, 7 and 11 of the '704 patent, and in Claims 1-5, 7 and 11 of the '057 patent. Plaintiff asks the Court to construe the term as the rods are attached at a particular point such that they remain in place in ordinary use. Plaintiff bases its argument on definitions from the Merriam Webster's Ninth New Collegiate Dictionary and the New Shorter Oxford English Dictionary, as well as the specific claims and figures in the '704 and '057 patents. Plaintiff also introduces extrinsic evidence in the form of testimony from R. Lee Rawls.

Defendant asks the Court to construe the claim as a single end (not multiple ends) of each of the rods is

held firmly stationary in a stationary position. Defendant bases its argument on a definition from the Merriam Webster's Ninth New Collegiate Dictionary, as well as the specific claims and figures in the '704 and '057 patents. Defendant also introduces extrinsic evidence in the form of testimony by Evan R. Flavell.

In the context of the patent, the term "secured in a fixed position" is used to describe how the rods are mounted to the base. For example, "one end of the rod being secured in a fixed position" and "one end of each rod being secured in a fixed position." '057 Patent at 7:6 and '704 Patent at 7:32-33. The specifications of the patents describe the "fixed ends" of the rods as how they are mounted on the base:

A retainer 36 is inserted into the upper interior portion of the U-shaped post 12 and is attached thereto by bolts 41 and nuts 38 (FIGS.2).... A retainer 36 *a* is inserted into the lower interior portion of the U-shaped post 12.... In the assembled state of retainers 36 and 36 *a*, holes 42 and 42 *a* in both retainers are aligned with respect to each other. These holes receive respective cantilevered rods or arms 44, the free ends of which extend upward from the retainer 36 and base 10.... Lower ends of the resilient rods 44 are fixed in retainer 36 *a* by transverse bolts 46 with nuts 48. Bolts 46 pass through aligned holes drilled in retainer 34 and the lower ends of the rods. The rods are then free to bend in bow-like fashion, as illustrated in FIGS. 12-22, and produce such a force in opposition to the force which bends them.

'057 Patent at 3:31-54.

The parties present the same dictionary definitions for the Court's consideration. Definitions include "to hold fast," "stationary," and "firmly fixed." *Merriam Webster's Ninth New Collegiate Dictionary*, at 468 and 1062 (1990). However, the way they apply the definition in the context of the patent differs. Plaintiff argues that "secured in a fixed position" means that the rods are attached at a particular point so that they remain fixed in place, while defendant argues that the term necessarily refers only to one extremity, or end, of the rod being fixed in place.

The Court agrees with plaintiff. The claim language only requires that bolts be passed through holes in the "lower ends" of the rods, so that the rods may bend "in bow-like fashion." '057 Patent at 3:51-54. As discussed above, the term "end" encompasses the portion of the rod containing either of two extremities. While the figures contained in the patents contain only one embodiment of the rods being secured near one extremity, the Federal Circuit Court has already cautioned that the specifications are narrower than the claims, and unless the claim contains a "clear disclaimer ... that limits the invention to these embodiments and nothing more," the claim may not be so limited. ( *See* Dkt. # 243, Ex. 1 at 6-7).

Moreover, the expert evidence supports this interpretation. Mr. Rawls testified that a person of ordinary skill in the art would interpret the term to mean "the tip *or some portion of the rod's length near its end*, is held in place by the device." (Dkt. # 303 at 3) (emphasis added). Thus, the Court finds that the term does not require that only the tip, or extremity, of the rod be fixed in place. Rather, some portion of the rod's length near its end is fixed such that it remains in place during ordinary use of the machine.

#### ***4. Claim Term Four- "Vertically Up"***

The term "vertically up" is found in Claims 12-14, 20-21 and 24-25 of the '704 patent. Plaintiff asks the Court to construe the term as generally upright. Plaintiff bases its argument on a definition from the Merriam Webster's Ninth New Collegiate Dictionary, as well as specific claims in the '704 and '057 patents. Plaintiff also introduces extrinsic evidence in the form of testimony by R. Lee Rawls.

Defendant asks the Court to construe the term as the end of the rod that is not attached to the base extends in a direction generally perpendicular to the plane of the horizon and in a direction away from the earth. Defendant bases its argument on a definition from the Merriam Webster's Ninth New Collegiate Dictionary, as well as specific claims in the '704 and '057 patents. Defendant also introduces extrinsic evidence in the form of testimony by Evan R. Flavell.

It appears to the Court that the parties essentially present the same proposed construction of the claim. Both parties agree that "vertical" means upright. However, defendant argues that plaintiff's proposed definition of "generally upright" fails to account for the entire term "vertically up" because "up" specifically means a direction away from the center of the earth. Defendant notes that an end that extends vertically down from a base might be considered "generally upright" simply because it is vertical. Thus, defendant argues that it is important to construe the term "vertically up" as extending in a direction away from the center of the earth.

In the context of this patent, it appears that the term "vertically up" means "generally upright," or in a perpendicular position. The Court notes that in writing the claims, the inventor did distinguish the rods as not simply vertical, but vertically "up," as illustrated in Figures 1, 4 and 12-22. In addition, in the detailed description of the device, the inventor notes that the free ends of the rods extend "upward" from the frame. '704 Patent at 4:2-4. However, in examining the prosecution history of the claim, the inventor clearly explains that his figures depict just one conceivable embodiment of his invention. ( *See, e.g.*, Dkt. # 319, Ex. D at NAUT 003317). Thus, the term is not limited to an extension in a direction away from the center of the earth. The Court believes no extrinsic evidence is necessary to construe this term.

#### ***5. Means-plus-Function Claim Term Five- "Means for Connecting the Cable Selectively to One or More Rods"***

The term "means for connecting the cable selectively to one or more rods" is found in Claim 12, 13, and 16-18 of the '057 Patent. The parties agree that this term is a means plus function limitation pursuant to 35 U.S.C. s. 112 para. 6. Accordingly, the term must be construed in two steps. First, the Court must identify the function recited in the claim. *ACTV Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1087 (Fed.Cir.2003). Second, the Court must determine the structure that corresponds to and performs the function. *Id.* The corresponding structure disclosed in the specification must be "clearly linked" to the claimed function. *B. Braun Medical, Inc. v. Abbot Labs*, 124 F.3d 1419, 1424 (Fed.Cir.1997).

##### ***a. Function***

In terms of the function in the claim, the parties do not appear to dispute the definition of the word "connect," meaning to fasten or join together. However, the parties do argue about what it means to "connect selectively" to one or more rods. Plaintiffs assert that the function of this claim does not allow the user to select from any one individual rod, but rather, it allows the user to select one rod or a group of rods. Defendant argues that by adding the word "selectively" the inventor intended that the user could select from any single rod from a group of rods, as well as being able to select multiple rods. The Court agrees with defendant.

The parties' proffered common and ordinary definitions of the term "selectively" differ, but do not conflict, and come from the same source. Plaintiff notes that "selectively" means "of, or relating to, or characterized by selection: selecting or tending to select." *Merriam Webster's Ninth New Collegiate Dictionary*, at 1064 (1990). Defendant notes that "select" means "to take by preference from a number or group: pick out:

CHOOSE ~to make a choice." *Id.* Thus, the common meaning of the term selectively supports defendant's proposed construction of the term.

In addition, the abstract, specification and prosecution history all support defendant's proposed definition. For example, the abstract and specification both state that the rods can be used *in any combination*. '057 Patent at Abstract and 5:37-38 (emphasis added). Thus, any one or more rods could be used. Furthermore, in his patent application, the inventor emphasized that the cable could be "connected to *any one* or more of the rods." (Dkt. # 325 at 29) (emphasis added). Accordingly, the Court construes the term "connecting ... selectively" as joining or fastening any one rod or any group of adjacent rods from a group of rods and connect such rod or rods to the cable.

### ***b. Corresponding Structure***

The parties next dispute the structure that corresponds to and performs the function. Plaintiff asserts that the essential structure is link 54 illustrated in Figure 6. Defendant asserts that the structure includes the eye bolts 50, the detachable links 54, and the spring clips 56. The Court agrees with plaintiff.

The structure for performing the stated function is described in the specification:

As shown in FIGS. 1 and 6, eye bolts 50 are attached to the upper ends of resilient rods 44. Hand cables 52 are connected to eyelets of said bolts through detachable links 54 and spring clips 56 (FIG.6).

'057 Patent at 3:55-58 and '704 Patent at 4:11-14. Plaintiff argues that the only structure in that description necessary for performing the stated function is detachable link 54. In *Asyst Technologies, Inc. v. Empak, Inc.*, 268 F.3d 1364 (Fed.Cir.1999), the Federal Circuit Court of Appeals explained the important distinction between necessary and unnecessary structures. The Court explained that "[s]ection 112 paragraph 6 does not 'permit incorporation of structure from the written description beyond that necessary to perform the claimed function.' Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations." *Asyst Techs., Inc.*, 268 F.3d at 1369-70 (citation omitted). The Court illustrated this principle in terms of a toaster, stating:

[a]n electrical outlet enables a toaster to work, but the outlet is not for that reason considered part of the toaster. The corresponding structure to a function set forth in a means-plus-function limitation must actually perform the recited function, not merely enable the pertinent structure to operate as intended....

*Id.* at 1371.

The Court finds this analogy applicable in the instant case. The detachable link 54 is the structure that enables the user to select either a single rod or multiple rods because the detachable link can accommodate more than one eye bolt. However, the eye bolts 50 and spring clips 56 are not necessary for that function. For example, the detachable link 54 could be joined directly with the cable 52 through the loop in the cable, or the detachable link 54 could connect the cable to the rod 44 through a hook or loop formed in the end of the rod. Thus, like the toaster's electrical outlet, the eye bolts and spring clips merely enable the detachable link to operate as intended. Accordingly, the Court finds that the necessary structure to perform the function stated in this claim is the detachable link 54.

### ***6. Claim Term 6- "Means for Connecting"***

The term "means for connecting" is found in Claims 1, 3-5, 7 and 11 of the '704 Patent. The parties agree that this term is a means plus function limitation pursuant to 35 U.S.C. s. 112 para. 6. In addition, the parties agree that the term should be construed as it was in the previous claim term 5. Accordingly, the Court construes "means for connecting" as to fasten or join together, and the necessary structure for performing that function is detachable link 54.

### ***7. Claim Term 7- "Means for Operatively Connecting Said Support to Said Resilient Arm Means"***

The term "means for operatively connecting said support to said resilient arm means" is found in Claims 12-14, 20-21 and 24-25 of the '704 Patent. The parties agree that this term is a means plus function limitation pursuant to 35 U.S.C. s. 112 para. 6. Accordingly, the term will be construed in two steps.

#### ***a. Function***

Claim 12 of the '704 patent requires:

A universal exercising machine comprising: a base; resilient arm means having one end thereof attached to said base and an opposite end extending vertically up from said base in cantilever fashion; a support horizontally movable with respect to said base and adapted to receive the body of a person using the machine; and *means for operatively connecting said support to said resilient arm means* such that movement of said support will cause said resilient arm means to flex.

'704 Patent at 8:11-19 (emphasis added). The parties do not dispute the function of this claim. They agree that the function is connecting the support, or moveable seat, to the resilient arm. (Dkts. # 324 at 30 and # 325 at 31). Thus, the Court turns to the necessary structure for that function.

#### ***b. Corresponding Structure***

The parties dispute which components make up the necessary structure to connect the support to the resilient arm. The specification contained in the '704 Patent describes the structure as:

Eye bolts 96 (only one of which is shown in FIG. 4) are engaged with spring clips 80 and are attached to the front end of the bench 82 so as to face upright post 12. These eye bolts are used for attaching the bench to the foot cables 76.

'704 Patent at 4:49-54. The structure is illustrated in Figure 4. As can be seen in the figure, between the rods 44 and the bench 82, there is an eye bolt 50, a detachable link 54, a spring clip 56, a cable 52, another spring clip 80 and another eye bolt 96. Plaintiff argues that the necessary structure encompasses only detachable link 54, the cable 52 and the spring clip 80. Plaintiff asserts that the eye bolt 50 and the first spring clip 56 are not necessary because the detachable link 54 could connect to the rod in another manner, and that the second eye bolt 96 is not necessary because the second spring clip 80 could connect with the support 82 in another manner. Defendant argues that the necessary structure is the spring clip 56, the detachable link 54, and a set of eye bolts 50.

For the same reasons set forth above in construing the term "means for connecting ...," the Court agrees with plaintiff. As the Court previously explained, "[s]tructural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations." *Asyst Techs., Inc.*, 268 F.3d at 1369-70 (citation omitted). The Court agrees that it is the detachable link 54, the cable 52,

and the spring clip 80 that are necessary to connect the moveable seat to the resilient arm, or rod. The remaining components merely enable the detachable link, the cable and the spring clip to operate as intended. Thus, those pieces do not serve as claim limitations. Accordingly, the Court finds that the necessary structure encompasses only detachable link 54, the cable 52, and the spring clip 80.

#### ***8. Claim Term 8- "Means Engageable with the Cable/Guide Means"***

The term "means engageable with the cable" or "guide means" is found in Claims 1-5, 7 and 11 of the '057 Patent and in Claims 1-5, 7 and 11 of the '704 Patent. The parties dispute whether this term is a means-plus-function limitation. Plaintiff argues that the term should not be governed by 35 U.S.C. s. 112 para. 6 because the claim describes sufficient structure to one skilled in this art. Defendant argues that because of the word "means," this term is presumptively a means plus function limitation, and plaintiff has not sufficiently rebutted that presumption. The Court agrees with defendant.

Claim 1 of the '057 Patent requires:

In an exercise machine: a base, resilient rod mounted on the base in cantilevered fashion with one end of the rod being secured in a fixed position and the other end being free, a cable connected to the free end of the rod for flexing the rod when pulled, *and means engageable with the cable for guiding the cable* and operatively positioned such that a pull exerted upon the cable by a user, causes the rod to flex and resist the pull in a predetermined manner regardless of the direction in which the pull is exerted.

'057 Patent at 7:4-13 (emphasis added); *see also* '704 Patent at 7:30-41 ("guide means for the cable mounted on the base"). Use of the word "means" creates a rebuttable presumption that the disputed term is a means-plus-function term. *Linear Technology Corp.*, 379 F.3d at 1319; *Sage Products, Inc. v. Devon Industries, Inc.*, 126 F.3d 1420, 1427 (Fed.Cir.1997). "However, the presumption is not conclusive. For example, where a claim uses the word 'means,' but specifies no corresponding function for the 'means,' it does not implicate section 112. Likewise, where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format." *Sage Products*, 126 F.3d at 1427-28 (citations omitted).

Claim 1 identifies a function for the word "means," explaining that it is used "for guiding the cable ... such that a pull exerted upon the cable by a user, causes the rod to flex and resist the pull in a predetermined manner..." '057 Patent at 7:8-11. In addition, the corresponding function is not elaborated within the claim itself. *See Sage Productions*, 126 F.3d at 1427-28. Although plaintiff argues that a person of ordinary skill in the art would read the claim to mean a "pivotable pulley," nowhere in the claim itself do the words pulley or pivotable pulley appear. ( *See* Dkt. # 324 at 32). Accordingly, the Court finds that plaintiff has not sufficiently rebutted the presumption that this term is a means-plus-function limitation, and the Court will construe the term as follows.

##### ***a. Function***

The parties agree that, if this term is construed as a means-plus-function term, the stated function is to guide the cable such that a pull on the cable causes the rods to flex in a predetermined manner regardless of the direction of the pull. (Dkts. # 324 at 32 and # 325 at 32). Thus, the Court turns to the corresponding structure.

##### ***b. Corresponding Structure***

The parties also agree that, if this term is construed as a means-plus-function term, the necessary structure consists of a detachable link 66, a yolk 58, and a sheave 60, as illustrated in Figure 5 of the '057 Patent. (Dkts. # 324 at 33 and # 325 at 33). Plaintiff asserts that these components are known as a "pivotable pulley." Defendant does not dispute the use of that descriptive phrase. ( See Dkt. # 332 at 22-23). Accordingly, the Court finds that the corresponding structure for guiding the cable in this claim is a pivotable pulley consisting of a detachable link 66, a yolk 58, and a sheave 60.

### ***9. Claim Term 9- "In Cantilevered Fashion"***

The term "in cantilevered fashion" is contained in all of the asserted claims. Plaintiff asks the Court to construe the term as a structure that is similar to or in accordance with the principles of a cantilever, but not requiring a literal cantilever. Plaintiff bases its argument on definitions from The American Heritage Dictionary, the McGraw-Hill Encyclopedia of Science and Technology, Webster's Third New International Dictionary of the English Language, and an online definition provided by defendant, as well as the specific claims and figures found in the '704 and '057 patents. Plaintiff also introduces extrinsic evidence in the form of the Federal Circuit's November 18, 2003, decision, several depositions, and expert testimony by R. Lee Rawls.

Defendant asks the Court to construe the term as a rod that is mounted such that one end of the rod is secured in a fixed position and the other end is free. Defendant bases its argument on definitions from Webster's Ninth New Collegiate Dictionary, the McGraw-Hill Dictionary of Scientific and Technical Terms, and the Wordsworth Dictionary of Science and Technology, as well as the specific claims and figures found in the '704 and '057 patents. Defendant also introduces extrinsic evidence in the form of testimony by Evan R. Flavell.

The Court agrees with plaintiff. This Court previously adopted defendant's narrow construction of the term, relying heavily on a definition of "cantilever" restricting the term to a beam securely fixed at one end and hanging free at the other. The Court did not apparently consider a double cantilever definition. The Federal Circuit Court highlighted the Court's error in failing to recognize the double cantilever definition, explaining that the Court first erred by failing to recognize that the term at issue is "in cantilevered fashion," and not simply "cantilever." (Dkt. # 243, Ex. 1 at 5). The Circuit Court concluded that the term language does not require a literal cantilever. This Court now agrees that, in the context of the patents at issue in this case, a definition of the term encompassing a double cantilever is the most consistent with the words used by the inventor.

In reaching this conclusion, the Court first looked to common definitions of the term cantilever. Among the definitions proffered by both parties are those found in the American Heritage Dictionary and the McGraw-Hill Encyclopedia of Science and Technology. The American Heritage Dictionary defines the term as:

1. A projecting beam or other structure supported only at one end.
2. A beam or other member projecting beyond a fulcrum and supported by a balancing member or downward force behind the fulcrum.

*American Heritage Dictionary*, at 235 (Second Collegiate Ed.1986). The *McGraw-Hill Encyclopedia of Science and Technology* defines the term as:

A beam supported at one end and supporting a load along its length or at its free end.... Familiar examples are the symmetrical paired cantilevers of a seesaw or teeterboard, the beam in a chemical balance, and the unsymmetrical cantilever in the overhang of a roof.

*McGraw-Hill Encyclopedia of Science and Technology*, at 190-91 (7th Ed.1992). It is clear from these definitions that, in addition to the others advanced by the parties, the term cantilever includes both a beam supported only at one end and a beam which projects on both sides beyond its support, and therefore "cantilevered fashion" necessarily includes both types of cantilevers.

This conclusion is supported by extrinsic evidence as well. Mr. Rawls testified that a person of ordinary skill in the art would understand "in cantilevered fashion" to mean that the rod is mounted in a way that allows it to operate in the manner of a cantilever, "like or similar to a cantilever." (Dkt. # 303 at 3). Mr. Flavell disagrees with that interpretation, but bases his opinion on an erroneous limitation. (Dkt. # 304 at 10-13). Mr. Flavell relies heavily on the specifications and figures found in the patents. However, as the Federal Circuit has reminded this Court, it is important to distinguish the role of the specification versus the role of the claim. The specification describes, among other things, an enabled embodiment of the invention. ( See Dkt. # 243, Ex. 1 at 7). The claims on the other hand set the boundaries or scope of the invention. Therefore, the claims may encompass more than the embodiment described in the specification. Because there is nothing in the claim itself which limits the invention to only the embodiment found in the specification, the Court finds that Mr. Rawls' understanding of the term is the more proper understanding. For all of these reasons, the Court finds that the term "in cantilevered fashion" does not preclude a cantilevered structure with two free ends.

#### ***10. Claim Term 10- "A Seat Movably Mounted on the Base and Connected to the Cable"***

The term "a seat movably mounted on the base and connected to the cable for receiving the body of the person using the machine" is found in Claim 7 of the '057 patent, and the term "base" is found in all of the disputed claims. Plaintiff asks the Court to construe the term "base" as a floor-supported frame, which acts as a supporting structure for discreet elements of the device, and including any horizontal and vertical, or "upright," sections. Plaintiff bases its argument on definitions from *The New Shorter Oxford English Dictionary*, *Merriam Webster's Ninth New Collegiate Dictionary*, and *The American Heritage Dictionary*, as well as specific claims and figures in the '704 and '057 patents and specific portions of the prosecution history of the '704 and '057 patents. Plaintiff also introduces extrinsic evidence in the form of testimony by R. Lee Rawls.

Defendant asks the Court to construe the term "base" and the term "connected to the cable." Defendant argues that "base" means a supporting layer or foundation that serves to support the elements of the device, that needs not render the device free standing. Defendant further argues that "connected to the cable" means that the cable is fastened to the seat, not to a belt that is wrapped around the user. Defendant bases its argument on the definition of "base" reference in the R. Lee Rawls *Markman* report, as well as specific claims in the '057 patent. Defendant also introduces extrinsic evidence in the form of expert testimony by Evan R. Flavell.

As a threshold matter, the Court notes that the term "base" is the tenth disputed claim presented by the parties. This Court previously limited claim construction to a total of ten disputed claims. (Dkt.# 288). Accordingly, the Court will not construe the term "connected to the cable."

The "base" is described in the patents at issue as follows:

the machine comprises a rigid frame or base 10 having an upright U-shaped post 12 and a short horizontal leg 14 rigidly connected to post 12, e.g., by means of triangularly-shaped side corner plates 16. An elongated section 18 is hinged to leg 14 by means of a hinge 20, which is clearly shown in Fig. 9.... Base 10, including horizontal leg 14, corner plate 16, and base section 18 can be made of a light metal, such as aluminum or aluminum alloy, or of any other suitable material.

'057 Patent at 2:66-3:30 and '704 Patent at 3:25-55. The parties agree that the common meaning of base, something on which a thing stands or by which it is supported, correctly describes the term "base" as used in the context of this patent. However, plaintiff asks the Court to also construe the term to mean "floor-supported" frame, including all of the named components above, while defendant argues that nothing in the claim requires that the base be free standing or "floor-supported." In addition, defendant appears to argue that the term base refers only to the horizontal element that lies on the floor. Based on the intrinsic record for these patents, the Court finds that the "base" does include the components listed above, but does not require that these components be "floor-supported" as plaintiff suggests.

The language of the specifications demonstrates that the "base" is intended to include all of the components listed, not just one piece. For example, the inventor uses the inclusive words "a rigid frame or base 10 *having* ...," '057 Patent at 2:66-67 and '704 Patent at 3:25-26 (emphasis added), and "[b]ase 10 including...." '057 Patent at 3:27 and '704 Patent at 3:54. Moreover, in other sections of the specifications, the inventor refers to individual components of the base as "base sections." For example, the inventor first identifies section 18 as "an elongated section," then refers to it subsequently as "base section 18." '057 Patent at 3:2 and 3:29 and '704 Patent at 3:29 and 3:55.

This intent to include all of the base components in the term "base" is further evidenced by the prosecution history of the '704 Patent. In the initial patent application the frame and the base were described separately:

the machine comprises a rigid frame 10 formed by an upright U-shaped post 12 and a horizontal leg 14 rigidly connected to post 12, e.g., by means of triangularly-shaped side corner plates 16. A base 18 is hinged to leg 14 by means of a hinge 20, which is clearly shown in Fig. 9.

(Dkt. # 319, Ex. D at NAUT 003310). Accordingly, the term "base" strictly referred to the horizontal section 18, as shown in Figure 9. (Dkt. # 319, Ex. D at NAUT 003328). However, that patent application was rejected, and in response to the rejection, the definition of "base" was amended with the more inclusive language highlighted above:

the machine compromises a rigid frame *or base 10 having* an upright U-shaped post 12 and a *short* horizontal leg 14 rigidly connected to post 12, e.g., by means of triangularly-shaped side corner plates 16. *An elongated section* 18 is hinged to leg 14 by means of a hinge 20, which is clearly shown in Fig. 9.

(Dkt. # 319, Ex. D at NAUT 003310) (emphasis added). Thus, the definition of base was broadened to include both the horizontal and vertical components. Accordingly, this Court finds that the term "base" includes the components described in the specifications, not just the horizontal section 18.

However, the Court does not find that anything in the claims or specifications requires the "base" to be "floor-supported" as plaintiff asserts. In fact, the doctrine of claim differentiation weakens any suggestion

that claim 7 includes such limitation. While the Court recognizes that the doctrine of claim differentiation is not a hard and fast rule of construction, it does create a presumption that each claim in a patent has a different scope. Claim 8 incorporates claim 7 by reference and further defines the term "base" with an additional limitation: "wherein the base is adapted to rest on a horizontal supporting surface, and the seat includes wheels engageable with the supporting surface." '057 Patent at 7:33-36 and '704 Patent at 7:62-65. If this Court were to interpret the term "base" to include the limitation "floor-supported," as plaintiff asserts, it would render claim 8 superfluous and nearly redundant of claims 7 and 1, the exception being the description of the seat including wheels engageable with the supporting surface. Plaintiff has not shown any reason sufficient to rebut the presumption that claims 1 and 7 should not be so limited in order to preserve the distinction between claims 7 and 8. Consequently, the Court declines to limit the term "base" to a "floor-supported" structure.

### *III. CONCLUSION*

This Court has construed the ten disputed claim terms in this case as set forth above, and the Clerk is directed to a copy of this Order to all counsel of record.

W.D.Wash.,2005.

Nautilus Group, Inc. v. Icon Health & Fitness, Inc.

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