

United States District Court,
E.D. Missouri, Eastern Division.

WORLD WIDE STATIONERY MANUFACTURING CO., LTD,
Plaintiff.

v.

U.S. RING BINDER, L.P,
Defendant.

No. 4:07-CV-1947 (CEJ)

March 31, 2009.

Keith A. Rabenberg, Richard L. Brophy, Senniger Powers, St. Louis, MO, for Plaintiff.

Anthony G. Simon, Timothy E. Grochocinski, Simon Law Firm, P.C., St. Louis, MO, for Defendant.

MEMORANDUM AND ORDER

CAROL E. JACKSON, District Judge.

This matter is before the Court on the parties' joint motions for claim construction. On November 4, 2008, a hearing on the motions was held, pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). At issue are the parties' disputes over the scope of claims 1, 11, 24, 26, 28, and 30 in U.S. Patent No. 7,296,946 (the '6 patent) and the scope of claims 1, 2, 3, 5, 9, 10, 11, and 13 in U.S. Patent No. 7,404,685 (the '685 patent). FN1

FN1. On November 25, 2008, the parties filed a list of disputed and non-disputed claim terms. (Doc. # 78). The parties agree that the following terms in the '6 patent do not require construction: (1) controllably pivoting; (2) movable in translation; (3) a spring; (4) locking; (5) closed position; (6) biased; (7) movable generally lengthwise; (8) generally circular shape; (9) generally slated D shape; (10) pivoting motion; (11) produces movement; and (12) generally lengthwise. *Id.* at 2. As such, the Court will only address the terms that remain in dispute as set forth in the list.

I. Background

Plaintiff is the inventor of the '6 patent, which is titled "Ring Binder Mechanism" and the '685 patent, which is titled "Ring Binder Mechanism Spring Biased to a Locked Position When Ring Members Close." The claims of the '6 and '685 patents "cover devices known as 'ring metals,' which are metal mechanisms incorporated into loose-notebooks." (Doc. # 40, at 2-3). Plaintiff claims that defendant marketed and sold a device, namely the InstaClik, that infringes both the '6 and '685 patents. (Doc. # 40, at 12; # 31, at 12).

A. DISPUTED CLAIMS OF THE '6 PATENT

Claim 1 of the '6 patent reads (with the disputed terms underlined):

A ring binder mechanism for retaining loose leaf pages, the mechanism comprising:

a generally rigid, elongate plate having a longitudinal axis;

hinge plates supported by said plate for pivoting motion relative to the elongate plate;

rings for holding loose leaf pages, the rings including ring members mounted on said hinge plates and moveable by the hinge plates between a closed position wherein the ring members of each ring form a substantially continuous, closed loop for allowing loose leaf pages retained by the rings to be moved along the ring from one ring member to the other, and an open position wherein the ring members of each ring form a discontinuous, open loop for adding or removing loose leaf pages from the rings;

a *control structure* supported by the elongate plate movement relative to the elongate plate for controllably pivoting said hinge plates to thereby move the ring members between the closed and open positions, the *control structure* comprising a travel bar *operatively connected* to the hinge plates and movable in translation relative to the elongate plate for moving the hinge plates between the closed and open positions; and

a spring *arranged to bias* travel bar toward the closed position for locking the hinge plates in the closed position.

Claim 11 of the '6 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 1 wherein said elongate plate has two generally opposite longitudinal edges, the hinge plates being *supported loosely* between said two edges such that the hinge plates are not biased to the open or closed position by the elongate plate.

Claim 26 of the '6 patent reads (with the disputed terms underlined):

A ring binder mechanism for retaining loose leaf pages, the mechanism comprising:

a generally rigid, elongate plate having a longitudinal axis and two generally opposite longitudinal edges;

hinge plates supported by said plate between said two edges for pivoting motion relative to the elongate plate;

rings for holding said loose leaf pages, the rings including ring members mounted on said hinge plates and moveable by the hinge plates between a closed position wherein the ring members of each ring form a substantially continuous, closed loop for allowing loose leaf pages retained by the rings to be moved along the ring from one ring member to the other, and an open position wherein the ring members of each ring form a discontinuous, open loop for adding or removing loose leaf pages from the rings;

a *control structure* supported by the elongate plate for movement relative to the elongate plate for controllably pivoting said hinge plates to thereby move the ring members between the closed and open positions, the *control structure* comprising of a travel bar *operatively connected* to the hinge plates and movable in translation relative to the elongate plate for moving the hinge plates between the closed and open positions;

the *control structure* further comprising an actuating lever *pivotaly mounted* on the elongate plate in a position for grasping to pivot the lever, the lever being *operatively connected* to the travel bar such that pivoting motion of the lever produces movement of the travel bar generally lengthwise of the elongate plate; and

a spring *arranged to bias* said travel bar toward the closed position for locking the hinge plates in the closed position.

Claim 30 of the '6 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 26 wherein the hinge plates cooperatively define at least one opening for allowing a portion of the *control structure* to pass through the hinge plates.

B. DISPUTED CLAIMS OF THE '685 PATENT

Claim 1 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism for retaining loose-leaf pages, the mechanism comprising:

a housing;

hinge plates supported by the housing for pivoting motion relative to the housing;

rings for holding the loose-leaf pages, each ring including a first ring member and a second ring member, the first ring member being mounted on a first hinge plate and moveable with the pivoting motion of the first hinge plate relative to the second ring member between a closed position and an open position, in the closed position the two ring members form a substantially continuous, closed loop for allowing loose-leaf pages retained by the rings to be moved along the rings from one ring member to the other, and in the open position the two ring members form a discontinuous, open loop for adding or removing loose-leaf pages from the rings;

a *control structure* supported by the housing and moveable relative to the housing between a first position and a second position for use in controlling the pivoting motion of the hinge plates, the *control structure* including an actuator and a hinge pin *pivotaly connecting* the actuator to the housing for movement relative to the housing to cause movement of the *control structure* between said first and second positions; and

a spring received on the hinge pin *engageable* with the actuator for urging the *control structure* toward said first position;

the actuator comprising a lever *pivotaly mounted* on the housing and the *control structure* further comprising a travel bar *operatively connected* to the lever such that pivoting movement of the lever causes

movement of the travel bar in translation relative to the housing from the first position in which the *control structure* locks the hinge plates in the closed position to the second position in which the hinge plates are free to pivot to the open position.

Claim 2 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 1 wherein the spring is arranged relative to the actuator so that movement of the *control structure* from the first position to the second position deflects the spring and stores additional energy in the spring.

Claim 3 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 2 wherein the spring includes a first free end and a *second free end*, the first free end of the spring being *engageable* with the actuator such that the first free end of the spring moves relative to the *second free end* of the spring when the actuator is moved to move the *control structure* toward the said second position.

Claim 11 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 1 wherein the *lever* is *pivotally connected* to the travel bar.

Claim 13 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism for retaining loose-leaf pages, the mechanism comprising:

a housing;

hinge plates supported by the housing for pivoting motion relative to the housing;

rings for holding the loose-leaf pages, each ring including a first ring member and a second ring member, the first ring member being mounted on a first hinge plate and moveable with the pivoting motion of the first hinge plate relative to the second ring member between a closed position and an open position, in the closed position the two ring members form a substantially continuous, closed loop for allowing loose-leaf pages retained by the rings to be moved along the rings from one ring member to the other, and in the open position the two ring members form a discontinuous, open loop for adding or removing loose-leaf pages from the rings;

a *control structure* supported by the housing and moveable relative to the housing between a first, closed position, and a second, open position, for use in controlling the pivoting motion of the hinge plates, the *control structure* including a *lever* having a head, a hinge pin *pivotally connecting* the *lever* to the housing for movement relative to the housing to cause movement of the *control structure* between said first and second positions, and a travel bar *pivotally connected* to the *lever* at a location closer to the head of the *lever* than the hinge pin connecting the *lever* to the housing,

a torsion spring received on the hinge pin *engageable* with the actuator for urging the *control structure* toward said first position.

Claim 14 of the '685 patent reads (with the disputed terms underlined):

A ring binder mechanism as set forth in claim 13 wherein the *control structure* further comprises an intermediate connector pivotally connecting the travel bar to the lever.

* * *

Resolution of the disputed claims of the '6 patent depends on the construction of the claim terms: (1) "control structure," (2) "arranged to bias," (3) "supported loosely," (4) "pivotally mounted," and (5) "operatively connected." With respect to the '685 patent, resolution depends on the construction of the claim language: (1) "control structure," (2) "pivotally connected/pivotally connecting," (3) "a lever," (4) "operatively connected," (5) "engageable," and (6) "second free end."

II. Discussion

The construction of a patent claim is a matter of law exclusively for the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977 (Fed.Cir.1995). The words of claims, "both asserted and nonasserted," are the first resource for determining the scope of a patent alleged to be infringed. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed.Cir.1996); *Markman*, 52 F.3d at 976. When interpreting a claim, words are given their "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art" relevant to the claim. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed.Cir.2005) (citations omitted).

If the ordinary meaning of claim language may be "readily apparent" to a layperson, then claim construction "involves little more than the application of widely accepted meaning of commonly understood words," and general purpose dictionaries may be consulted. *Phillips*, 415 F.3d at 1314. Claims must be read in light of the specification, and the court also may consider the prosecution history. *Vitronics*, 90 F.3d at 1582 (citations omitted). If these intrinsic sources resolve ambiguity regarding the disputed claim terms, the court may not refer to extrinsic evidence. *Id.* at 1583.

"[A]n inventor may use the specification to intentionally disclaim or disavow the broad scope of a claim," but "this intention must be clear ... and [the court] cannot draw limitations into the claim from a preferred embodiment." *Conoco, Inc. v. Energy v. Env'tl. Int'l, L.C.*, 460 F.3d 1349, 1357-58 (Fed.Cir.2006) (citations omitted).

The Federal Circuit explains disclaimers as follows:

When the specification "makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question."

Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1347 (Fed.Cir.2004), *quoting* *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed.Cir.2001). Additionally, the "doctrine of prosecution disclaimer ... preclud[es] patentees from recapturing through claim construction specific meanings disclaimed during prosecution." *Hakim v. Cannon Avent Group, PLC*, 479 F.3d 1313, 1317-18

(Fed.Cir.2007) (citations omitted).

When a court construes the claims of the patent, "it is as if the construction fixed by the court had been incorporated in the specification." *Markman*, 52 F.3d at 978 (citation omitted).

A. "Control Structure"

The claim term "control structure" appears in both the '6 and '685 patents. As an initial matter, the Court will address defendant's argument that the claim term, as used in both patents, should be construed a means-plus-function limitation under 35 U.S.C. s. 112, para. 6.

1. Applicability of 35 U.S.C. s. 112, paragraph 6

Paragraph 6 of 35 U.S.C. s. 112 states that "[a]n element in a claim for 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 a claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Federal Circuit law states that:

"[A] claim limitation that actually uses the word 'means' invokes a rebuttable presumption that s. 112 para. 6 applies. By contrast, a claim term that does not use 'means' will trigger the rebuttable presumption that s. 112 para. 6 does not apply." The use of the term "means" is "central to the analysis," because the term "means," particularly as used in the phrase "means for," is "part of the classic template for functional claim elements," and has come to be closely associated with means-plus-function claiming.

Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed.Cir.2004) (internal citations omitted). "The presumption that a limitation lacking the term 'means' is not subject to section 112 para. 6 can be overcome if it is demonstrated that 'the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.' " *Lighting World*, 382 F.3d at 1358, *citing* *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed.Cir.2002) (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed.Cir.2000)). Federal Circuit "cases make clear, however, that the presumption flowing from the absence of the term 'means' is a strong one that is not readily overcome." *Lighting World*, 382 F.3d at 1358.

In the instant case, the claim term "control structure" does not contain the word "means." Therefore, the term triggers the rebuttable presumption that s. 112, para. 6, does not apply. The term does not recite a function. Moreover, claim 1 recites sufficiently, definite structure by stating that "a control structure" comprises "a travel bar ... and a spring..." (Doc. # 1-2, '6 patent, col. 9, lines 61-65). Claim 26 also recites sufficiently, definite structure by stating that "the control structure comprising a travel bar" and that "the control structure further comprising an actuating lever ... and a spring..." (Doc. # 1-2, '6 patent, col. 12, lines 17, 21). As such, defendant has not rebutted the presumption that s. 112, para. 6, does not apply. Based on the foregoing, the Court does not construe the claim term "control structure" as a means-plus-function limitation, and will next address the parties' proposed construction of the term in the context of both the '6 and '685 patents. **2. "Control Structure" in the '6 Patent**

Plaintiff requests that the Court construe the claim term "control structure" in the '6 patent as "an arrangement of one or more part(s) and element(s) which govern the movement of hinge plates." (Doc. # 26-2, at 5). In support of its proposed construction, plaintiff primarily relies on dictionary definitions. (Doc. # 26-2, at 5-6; # 51, at 4-5).

Plaintiff contends that the patentee did not act as his own lexicographer because "[a] cursory review of the patent shows that the specification contains no clear, deliberate, and precise definition of the term *control structure*." (Doc. # 31, at 23) (emphasis in original). Plaintiff also argues that "[a] claim term should take on its ordinary and accustomed meaning 'unless the patentee demonstrated an intent to deviate from the ordinary and accustomed meaning of a claim term by redefining the term or by characterizing the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of [the] claim scope.'" (Doc. # 31, at 23) (citing *Teleflex, Inc., v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed.Cir.2002)). Plaintiff also argues that "[d]efendant should not be permitted to read descriptions of the preferred embodiment into the claims as limitations." (Doc. # 31, at 24) (citing *CCS Fitness*, 288 F.3d at 1366). Plaintiff next argues that defendant's proposed construction would not encompass the prior art. (Doc. # 31, at 24-25).

Finally, plaintiff refers the Court to the doctrine of claim differentiation, which states "that '[t]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.'" (Doc. # 31, at 25) (citing *Halliburton Energy Services, Inc. v. M-1 LLC*, 514 F.3d 1244, 1252 n. 3 (Fed.Cir.2008)). Plaintiff asserts that defendant's proposed construction violates the doctrine of claim differentiation by improperly incorporating the limitations of claims 10 and 14 of the '6 patent. Claim 10 states that the "control structure further comprises a connecting link pivotally connecting the travel bar to the hinge plates...." (Doc. # 1-2, '6 patent, col. 10, lines 26-28). Claim 14 states that "the control structure further comprises an actuating lever pivotally mounted on the elongate plate...." (Doc. # 1-2, '6 patent, col. 10, lines 43-44).

Defendant urges the Court to construe the claim term "control structure" in the '6 patent as "a control structure supported by the elongate plate.... The control structure includes a single actuating lever at one end of the mechanism, a travel bar, and two connecting links." FN2 (Doc. # 26-2, at 5). Defendant argues "the patentee chose to be his own lexicographer with respect to the term 'control structure.'" (Doc. # 26-2, at 8). Defendant notes that, in *Johnson WorldWide Associates, Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed.Cir.1999), the Federal Circuit held that "[w]hen a patentee chooses to be his or her own lexicographer, that definition must be applied to the claim." (Doc. # 26-2, at 8). Defendant refers the Court to the '946 patent specification, which states that "[t]he control structure 66 includes a single actuating lever 68 at one end of the mechanism, a travel bar 70, and two connecting links 72 which are supported by the elongate plate 32 and are movable relative to the elongate plate." (Doc. # 1-2, '946 patent, col. 4, lines 5-9). Defendant claims that the patentee, acting as a lexicographer, described the "control structure" as a "unique control structure." *See* (Doc. # 1-2, '946 patent, col. 4, line 1). Defendant also refers the Court to the '946 patent prosecution history, whereby the patentee states that the mechanism includes a "unique structure." (Doc. # 26-4, at 11-12; # 26-5, at 25).

FN2. Because the Court does not construe the claim term "control structure" as a means-plus-function limitation, the Court will only consider defendant's alternative, proposed construction. (Doc. # 26-2, at 5 n. 1).

Defendant also contends that "claim 1 requires including the only disclosed structures that correspond to the function of 'control structure,' being an 'actuating lever' and 'connecting links,' so that claim 1 does not exceed the breadth of the supporting disclosure. Otherwise, the claims of the '946 patent containing the term 'control structure' would be invalid." (Doc. # 26-2, at 9-10) (internal citations omitted). Finally, defendant

argues that its proposed construction of the term "control structure" is "consistent with 35 U.S.C. s. 112, para. 2, which requires that the claims of a patent 'particularly point out and distinctly claim the subject matter which the applicant regards as his invention.' " (Doc. # 26-2, at 10).

The Court rejects plaintiff's argument that defendant's proposed construction of the term "control structure" violates the doctrine of claim differentiation. As stated above, "[u]nder the doctrine of claim differentiation, 'the presence of a dependent claim that adds a particular limitation gives to a presumption that the limitation in question is not present in the independent claim.'" Halliburton, 514 F.3d at 1252 n. 3, *citing* Phillips, 415 F.3d 1303. "That presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim." SunRace Roots Enter. Co., Ltd. v. SRAM Corp. , 336 F.3d 1298, 1303 (Fed.Cir.2003). However, "the presumption ... is 'not a hard and fast rule and will be overcome by a contrary construction dictated by the written description or prosecution history.'" Regents of Univ. of Cal. v. Dakocytomation Cal., Inc., 517 F.3d 1364, 1375 (Fed.Cir.2008) (citing Seachange Int'l, Inc. v. C-COR, Inc., 413 F.3d 1361, 1369 (Fed.Cir.2005)); *see also* ICU Med., Inc. v. Alaris Med. Sys., Inc., No.2008-1077, 2009 WL 635630, at (Fed.Cir. Mar.13, 2009).

In the instant case, defendant suggests that the Court construe "control structure" to include "a single actuating lever at one end of the mechanism, a travel bar, and two connecting links." Independent claim 1 does not include the "a single actuating lever" or "two connecting links." Therefore, defendant's proposed construction improperly includes the limiting language of dependent claims 10 and 14 of the '6 patent to create "presumption that the limitation[s] in question [are] not present in the independent claim [1]." The written description, however, overcomes this presumption because the '946 patent specification states that "[t]he control structure 66 includes a single actuating lever 68 at one end of the mechanism, a travel bar 70, and two connecting links 72 which are supported by the elongate plate 32 and are movable relative to the elongate plate." (Doc. # 1-2, '6 patent, col. 4, lines 6-9). Therefore, the Court finds that term "control structure" in the '946 patent means "control structure including a single lever at one end of the mechanism, a travel bar, and two connecting links."

3. "Control Structure" in the '685 patent

As with the '6 patent, defendant urges the Court to construe the claim term "control structure" in the '685 patent as a means-plus-function limitation. Since the claim term "control structure" in the '685 patent does not contain the word "means," the claim term invokes the rebuttable presumption that s. 112, para. 6, does not apply. Claim 1 recites sufficiently, definite structure by stating that "a control structure" includes "an actuator and a hinge pin ... and a spring..." (Doc. # 51-2, '685 patent, col. 16, lines 35-40). Claim 13 also states that "control structure" includes "a lever having a head, a hinge pin ... and a travel bar..." (Doc. # 1-2, '6 patent, col. 18, lines 27-31). Thus, the Court does not construe the claim term as a means-plus-function limitation, and will next address the parties' proposed construction of the claim term within the context of the '685 patent.

Plaintiff urges the Court to construe the claim term "control structure" as "an arrangement of one or more part(s) and element(s) which govern the movement of hinge plates." (Doc. # 51, at 2). Plaintiff again provides dictionary definitions to support its proposed construction. Plaintiff also contends that the '685 patent specification contains no definition of the term "control structure," and that "[d]efendant should not be permitted to read the [] descriptions of an embodiment into the claims as limitations." (Doc. # 55, at 23). Moreover, plaintiff asserts that "[d]efendant's proposed construction of the term *control structure* does not

comport with the representation that the patentee made to the patent office within the specification of the '685 patent." Id. Plaintiff also argues that defendant's proposed construction includes the term "intermediate connector," which violates the doctrine of claim differentiation. Plaintiff contends that the term improperly incorporates the limiting language from dependent claims 12 and 14 of the '685 patent.

Defendant requests that the Court construes the term "control structure" in the '685 patent as:

[A] control structure supported by the housing and moveable relative to the housing between a first position and a second position for use in controlling the pivoting motion of the hinge plates, the control structure including an actuator and a hinge pin pivotally connecting the actuator to the housing for movement relative to the housing to cause movement of the control structure between said first and second positions; and ... the control structure further comprising a travel bar operatively connected to the lever such that pivoting movement of the lever causes movement of the travel bar in translation relative to the housing from the position in which the control structure locks the hinge plates in the closed position to the second position in which the hinge plates are free to pivot to the open position. The control structure includes the actuating lever, an intermediate connector, an elongate travel bar, and either:

(a) at least one connecting link; or

(b) an opening arm, a closing arm and three blocking elements; or

(c) and opening arm and three angled blocking elements.

(Doc. # 51, at 2-3).FN3 Defendant claims that the structures outlined in subsections (a) through (c) are "three alternative sets of structure for performing the[] functions" of the control structure. (Doc. # 51, at 7). Defendant asserts that the patentee, acting as his own lexicographer, explicitly described the three, separate descriptions of the term "control structure."

FN3. Because the Court does not construe the claim term "control structure" as a means-plus-function limitation, the Court will only consider defendant's alternative, proposed construction. (Doc. # 51, at 3 n. 2).

Defendant's proposed construction partially violates the doctrine of claim differentiation. Independent claim 1 of the '685 patent does not mention "intermediate connector," but dependent claims 12 and 14 includes such language. Incorporation of the phrase into the independent claim 1 invokes the presumption that the limiting language "is not present in the independent claim." *Halliburton*, 514 F.3d at 1252 n. 3. The '685 patent specification states that "[t]he control structure 37 includes the actuating lever 15, an *intermediate connector* 39, an elongate travel bar 41, and three connecting links 43..." (Doc. # 51-2, '685 patent, col. 5, lines 20-22). However, in the Office Action dated December 13, 2007, the patent examiner referenced U.S. Patent No. 2,004,570 (the '570 patent) and rejected claim 1 of the ' 685 patent because it described "control structure" as "the control structure including an actuator and a hinge pin" as was disclosed in the ' 570 patent. (Doc. # 55-7, at 1, 6). Had the patentee understood "control structure" to include the phrase "intermediate connector," then the patent examiner would not have referenced the '570 patent, because the '570 patent description of "control structure" did not contain the term "an intermediate connector." Therefore, despite the written description, the ' 685 patent prosecution history suggests that "control structure" does not contain the phrase "intermediate connector." As such, the Court believes that defendant has not overcome the heavy burden invoked by the doctrine of claim differentiation, and will not read the

limiting language into the term "control structure" in the '685 patent.

The Court also rejects defendant's attempt to define "control structure" in light of the three embodiments disclosed in the '685 patent specification. Federal Circuit law states that:

Although claims must be read in light of the specification of which they are a part, it is improper to read limitations from the written description into a claim. Moreover, "although the specification may well indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than such embodiments."

Tate Access Floors, Inc. v. Maxcess Technologies, Inc., 222 F.3d 958, 966 (Fed.Cir.2000). In the instant case, the first embodiment of the '685 patent specification states that "[t]he control structure 37 includes the actuating lever 15, an intermediate connector 39, an elongate travel bar 41, and three connecting links 43...." (Doc. # 51-2, '685 patent, col. 5, lines 20-22). The fourth embodiment describes a "[c]ontrol structure 337 [that] include[s] three blocking elements, ... a closing arm 330 and an opening arm 332." (Doc. # 51-2, '685 patent, col. 10, lines 49-55). The sixth embodiment refers to the mechanism disclosed in the fourth embodiment. (Doc. # 51-2, '685 patent, col. 13, lines 33-34). As such, the sixth embodiment modifies the actuator to include "a flat opening arm" and "angled surfaces of the blocking elements [that] face the lever." (Doc. # 51-2, '685 patent, col. 13, line 51, col. 14, lines 19-20). The language in claim 1, however, only refers to "control structure" as "the control structure including an actuator and hinge pin ... and a spring ... and ... further comprising a travel bar...." (Doc. # 51-2, '685 patent, col. 16, lines 35-36, 40, 44-45). Thus, the claim language is broader than the preferred embodiments. As such, the Court will not read the limiting language disclosed in the embodiments into claim 1 of the '685 patent. Therefore, the Court finds that "control structure" in the '685 patent means "the control structure including a hinge pin, a spring, and a travel bar."

B. "Operatively Connected"

The claim term "operatively connected" appears in both the '6 and '685 patents. Before discussing the parties' proposed construction of the term, the Court will address defendant's contention that the term is a means-plus-function limitation under 35 U.S.C. s. 112, para. 6. As discussed above, a presumption arises that s. 112, para. 6 does not apply when the disputed claim language omits the word "means." *See Lighting World*, 382 F.3d at 1358. However, "[t]he presumption ... can be overcome if it is demonstrated that 'the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.' " *Id.*

The claim term "operatively connected" standing alone does not invoke the application of s. 112, para. 6. In *Mas-Hamilton Group v. LaGard, Inc.*, the parties disagreed as to whether the claim term "movable" was a means-plus-function limitation. 156 F.3d 1206, 1215 (Fed.Cir.1998). The Federal Circuit acknowledged "that the subsequent functional language [to the term "movable"] require[d] two functions: (1) 'for holding the lever out of the engagement with the surface before entry of combination,' (2) 'for releasing the lever after entry of the combination'...." 156 F.3d at 1215. The *Mas-Hamilton* court even noted that the subsequent functional language was "precisely what was intended by the statutory phrase in section 112, para. 6...." *Id.* The Federal Circuit, however, held "that the claim term 'movable' *alone* [did] not cause the claim to be read in a means-plus-function format ." 156 F.3d 1206, 1215 (emphasis in original).

In the instant case, the parties differ as to whether the claim term "operatively connected" is a means-plus-

function limitation.FN4 Similar to subsequent, functional language to the claim term "movable" in *Mas-Hamilton*, here the subsequent functional language to the term "operatively connected" recites: (1) "for moving the hinge plates between the closed and open positions," (Doc. # 1-2, ' 946 patent, col. 9, lines 64-65); (2) "such that pivoting motion of the lever produces movement of the travel bar generally lengthwise of the elongate plate," (Doc. # 1-2, ' 946 patent, col. 12, lines 25-27); and (3) "such that pivoting movement of the lever causes movement of the travel bar in translation relative to the housing from the first position in which the control structure locks the hinge plates...." (Doc. # 51-2, ' 685 patent, col. 16, lines 45-51). However, like the term "movable" in *Mas-Hamilton Group*, the term "operatively connected" standing alone does not invoke s. 112, para. 6. Therefore, the Court does not construe the term "operatively connected" as a means-plus-function limitation.

FN4. Defendant repeatedly identifies the entire, three phrases that contain the term "operatively connected" as the disputed claim language that requires construction by the Court. *See* (Doc. # 26-2, at 12-16; # 29, at 24 n. 6; # 51, at 28; # 79, at 16-18). However, in the "List of Disputed and Non-disputed Claim Terms (the List)," the parties inform the Court that "operatively connected" is one of the disputed terms that requires construction, not the phrases that contain the term. (Doc. # 78). Therefore, the Court will only construe the term "operatively connected" as noted in the List within the context of the phrases.

The parties agree that the claim language "operatively connected" requires construction within the context of the three phrases: (1) "a travel bar operatively connected to the hinge plates" in claim 1 of the '6 patent; (2) "the lever being operatively connected to the travel bar" in claim 26 of the '6 patent; and (3) "a travel bar operatively connected to the lever" in claim 1 of the '685 patent. (Doc. # 78). The Court will discuss each in turn.

1. "a travel bar operatively connected to the hinge plates" in claim 1 of the '6 patent

Plaintiff proposes that, in the context of the phrase "a travel bar operatively connected to the hinge plates," the term "operatively connected" means "mechanically associated so as to be capable of applying mechanical force to." (Doc. # 26-2, at 11). Plaintiff argues that the term should be given its common and ordinary meaning and relies on dictionary definitions to support its proposed construction. (Doc. # 26-2, at 12).

Plaintiff refers the Court to *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed.Cir.2004), whereby the Federal Circuit analyzed the construction of the term "operatively connected" in the context of a water bottle filter assembly patent. After noting that "[n]either party assert[ed] that the term 'operatively connected' [was] a technical term having a special meaning in the art of water filtration," the Federal Circuit stated that the term was "a general descriptive term frequently used in patent drafting to reflect a functional relationship between claimed components." *Id.* at 1118. The Federal Circuit held that, "[g]enerally speaking, ... [operatively connected] means the claimed components must be connected in a way to perform a designated function." *Innova/Pure Water*, 381 F.3d at 1118. The Federal Circuit then stated that "'operatively connected' takes full breadth of its ordinary meaning, *i.e.*, 'said tube [is] operatively connected to said cap' when the tube and cap are arranged in a manner capable of performing the function of filtering." *Id.* Plaintiff also notes that the District of Oregon construed the term "operatively connected" in the phrase "a spring operatively connected between the handle and the blade to assist in the opening of the blade" to mean "the spring, handle, and blade are arranged such that the spring operates to assist in opening the blade." (Doc. # 31, at 28) (citing *Kai U.S.A., Ltd. v. Buck Knives, Inc.*, No.

Defendant requests that, if the Court does not construe the term as a means-plus-function limitation, the Court adopt its alternative, proposed construction:

[C]omprising a travel bar operatively connected to the hinge plates.... A travel bar operatively connected to the hinge plates means the hinge plates are connected to the travel bar by placing at least one pivotally movable connecting link between the hinge plates and the travel bar such that the motion of the bar produces pivotal motion of the hinge plates.

(Doc. # 26-2, at 11-12, 14-15). Defendant refers the Court to the "6 patent specification, which recites: (1) "[a]n intermediate connector 76 is pivotally connected to the lever 68 and to the travel bar 70 for pivoting motion relative to both the lever and the travel bar," and (2)"[t]he hinge plates 56 are operatively connected with the travel bar 70 by placing at least one pivotally movable connecting link 72 between the hinge plates and the bar such that motion of the bar produces pivotal motion of the hinge plates." (Doc. # 1-2, "6 patent, col. 4, lines 30-32, col. 7, lines 23-27). Defendant maintains that the Court should adopt its proposed construction, which incorporates the specification's definition of the phrase "a travel bar operatively connected to the hinge plates." (Doc. # 26-2, at 15). Based on the specification, defendant contends that "connecting links" are necessary structures. (Doc. # 79, at 17). Defendant asserts that its proposed construction is "consistent with the maxim that claims should be construed to maintain their validity and the Federal Circuit's interpretation of the written description and enablement requirements of 35 U.S.C. s. 112, para. 1." (Doc. # 26-2, at 15). Finally, defendant argues that "[p]laintiff's reliance on *Innova* is misplaced." (Doc. # 79, at 15).

The claim language, specification, or prosecution do not make clear the definition of the term "operatively connected," and the Court adopts the Federal Circuit's ordinary and customary meaning of the disputed term. As such, the Court finds that the ordinary meaning of the disputed term is "arranged in a manner capable of performing a designated function." *See Innova/Pure Water*, 381 F.3d at 1118, 1120. The stated function in claim 1 of the "6 patent is "for moving the hinge plates between the closed and open positions...." (Doc. # 1-2, "6 patent, col. 9, lines 63-64). The specification states that "[t]he hinge plates 56 are operatively connected with the travel bar 70 by placing at least one pivotally movable connecting link 72 *between the hinge plates and the bar such that motion of the bar produces pivotal motion of the hinge plates.*" (Doc. # 1-2, "6 patent, col. 7, lines 23-27) (emphasis added). Therefore, a the travel bar and hinge plates, without at least one connecting link, could not perform the function recited in claim 1 of the "6 patent. "[I]t is 'entirely proper to consider the functions of the invention in seeking to determine the meaning of particular claim language.' " *ICU Med.*, No.2008-1077, 2009 WL 635630, at *4, *citing Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed.Cir.2005).

The Court finds that the reference to the travel bar and hinge plates in claim 1 of the "6 patent contemplates the inclusion of at least one connecting link. The intended function described in the specification supports this conclusion. As such, the Court finds that "operatively connected" in the context of the phrase "a travel bar operatively connected to the hinge plates" of the "6 patent means "the travel bar and hinge plates are arranged in a manner such that at least one connecting link operates to assist in moving the hinge plates between the closed and opened positions."

2. "the lever being operatively connected to the travel bar" in claim 26 of the "6 patent

Federal Circuit law holds that, "[u]nless otherwise compelled, when different claims of a patent use the same language, we give that language the same effect in each claim." *Innova/Pure Water*, 381 F.3d at 1119. In the instant case, the term "operatively connected" appears in both claims 1 and 26 of the '6 patent, and the Court finds that "'[o]peratively connected' carries the same meaning in both claims." *Id.* Claim 26 recites that "the lever [is] being operatively connected to the travel bar *such that pivoting motion of the lever produces movement of the travel bar generally lengthwise of the elongate plate ...*" (Doc. # 1-2, '6 patent, col. 12, lines 23-26). The specification states:

The lever 68 is operatively connected to the travel bar 70 such that application of force to the lever produces movement of the travel bar generally lengthwise of the elongate plate 32.... An intermediate connector 76 is pivotally connected to the lever 68 and to the travel bar 70 for pivoting motion relative to both the lever and travel bar. Force is transmitted from the lever 68 to the travel bar 70 through the intermediate connector 76.

(Doc. # 1-2, '6 patent, col. 4, lines 20-24, 30-34). A lever and travel bar, without the intermediate connector, could not perform the function recited in both claim 26 and the specification. As stated above, "it is 'entirely proper to consider the functions of the invention in seeking to determine the meaning of particular claim language.'" *ICU Med.*, No.2008-1077, 2009 WL 635630, at *4. The Court finds that the reference to the lever and travel bar in claim 26 contemplates the inclusion of an intermediate connector. The intended function described in the specification supports this conclusion. Accordingly, the Court finds that "operatively connected" in claim 26 of the '6 patent means "the lever and travel bar are arranged such that the intermediate connector operates to assist the pivoting motion of the lever to produce movement of the travel bar generally lengthwise of the elongate plate."

3. "a travel bar operatively connected to the lever" in claim 1 of the '685 patent

Defendant contends that the term "operatively connected" in the '685 patent is a means-plus-function limitation. However, as discussed above, the Court does not construe the term "operatively connected" as a means-plus-function limitation, and will only consider defendant's alternative, proposed construction.

Plaintiff argues that the term "operatively connected" in the '685 patent means "mechanically associated so as to be capable of applying mechanical force to." (Doc. # 51, at 27). Plaintiff relies on dictionary definitions and *Innova/Pure Water* and *Kai* to support its proposed construction. Defendant urges the Court to adopt its alternative, proposed construction:

[A] travel bar operatively connected to the lever such that pivoting movement of the lever causes movement of the travel bar in translation relative to the housing from the first position in which the control structure locks the hinge plates in the closed position to the second position in which the hinge plates are free to pivot to the open position. A travel bar operatively connected to the lever means the travel bar is connected to the lever by an intermediate connector.

(Doc. # 51, at 28). Defendant also provides the same arguments that it asserted with respect to the construction of the term in the '6 patent claims. Additionally, defendant contends that the construction of the term within the context of claim 1 of the '685 patent requires the inclusion of "an intermediate connector" because the structure "is the only enabling disclosure in the '685 patent specification." (Doc. # 51, at 31).

The claim language, specification, or prosecution history do not make clear the meaning of "operatively

connected" in the '685 patent, and the Court adopts the Federal Circuit's ordinary and customary meaning of the disputed term. As such, the Court finds that the ordinary meaning of the disputed term is "arranged in a manner capable of performing a designated function." *See Innova/Pure Water*, 381 F.3d at 1118, 1120. The '685 patent specification states that:

As also seen, the travel bar 41 is disposed behind the plateau 17 of the housing 11 and is connected to the lever 15 by the intermediate connector 39.... Force is therefore transmitted from the lever 15, around the post 21a, and to the travel bar 41 while keeping direction of the force along a centerline of the connector 39. Thus, the connector is able to transmit force from the lever 15 to the travel bar 41 such that application of force to the lever produces the translational movement of the travel bar.

(Doc. # 51-2, '685 patent, col. 6, lines 36-39, 54-60). The travel bar and lever, without the intermediate connector, could not perform the function recited in both claim 1 and the specification. As stated above, "it is 'entirely proper to consider the functions of the invention in seeking to determine the meaning of particular claim language.' " *ICU Med.*, No.2008-1077, 2009 WL 635630, at *4. Therefore, the Court finds that the reference to the travel bar and lever in claim 1 in the '685 patent contemplates the inclusion of an intermediate connector. The intended function described in the specification supports this conclusion. Accordingly, the Court finds that "operatively connected" in claim 1 of the '685 patent means "the travel bar and the lever are arranged such that the intermediate connector operates to assist the pivoting movement of the lever that causes movement of the travel bar in translation relative to the housing from the first position in which the control structure locks the hinge plates in the closed position to the second position in which the hinge plates are free to pivot to the open position."

C. Additional Disputed Terms in the "6 Patent

The parties have agreed to construe the claim term "mounted on" as "attached or fixed securely to," and the Court adopts the parties' proposed construction. (Doc. # 78, at 1). The Court will now address the remaining disputed claim terms that only appear in the "6 patent.

1. "Arranged to Bias"

Plaintiff argues that the claim language "arranged to bias" in claim 1 of the "6 patent means "placed in a certain location or in such a way as to cause a continuous tendency or preference toward a particular position." (Doc. # 26-2, at 18). Plaintiff relies on dictionary definitions to support its proposed construction. (Doc. # 26-2, at 19). Defendant argues that the term "arranged to bias" means "acts directly on." (Doc. # 26-2, at 20). Defendant refers the Court to the "6 patent prosecution history, whereby the patentee repeatedly states that "the coil spring 134 *acts directly* on the travel bar to move it so that the hinge plates close the rings." (Doc. # 26-4, at 12, 59; # 26-5, at 26) (emphasis added). Defendant further relies on Figures 15 and 18 in the "6 patent specification to support its construction. Although Figure 15 does not clearly illustrate the interaction between the spring and the travel bar, Figure 18 depicts the direct connection between the two components. As such, the Court believes that the intrinsic evidence supports defendant's alternative, proposed construction. Therefore, the Court finds that "arranged to bias" in the "6 patent means "acts directly on."

2. "Supported Loosely"

Plaintiff contends that the claim term "supported loosely" in claim 11 of the "6 patent means "having just enough force applied for holding in position and to keep from falling, but not substantially more." (Doc. #

26-2, at 26). Plaintiff relies on dictionary definitions to support its proposed construction.

In opposition, defendant asserts that the claim language means "receive substantially no tension." (Doc. # 26-2, at 27). Defendant refers the Court to the "6 patent specification, which states that "the hinge plates 56 receive substantially no tension from the elongate plate 32...." (Doc. # 1-2, '946 patent, col. 6, lines 35-37). Additionally, defendant refers the Court to the prosecution history, whereby the patentee repeatedly states that "[n]o substantial spring force is needed from the cover plate 32 to drive the hinge plates 172 to a fully open or closed position, or to hold them closed." (Doc. # 26-4, at 12, 59; # 26-5, at 26).

As stated above, claims "must be read in view of the specification, of which they are a part." Vitronics, 90 F.3d at 1582 (citations omitted). Therefore, the "6 patent specification and prosecution history support defendant's proposed construction. As such, the Court finds that "supported loosely" in the "6 patent means "receive substantially no tension."

3. "Pivotally Mounted"

The claim term "pivotally mounted" appears in claim 26 of the "6 patent. While the parties agree that the term means "attached and capable of rotating or turning about the point of attachment." (Doc. # 78). The parties differ as to whether the term "requires the actuating lever to be pivotally mounted 'directly' on the elongate plate." (Doc. # 78, at 1 n. 1). Plaintiff argues that the claim language permits both a direct and indirect connection. (Doc. # 80, at 14-15). However, defendant contends that the attachment requires a direct connection between the components. (Doc. # 79, at 18).

The claim language, specification, and prosecution history do not make clear whether the disputed term requires a direction connection. Accordingly, the Court will consult extrinsic evidence to "shed useful light on the relevant art [.]" Phillips, 415 F.3d 1303, 1318. At the *Markman* hearing, defendant's expert witness, Paul Whaley, testified that he (1) had thirty years of experience in the ring metal industry and (2) held 29 U.S. patents on ring metal designs. (Doc. # 72, at 76, 79). Mr. Whaley also testified that, in his U.S. Patent No. 6,966,108 (the '108 patent), the specification recites: "[a] ring assembly 18 is pivotally mounted to the notebook by the hinge panel 20." (Doc. # 72, at 128-29). Mr. Whaley admitted that, in the '108 patent, the ring assembly is pivotally mounted to the notebook and that "it is an indirect connection by way of the hinge panel." (Doc. # 72, at 130). The "6 patent specification statement nearly mirrors the quoted statement from the '108 patent, by stating that "[t]he lever is pivotally mounted by a hinge pin 74 to one end 42 of the elongate plate 32 in a position readily accessible for grasping and moving the lever." (Doc. # 1-2, "6 patent, col. 4, lines 14-17). Moreover, the '108 and "6 patents are similar in that they both cover the design of ring metals. Therefore, Mr. Whaley's testimony supports plaintiff's contention that the term "pivotally mounted" encompasses both a direct and indirect connection. As such, the Court finds that the claim term "pivotally mounted" in the "6 patent means "attached and capable of rotating or turning about the point of direct or indirect attachment."

D. Additional Disputed Terms in the '685 Patent

Finally, the Court will address the remaining disputed claim terms that only appear in the '685 patent.

1. "Pivotally Connected" and "Pivotally Connecting"

The parties agree that the claim terms "pivotally connected" and "pivotally connecting" mean "attached (attaching) and capable of rotating or turning about the point of attachment." (Doc. # 78, at 2). They differ

as to "whether the terms ... as used in claims 1, 11 and 13 of the '685 patent, require a direct attachment." (Doc. # 78, at 2 n. 2). Plaintiff asserts that the parties' stipulated construction "encompasses [both] direct and indirect connections." (Doc. # 80, at 15). Plaintiff relies on the testimony of defendant's expert witness, Mr. Whaley, at the *Markman* hearing to support its proposed construction. In that testimony, Mr. Whaley admitted that the term "pivotally connected" as used in his patent, U.S. Patent No. 6,966,108, included both direct and indirect connections. (Doc. # 72, at 128, 131). Defendant, however, argues that "[t]he parties' stipulated construction requires [only] a direct connection between the components that are connected." (Doc. # 79, at 18). Defendant refers the Court to the '685 patent prosecution history, whereby the patent examiner interpreted the term "connecting" to mean "touching engagements." (Doc. # 79, at 18; # 51-6, at 4).

In the '685 patent, claim 1 refers to "the control structure including an actuator and a hinge pin *pivotally connecting* the actuator to the housing for movement relative to the housing to cause movement of the control structure between said first and second positions...." (Doc. # 51-2, '685 patent, col. 16, lines 35-39) (emphasis added). Claim 11 states that "the lever is *pivotally connected* to the travel bar." (Doc. # 51-2, '685 patent, col. 18, line 2) (emphasis added). Claim 13 describes "a hinge pin *pivotally connecting* the lever to the housing for movement relative to the housing to cause movement of the control structure between said first and second positions...." (Doc. # 51-2, '685 patent, col. 18, lines 27-30) (emphasis added).

As stated above, claims "must be read in view of the specification, of which they are a part." *Vitronics*, 90 F.3d at 1582 (citations omitted). The '685 patent specification states that "[t]he wider end of the intermediate connector 39 is pivotally connected to the lever 15 by hinge pin 95 through holes 96 of the lever 15 and holes 97 of the connector 39...." (Doc. # 51-2, '685 patent, col. 6, lines 39-41). The specification states that the lever includes an enlarged head and a narrow body. (Doc. # 51-2, '685 patent, col. 5, lines 28-30). Figure 4 shows that the lever, which includes items 53 and 55 that appear in the figure, is directly connected to intermediate connector, item 39a. (Doc. # 51-2, '685 patent, Fig. 4). However, the term "pivotally connected" in claim 11 does not require a direct connection. As stated above, claim 11 refers to a lever that is pivotally connected to the travel bar. Figure 4 shows that the lever, which includes items 15, 53, and 55, is directly connected to the intermediate connector, item 39, and that the intermediate connector is directly connected to the travel bar, item 41. Therefore, the lever is indirectly connected to the travel bar. As such, the Court finds that the intrinsic evidence supports the conclusion that the claims do not restrict the attachment to a direct connection. Thus, the Court finds that "pivotally connected" and "pivotally connecting" in the '685 patent mean "attached (attaching) and capable of rotating or turning about the point of direct or indirect attachment."

2. "A Lever"

Plaintiff argues that the claim language "a lever" in claim 1 of the '685 patent means "[a] rigid member that pivots about one point and that is used to move an object at a second point by force applied at a third." (Doc. # 51, at 22). Plaintiff refers the Court to the specification to show that the patentee did not intend to depart from the common and ordinary meaning of the term. As such, plaintiff relies on dictionary definitions to support its proposed construction. In opposition, defendant argues that the term "a lever" means "a lever having a head." (Doc. # 51, at 22). Defendant asserts that the '685 patent specification states that "[t]he actuating lever ... includes an enlarged head...." (Doc. # 51-2, '685 patent, col. 5, lines 27-28). Defendant also notes that every figure in the '685 patent specification, which includes a lever, depicts the lever as having a head. (Doc. # 51, at 23).

The claim language provides no definition of the term "a lever." The first embodiment includes the

specification statement that defendant highlights. Additionally, as defendant noted, nearly every figure that includes a lever illustrates a lever as having a head. (Doc. # 51-2, at 6-8, 10-13, 15-23, 32, 34-37).

"Occasionally specification explanations may lead one of ordinary skill to interpret a claim term more narrowly than its plain meaning suggests. Nonetheless, [the Federal Circuit] will not countenance the importation of claim limitations from a few specification statements or figures into the claims." *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366 (Fed.Cir.2008), *citing* *Phillips*, 415 F.3d 1303, 1323. In the instant case, the patentee explicitly states that "[t]he embodiments described [were] given by way of example and in no way limit the scope of the invention." (Doc. # 51-2, '685 patent, col. 15, lines 54-55). The patentee also explains that "[t]he term[] ... 'including' [was] intended to be inclusive and mean that there may be additional elements other than the listed elements." (Doc. # 51-2, '685 patent, col. 16, lines 2-4). Therefore, the specification demonstrates that the preferred embodiments and figures do not narrow the scope of the term "a lever" to include a lever having a head.

Because the claim language, specification, and prosecution history do not make clear the meaning of "a lever," the Court will consult a dictionary to determine the term's ordinary and customary meaning. "Lever" is defined as "a bar or rigid body used to lift weight and operating on the principle that force or power applied at one point to lift a resistive weight or force at a second point tends to rotate the bar in opposite directions about a fixed axis or fulcrum." *RANDOM HOUSE COLLEGE DICTIONARY* (1980). The dictionary definition supports plaintiff's proposed construction. Accordingly, the Court adopts plaintiff's construction, and construes "a lever" in the '685 patent to mean "a rigid member that pivots about one point and that is used to move an object at a second point by a force applied at a third."

3. "Engageable"

Plaintiff argues the term "engageable" in claim 1 of the '685 patent means "[c]apable of working in contact to ensure coordinated action." (Doc. # 51, at 25). Plaintiff contends that the patentee's use of the term does not depart from the term's common and ordinary meaning. Plaintiff, therefore, relies on dictionary definitions to support its proposed construction.

Defendant argues that the term means "interlocking." (Doc. # 51, at 25). Defendant contends that the intrinsic evidence supports its proposed construction. Defendant refers the Court to the '685 patent specification, which states that "[t]he first free end 49 of the torsion spring 45 (FIG.8B) engages the lever 15 while second free end 51 engages the housing 11 and intermediate connector 39. Thus, the torsion spring 45 is oriented to resist movement of the control structure 37 in a direction tending to open the ring members 35." (Doc. # 51-2, '685 patent, col. 7, lines 5-10). Defendant relies on Figures 9B and 11B in the specification to argue that "the spring is 'interlocking' with both the lever and the housing." (Doc. # 51, at 26). Defendant also asserts that its proposed construction is consistent with the dictionary definition of the term. Finally, defendant contends that its proposed construction will maintain the validity of claim 1 under 35 U.S.C. s. 112, para. 2.

The claim language, specification, and prosecution history do not make clear the definition of "engageable." Accordingly, the Court will consult a dictionary to determine the ordinary and common meaning of the claim term. The dictionary provides no definition for the word "engageable." However, the mechanical definition for "engage" is "to cause (gears or the like) to become interlocked; interlock with." *RANDOM HOUSE DICTIONARY* (1980). "Interlock" is defined as "to fit into each other, as parts of machinery, so that all action is synchronized." *Id.* The dictionary definition supports plaintiff's proposed construction. Therefore, the Court finds that the term "engageable" in the '685 patent means "capable of working contact

to ensure coordinated action."

4. "Second Free End"

Plaintiff argues that the term "second free end" in claim 3 of the '685 patent means "[t]he latter of two relatively unrestricted extremities." (Doc. # 51, at 33). Plaintiff relies on dictionary definitions to support its proposed construction. (Doc. # 51, at 33-34). Plaintiff admits that "the patentee's description of *one embodiment* states that 'the second free end 51 engages the housing 11 and intermediate connector 39[.]' " (Doc. # 55, at 37) (emphasis in original). However, plaintiff contends that the other embodiment that defendant relies on states "the second free end 148 engages the housing 111 under plateau 117." (Doc. # 55, at 37; # 51-2, '685 patent, col. 9, lines 50-51). As such, plaintiff asserts that "[t]he mere fact that the specification discloses an embodiment in which the *second free end* of a spring engages a housing and an intermediate connector does not mean that the *second free end* of the spring must engage a housing and intermediate connector in every possible embodiment of the invention ." (Doc. # 55, at 37-38) (emphasis in original).

Defendant proposes that the Court construe "second free end" as "a second free end engageable with the housing and intermediary connector." (Doc. # 51, at 33). Defendant relies on the two embodiments mentioned above. Defendant contends that the Court should adopt its proposed construction "to clarify the term and the scope of claim 1." (Doc. # 51, at 35). Finally, defendant asserts that, because "[t]he '685 patent *only* discloses a 'second free end' that 'engages the housing and the intermediate connector[.]' ... it is therefore proper to include this limitation in claim 3." (Doc. # 51, at 35) (internal citation omitted) (emphasis added).

The claim language, specification, and prosecution history do not make clear the definition of "second free end." Accordingly, the Court will consult a dictionary to determine the ordinary and customary meaning of "second free end." The word "second" is defined as "being one of two parts," "free" is defined as "not joined to or in contact with something else, and "end" is defined as "the extremity of anything longer than it is wide or broad...." RANDOM HOUSE COLLEGE DICTIONARY (1980). The extrinsic evidence supports plaintiff's proposed construction. Therefore, the Court finds that "second free end" in the '685 patent means "the latter of two relatively unrestricted extremities ."

III. Conclusion

The Court construes the claim terms as set forth above and as summarized as follows:

- (1) In the '6 patent, the phrase "control structure" means "control structure including a single lever at one end of the mechanism, a travel bar, and two connecting links."
- (2) In the '685 patent, the phrase "control structure" means "the control structure including a hinge pin, a spring, and a travel bar."
- (3) In claim 1 of the '6 patent, the phrase "operatively connected" means "the travel bar and hinge plates are arranged in a manner such that at least one connecting link operates to assist in moving the hinge plates between the closed and opened positions."
- (4) In claim 26 of the '6 patent, the phrase "operatively connected" means "the lever and travel bar are arranged such that the intermediate connector operates to assist the pivoting motion of the lever to produce

movement of the travel bar generally lengthwise of the elongate plate."

(5) In claim 26 of the '685 patent, the phrase "operatively connected" means "the travel bar and the lever are arranged such that the intermediate connector operates to assist the pivoting movement of the lever that causes movement of the travel bar in translation relative to the housing from the first position in which the control structure locks the hinge plates in the closed position to the second position in which the hinge plates are free to pivot to the open position."

(6) In the '6 patent:

(a) the phrase "mounted on" means "attached or fixed securely to."

(b) the phrase "arranged to bias" means "acts directly on."

(c) the phrase "supported loosely" means "receive substantially no tension."

(d) the phrase "pivotally mounted" means "attached and capable of rotating or turning about the point of direct or indirect attachment."

(7) In the '685 patent:

(a) the phrases "pivotally connected" and "pivotally connecting" mean "attached (attaching) and capable of rotating or turning about the point of direct or indirect attachment."

(b) the phrase "a lever" means "a rigid member that pivots about one point and that is used to move an object at a second point by a force applied at a third."

(c) the phrase "engageable" means "capable of working contact to ensure coordinated action."

(d) the phrase "second free end" means "the latter of two relatively unrestricted extremities."

Accordingly,

IT IS HEREBY ORDERED that the parties' joint motions for claim construction by the Court [Doc.26, 27, 50] are **granted** as set forth above.

E.D.Mo.,2009.

World Wide Stationery Mfg. Co., Ltd. v. U.S. Ring Binder, L.P.

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