



UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA

D & D GROUP PTY LTD, et al,
Plaintiffs,
vs.
NATIONWIDE INDUSTRIES, INC,
Defendant.

CASE NO. 08cv236-MMA(POR)

**ORDER CONSTRUING DISPUTED
CLAIMS OF UNITED STATES
PATENT NUMBER 5,584,100**

Pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), the Court conducted a hearing on March 18, 2009 regarding the construction of the disputed claims in Plaintiffs D & D Group Pty Ltd, et al.'s ("D&D") United States Patent Number 5,584,100. Attorney Gary M. Anderson appeared on behalf of Plaintiffs, and attorneys James Sullivan McNeill and George R. McGuire appeared on behalf of Defendant Nationwide Industries, Inc. ("Nationwide"). At the outset of the hearing, the Court provided the parties with its tentative construction of each disputed claim term or phrase.¹ After a thorough review of the parties' briefs and supporting documents, having considered the oral arguments of counsel, the Court issues the following order construing the disputed claims of the patent at issue in this case.

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¹ The Court's Tentative Claim Construction Worksheet is attached to this Order as the Court's Exhibit "A."

BACKGROUND

There is one patent at issue in this case: United States Patent Number 5,584,100 (“the ‘100 Patent”) (also referred to by the parties as the “Doyle Patent”). Generally, the ‘100 Patent describes a self closing hinge. The device consists of (1) a first hinge member, (2) a second hinge member, (3) a cylindrical housing, (4) a torsion spring, (5) flange members, and (6) a coupling element. The patented device is “a pivoting spring loaded hinge that can be used to close gates, doors, and the like,” and is sold in the United States by D&D Technologies (USA), Inc. under the trademark TRU CLOSE®. (See *Complaint*, Doc. No. 1 ¶ 8.) On February 6, 2008, D&D filed the present Complaint against Nationwide alleging infringement of the ‘100 Patent. D&D contends that Nationwide has infringed the ‘100 patent by manufacturing and selling its own hinge device under the trademark CORNERSTONE®, hinge model numbers CH 300F, CH 300N, CH 300H, C-2 and CH 100-H. (*Complaint*, Ex. 3; *Defendant’s OCC Brief*, 1, fn.1.) Nationwide filed an Answer and Counterclaim on April 24, 2008 [Doc. No. 6]. The Counterclaim seeks a declaratory judgment of non-infringement and invalidity of the ‘100 Patent. (See *Counterclaim* ¶¶ 31 -38.) Nationwide also counterclaims for unfair competition, false advertising, and trade libel. (*Id.* ¶¶ 39-68.)

DISCUSSION

Claim construction is an issue of law, *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996), and it begins “with the words of the claim.” *Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Generally, those words are “given their ordinary and customary meaning.” *Id.* (citing *Vitronics*, 90 F.3d at 1582). This “‘is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.’” *Id.* (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005)). “The person of ordinary skill in the art views the claim term in the light of the entire intrinsic record.” *Id.* Accordingly, the Court must read the claims “‘in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). In addition, “‘the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it

1 would otherwise be.” *Id.* (quoting *Phillips*, 415 F.3d at 1318).

2 There are four claims at issue in this case, Claims 1-4 of the ‘100 Patent. Claims 5 and 6 are
3 not in dispute. The majority of terms and phrases contested are found in independent Claim 1. The
4 Court addresses the disputed claim terms and phrases below.

5 **A. Claim 1**

6 Claim 1 of the ‘100 patent provides:

7 “A hinge, comprising a first hinge element including a hollow cylindrical housing
8 having longitudinal central axis and a hinge body portion having means for securing
9 said first hinge element to a structure, a second hinge element including first and
10 second spaced apart end pieces receiving the cylindrical housing of the first hinge
11 element there between, and a hinge body portion arranged to be secured to a second
12 structure, biasing means being located within the cylindrical housing and coupling the
13 first hinge element to a coupling element, said coupling element having a first portion
14 received within one end of the cylindrical housing and having a cylindrical bearing
15 surface bearing against an inner wall of the cylindrical housing, whereby the biasing
16 means is arranged to restrain relative rotation of the coupling element with respect to
17 the first hinge element about said central axis, the coupling element further including
18 a second portion having a first engagement surface means being received within an
19 aperture provided in the first end piece of the second hinge element, said aperture
20 having a correspondingly shaped mating engagement surface means for preventing
21 relative between said second hinge element and said coupling element, the biasing
22 means also resiliently biasing the coupling element in a direction axially outwardly of
23 the cylindrical housing along said central axis urging the second portion to engage with
24 the aperture of the first end piece so that when the second hinge element is pivoted
25 with respect to the first hinge element the coupling element rotates with the second
26 hinge element and the bearing surface of the first portion rotates against the inner wall
27 of the cylindrical housing.”

18 There are thirteen terms/phrases in Claim 1 of the ‘100 Patent that the parties agree require
19 construction. They are: (1) first hinge element, (2) housing, (3) first hinge element including a
20 hollow cylindrical housing, (4) means for securing said first hinge element to a structure, (5) second
21 hinge element, (6) end pieces, (7) second hinge element including first and second spaced apart end
22 pieces, (8) first and second spaced apart end pieces receiving the cylindrical housing of the first
23 hinge element therebetween, (9) biasing means, (10) biasing means being located within the
24 cylindrical housing, (11) coupling element, (12) aperture, and (13) correspondingly shaped mating
25 engagement surface means for preventing relative rotation.

26 **1. “First Hinge Element”**

27 The first term at issue in Claim 1 is “first hinge element.” Plaintiff asserts this is an easily
28 understood term that is used in its customary and ordinary manner and the Court does not need to

1 construe the term. Defendant contends that this claim language should be construed in context to
2 mean: “a major component of a hinge in the form of a single unitary piece.” The Court tentatively
3 found that one of ordinary skill in the art, after reading the claims and consulting the intrinsic
4 evidence, would construe the term “first hinge element” to mean “a component of a hinge.” The
5 parties stipulate to this construction. Accordingly, the Court **AFFIRMS** the tentative construction.

6 2. ***“Housing”***

7 The next term at issue in the ‘100 Patent is “housing.” Plaintiff asserts this is an easily
8 understood term that is used in its customary and ordinary manner and the Court does not need to
9 construe the term. Defendant contends the term should be construed in context to mean “a structure
10 that substantially encloses one or more components.” The Court tentatively found that one of
11 ordinary skill in the art, after reading the claims and consulting the intrinsic evidence, would
12 construe the term “housing” to mean “something that encloses something else.” The parties stipulate
13 to this construction. Accordingly, the Court **AFFIRMS** the tentative construction.

14 3. ***“First Hinge Element Including a Hollow Cylindrical Housing”***

15 The first phrase at issue in Claim 1 is “first hinge element including a hollow cylindrical
16 housing.” Plaintiff asserts this is an easily understood phrase that is used in its customary and
17 ordinary manner and the Court does not need to construe the phrase. Defendant contends the phrase
18 should be construed in context to mean that “the cylindrical housing portion of the first hinge
19 element must be unitary with the rest of the first hinge element.” The Court tentatively found that
20 one of ordinary skill in the art, after reading the claims and consulting the intrinsic evidence, would
21 construe the phrase to mean “first hinge element that is a single piece including a hollow cylindrical
22 housing.” Plaintiff disputes the tentative construction of this phrase, specifically the Court’s use of
23 the term “single piece.” Defendant stipulates to the term “single piece” as a reasonable alternative to
24 Defendant’s own suggestion of the term “unitary.”

25 In the ‘100 Patent the first hinge element is always shown as formed from a single piece of
26 material, and is specified as comprising “an outer portion 13 arranged to be secured to a structure
27 (not shown) such as a door frame or a gate post through apertures 14. The first hinge member
28 further includes an inner portion 15 which comprises a cylindrical housing . . .” (*See Defendant’s*

1 CCB, Ex. A, 6, '100 Patent, col.2, ll.38-43.) The specification and drawings disclose only a first
2 hinge element made up of a single piece of material. A review of the prosecution history does not
3 reveal any discussion or embodiment wherein the first hinge element is comprise of more than one
4 piece of material. Therefore, any other construction would seem contrary to the intent of the
5 inventor. *See Phillips*, 415 F.3d at 1316 (stating that claim interpretation should comport with the
6 inventor's intent). Accordingly, the Court **AFFIRMS** the tentative construction.

7 **4. "Means For Securing Said First Hinge Element to a Structure"**

8 The next phrase at issue in the '100 Patent is "means for securing said first hinge element to a
9 structure." Plaintiffs and Defendant propose a joint construction of the phrase "means for securing
10 said first hinge element to a structure" to be a means plus function element and thus properly falls
11 within the ambit of 35 U.S.C. §112, 6.² The parties also agree that "the structure in the specification
12 corresponding to this element is outer portion 13 including apertures 14, and that the claim is
13 properly construed to cover this structure and its equivalents." In addition, Defendant proposes that
14 "function" should be more narrowly construed to mean "providing a securing interface" and
15 "structure" should be more narrowly construed to mean "structure of multiple holes through a
16 relative flat hinge body portion, with the holes being sized and shaped to respectively accommodate
17 screws to secure the hinge."

18 The Court tentatively found that one of ordinary skill in the art, after reading the claims and
19 consulting the intrinsic evidence, would construe the phrase "means for securing said first hinge
20 element to a structure" as a means plus function element, governed by the law of 35 U.S.C. §112, 6.
21 The Court further found that one of ordinary skill in the art would construe the phrase in accordance
22 with the parties' agreed construction and adopted that construction as its own. The Court determined
23 that the intrinsic evidence did not support Defendant's more narrow definition of the terms
24 "function" and "structure." The parties stipulate to the Court's adoption of their joint proposed
25 construction. Accordingly, the Court **AFFIRMS** the tentative construction.

26
27 ² "An element in a claim for a combination may be expressed as a means or step for performing
28 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. § 112, 6.

1 **5. *"Second Hinge Element"***

2 The next term at issue in Claim 1 is "second hinge element." Plaintiff asserts this is an easily
3 understood term that is used in its customary and ordinary manner and the Court does not need to
4 construe the term. Defendant contends that this claim language should be construed in context to
5 mean: "a major component of a hinge in the form of a single unitary piece, with the second hinge
6 element being a different piece than the first hinge element." The Court tentatively found that one of
7 ordinary skill in the art, after reading the claims and consulting the intrinsic evidence, would
8 construe the term "second hinge element" to mean "a component of a hinge, being a different
9 component than the first hinge element." The parties stipulate to this construction. Accordingly, the
10 Court **AFFIRMS** the tentative construction.

11 **6. *"End Pieces"***

12 The next term at issue in the '100 Patent is "end pieces." Plaintiff asserts this is an easily
13 understood term that is used in its customary and ordinary manner and the Court does not need to
14 construe the term. Defendant contends that this term should be construed in context to mean: "a
15 portion of a hinge element located at or near the end of the axis of rotation of the hinge." The Court
16 tentatively agreed with Plaintiff that this is an easily understood term that one of ordinary skill in the
17 art would construe to mean "end pieces." The parties stipulate to this construction. Accordingly, the
18 Court **AFFIRMS** the tentative construction.

19 **7. *"Second Hinge Element Including First and Second Spaced Apart End Pieces"***

20 The next phrase at issue in Claim 1 is "second hinge element including first and second
21 spaced apart end pieces." Plaintiff asserts this is an easily understood phrase that is used in its
22 customary and ordinary manner and the Court does not need to construe the phrase. Defendant
23 contends that this phrase should be construed in context to mean that "there must be two separate
24 end pieces and both the end pieces must both be unitary with the rest of the second hinge element."
25 The Court tentatively construed the phrase to mean "second hinge element including two end pieces,
26 the first end piece being located at one end of the second hinge element and the second end piece
27 being located at the opposing end of the second hinge element." Plaintiff disputes the Court's
28 tentative construction, arguing that the specification does not support such a limitation. Defendant

1 stipulates to the tentative construction.

2 Plaintiff contends that although in the preferred embodiment the specification provides for
3 the end pieces to be spaced apart in a manner resulting in the end pieces being at opposing ends of
4 the second hinge element, it also contemplates embodiments where the cylindrical housing is
5 between the end pieces, but the end pieces are not at the opposing ends of the second hinge element.
6 In other words, Plaintiff argues that the Court's additional language construes the phrase too
7 narrowly, such that it would only protect the invention if a competing device had end pieces located
8 exactly at the *ends* of the second hinge element, rather than protecting from any device having end
9 pieces *near* the ends of the second hinge element.

10 The Court cannot read extraneous limitations into a claim. *See Intervet America, Inc. v.*
11 *Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053 (Fed. Cir. 1989). Nevertheless, "in judicial 'claim
12 construction' the court must achieve the same understanding of the patent, as a document whose
13 meaning and scope have legal consequences, as would a person experienced in the technology of the
14 invention." *Toro Co. v. White Consol. Indus. Inc.*, 199 F.3d 1295, 1299 (Fed. Cir. 1999). This
15 requires that the meaning of a claim is to be understood in context. *See id.*; *Renishaw PLC v.*
16 *Marposs Societa' per Azioni*, 158 F.3d 1243, 1251 (Fed. Cir. 1998). Although, in certain contexts,
17 the term "spaced apart" may be understood, in a very general sense, to connote any sort of separation
18 between to things, the context of the instant claim does not admit such a general meaning. To be
19 sure, the claim language makes clear that the term "spaced apart" means separated - i.e., that the end
20 pieces are placed at some distance from one another. That the cylindrical housing is positioned in
21 the space between the end pieces, discussed in more detail below, is an additional limitation,
22 independent from the words "spaced apart." It is also the key context in which this phrase and the
23 term "spaced apart" must be understood.

24 Having reviewed the intrinsic evidence, the Court declines to affirm its tentative
25 construction. The Court determines that the inventor clearly intended that the invention be
26 distinguishable from the prior art by having a hinge element comprised of end pieces separated from
27 one another for the purpose of securing the cylindrical housing of the other hinge element between
28 them. Therefore, the Court finds that the disputed phrase must be construed in this specific context.

1 Accordingly, the Court construes the phrase “second hinge element including first and second spaced
2 apart end pieces” to mean “second hinge element including first and second end pieces placed a
3 fixed distance from each other at opposite ends of the cylindrical housing of the first hinge element.”

4 8. *“First and Second Spaced Apart End Pieces Receiving the Cylindrical Housing of
5 the First Hinge Element Therebetween”*

6 The next phrase at issue in Claim 1 is “first and second spaced apart end pieces receiving the
7 cylindrical housing of the first hinge element therebetween.” Plaintiff asserts this is an easily
8 understood phrase that is used in its customary and ordinary manner and the Court does not need to
9 construe the term. Defendant contends that this claim language should be construed in context to
10 mean: “when the hinge is assembled, the cylindrical housing portion of the first hinge element must
11 be physically located between and in close proximity to both of the first end piece portion of the
12 second hinge element and the second end piece portion of the second hinge element.”

13 The Court tentatively found that one of ordinary skill in the art, after reading the claims and
14 consulting the intrinsic evidence, would construe the phrase to mean that “when the hinge is
15 assembled, the cylindrical housing portion of the first hinge element is positioned between the first
16 end piece of the second hinge element and the second end piece of the second hinge element,” where
17 “positioned” means “physically located.” Reserving the objection to the Court’s tentative
18 construction of the above-discussed phrase, Plaintiff stipulates to this construction, as does
19 Defendant. Accordingly, the Court **AFFIRMS** the tentative construction.

20 9. *“Biasing Means”*

21 The next term at issue is “biasing means.” Plaintiff and Defendant agree that the term
22 “biasing means” properly falls within the ambit of 35 U.S.C. §112, 6. The parties also agree that the
23 structure in the specification corresponding to this element is helical spring 20. Plaintiff contends
24 that the claim is properly construed to cover this structure and its equivalents. Defendant asserts a
25 narrower construction of the term, to mean: “performs the function of biasing and is limited in
26 structure to a helical spring.”

27 The Court tentatively found that one of ordinary skill in the art, after reading the claims and
28 consulting the intrinsic evidence, would construe the term “biasing means” as a means plus function

1 element, governed by the law of 35 U.S.C. §112, 6. The Court further found the structure in the
2 specification corresponding to this element is helical spring 20, and that one of ordinary skill in the
3 art would construe the term to cover torsion springs, of which a helical spring is one kind, and its
4 equivalents, where “kind” means type. The parties stipulate to this construction. Accordingly, the
5 Court **AFFIRMS** the tentative construction.

6 **10. “Biasing Means Being Located Within the Cylindrical Housing”**

7 The next phrase at issue in Claim 1 is “biasing means being located within the cylindrical
8 housing.” Plaintiff asserts that, notwithstanding the foregoing construction of “biasing means,” this
9 is an easily understood phrase that is used in its customary and ordinary manner and the Court does
10 not need to construe the phrase. Defendant contends that this phrase should be construed in context
11 to mean: “the entire biasing means is located in an interior space physically defined by the cylindrical
12 housing portion of the first hinge element; consistent with the definition of “housing” above, the
13 biasing means is the component that is substantially enclosed within the “housing.” The Court
14 tentatively found that one of ordinary skill in the art, after reading the claims and consulting the
15 intrinsic evidence, would construe the phrase to mean “the biasing means being enclosed wholly
16 within the cylindrical housing.” Plaintiff disputes the Court’s use of the term “wholly,” arguing that
17 the invention does not require the cylindrical housing to be enclosed completely. Defendant
18 stipulates to the Court’s tentative construction.

19 The specification supports the Court’s construction. The specification describes how the
20 hinge is arranged to operate, and in doing so, describes how to assemble the hinge. The assembly of
21 the various elements of the hinge together first requires the assembler to “locate the spring 20 in the
22 housing 16 with its first end in the recess 22.” The next step requires the assembler to take the first
23 coupling element, and connect it to the second end of the spring, such that the first coupling element
24 is “forced against the spring to be located wholly within the housing 16.” At this point, both the
25 spring and the first coupling element are located wholly within the housing, because the spring is
26 being forced down farther into the housing by the first coupling element, which is specified as being
27 wholly enclosed in the housing as well. In this context, a person of ordinary skill in the art would
28 understand the torsion spring to be enclosed wholly within the cylindrical housing. Accordingly, the

1 Court **AFFIRMS** the tentative construction.

2 ***11. “Coupling Element”***

3 The next term at issue in Claim 1 is “coupling element.” Plaintiff asserts that,
4 notwithstanding the foregoing construction of “biasing means,” this is an easily understood term that
5 is used in its customary and ordinary manner and the Court does not need to construe the term.
6 Defendant contends that “coupling element” is a means plus function element, governed by the law
7 of 35 U.S.C. §112, 6, because “it is defined only in terms of its function (that is, coupling) and
8 recites no recognized structure (an ‘element’ is not a recognized structure).” Further Defendant
9 contends that “function” should be construed to mean “coupling other hinge components to each
10 other” and should be “limited to the particular corresponding shape disclosed in the specification,
11 specifically, the shape of first coupling element 30; for example, it must include a recess that is
12 shaped, like recess 40, to accommodate the tip of a flat head screwdriver; as a further example, it
13 must have, at its top, a circular shaped top section, like top section 38.” The Court tentatively found
14 that the term properly falls within the ambit of 35 U.S.C. §112, 6, and that one of ordinary skill in
15 the art, after reading the claims and consulting the intrinsic evidence, would construe the term
16 “coupling element” to mean “performs the function of coupling other hinge components to each
17 other.” The parties do not stipulate to this construction. Plaintiff argues that the term should not be
18 construed as a means plus function element because no function is recited, and a mechanical
19 structure is recited taking the term outside the scope of § 112, 6.

20 When the word “means” is not used in a claim term, a rebuttable presumption arises that §
21 112, 6 does not apply. This presumption can be rebutted, if the party advancing a means plus
22 function construction demonstrates that the claim term fails to recite sufficiently definite structure or
23 recites a function without reciting a sufficient structure for performing that function. In the Court’s
24 view, Defendant has overcome this presumption. Although one skilled in the art would know the
25 functionality of coupling, the Court is not persuaded that such a person would also know the precise
26 structures for a “coupling element,” because the function of a “coupling element” can be achieved in
27 a variety of ways making it unclear what the specific structures are for performing the recited
28 functions.

1 The Court finds that the means-plus-framework applies to “coupling element” because the
2 claim term is written as a functional term and has no inherent structure. The “coupling element” has
3 numerous functions in the specification, all related to transferring torsion from a spring to a hinge
4 element. Accordingly, the Court agrees with Defendant that the term “coupling element” should be
5 construed in accordance with § 112, 6. The Court further concludes that the corresponding structure
6 is coupling element 30, 51 of the specification. Accordingly, the Court construes the term “coupling
7 element” to be a means plus function element that properly falls within the ambit of 35 U.S.C. § 112,
8 6. The “coupling element” performs the function of “coupling other hinge components to each other
9 and the structure in the specification corresponding to this element is coupling element 30 (FIG. 3-
10 5), 51 (FIG. 6).”

11 **12. “Aperture”**

12 The next term at issue is “aperture.” Plaintiff asserts this is an easily understood term that is
13 used in its customary and ordinary manner and the Court does not need to construe the term. Citing
14 extrinsic evidence in the form of a dictionary definition, Defendant contends that this term should be
15 construed in context to mean: “an opening or space, as between parts or sections of solid matter,
16 such as a hole gap, cleft chasm, or slit.” The Court tentatively found construction of this term
17 necessary because an “aperture” can be understood in materially different ways as shown by
18 Defendant’s proffered extrinsic evidence, i.e. hole, slit, gap. Those specific terms are not supported
19 by the ‘100 Patent. Therefore, the Court tentatively found that one of ordinary skill in the art, after
20 reading the claims and consulting the intrinsic evidence, would construe the term “aperture” to mean
21 “open space.” The parties stipulate to this construction. Accordingly, the Court **AFFIRMS** the
22 tentative construction.

23 **13. “Correspondingly Shaped Mating Engagement Surface Means for Preventing**
24 **Relative Rotation”**

25 The last phrase at issue in Claim 1 is “correspondingly shaped mating engagement surface
26 means for preventing relative rotation.” Plaintiff contends that the phrase is an easily understood
27 phrase using words in their customary and ordinary manner and the Court does not need to construe
28 the phrase. Defendant contends that this phrase should be construed as a means plus function

1 element, governed by the law of 35 U.S.C. §112, 6, that “performs the function of preventing relative
2 rotation between two components and is limited in structure to a hexagonal shaped surface, like
3 hexagonally shaped portion 42 of the aperture 28.” The Court tentatively found that the phrase falls
4 within the ambit of § 112, 6, and adopted Defendant’s proposed construction of the phrase. Plaintiff
5 disputes that the phrase “shaped mating engagement surface means” is a means plus function term,
6 where the claim recites sufficient structure to remove the term from the scope of § 112, 6.

7 The Court affirms its tentative finding that this phrase should be construed as a means plus
8 function element where its function is to prevent relative rotation between two components of the
9 hinge. The Court next must identify “the corresponding structure, material, or acts described in the
10 specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6. In doing so, “a court may not import
11 functional limitations that are not recited in the claim, or structural limitations from the written
12 description that are unnecessary to perform the claimed function.” *Wenger Mfg., Inc. v. Coating*
13 *Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed.Cir.2001). Having reviewed the intrinsic evidence more
14 closely, and in particular the prosecution history, the Court declines to affirm its tentative
15 construction of the structure corresponding to the function. (*Defendant’s Ex. B*, 104.) The
16 prosecution history clearly reveals that the inventor intended the engagement surface to not be
17 limited to a hexagonal shape. In his discussion with the examiner, the inventor notes the examiner’s
18 request that the “engagement surface” be a “polygonal” engagement surface. The inventor
19 responded by explaining that although the specification and preferred embodiments disclosed a
20 hexagonal (polygonal) surface, the invention was not limited in its functionality by a polygonal
21 engagement surface. (*Id.*) As such, the Court agrees with Plaintiff’s proposal that the term be
22 construed “to include the recited structure (the hexagonal shaped surface) and its equivalents.”

23 Accordingly, the Court construes the phrase “correspondingly shaped mating engagement
24 surface means for preventing relative rotation” to be a means plus function element that properly
25 falls within the ambit of 35 U.S.C. §112, 6. The “correspondingly shaped mating engagement
26 surface means for preventing relative rotation” performs the function of “preventing relative rotation
27 between two components” and the corresponding structure in the specification is “the hexagonal
28 shaped surface 42, and its equivalents.”

B. Claim 2

Claim 2 of the '100 patent provides:

“A hinge in accordance with claim 1, wherein the engagement surface means of the coupling element is disengageable from the corresponding mating engagement surface means of the first end of the second hinge element by moving the coupling element against the bias of the biasing means axially inwardly along the central axis towards the cylindrical housing and torsion applied by the biasing means between the first and second hinge elements, via the coupling element, may be adjusted by rotating the engagement surface means relative to each other and subsequently releasing the coupling element to cause the engagement surface means to re-engage in a new relative orientation.”

There are two disputed phrases in Claim 2: (1) “coupling element is disengageable from the corresponding mating engagement surface means of the first end of the second hinge element by moving the coupling element” and (2) “engagement surface means to re-engage in a new relative orientation.”

1. “Coupling Element is Disengageable from the Corresponding Mating Engagement Surface Means of the First End of the Second Hinge Element By Moving the Coupling Element”

The first phrase at issue in Claim 2 is “coupling element is disengageable from the corresponding mating engagement surface means of the first end of the second hinge element by moving the coupling element.” Plaintiff contends that the phrase is an easily understood phrase using words in their customary and ordinary manner and the Court does not need to construe the phrase. Defendant contends that this phrase should be construed as a means plus function element, governed by the law of 35 U.S.C. § 112, 6, and “disengageable” should be construed in context to mean that “the disengageability function is provided by a recess, like recess 40, shaped to accommodate the tip of a flat head screwdriver.” The Court tentatively found, based on its previous constructions, that the phrase falls properly within the ambit of § 112, 6, and construed “disengageable” to mean “able to be disengaged by inserting a screwdriver into the recess 40.” Plaintiff disputes this construction, arguing that the recess does not have to fit a screwdriver specifically, but can be any other form allowing the coupling element to be pushed down.

The Court based its tentative construction on its review of the intrinsic evidence, which supports Defendant’s construction in so far as it specifies inserting a screw driver into the recess

1 40. (*Defendant's* Ex. A, 8, '100 Patent, col.5, ll.40-47.) Accordingly, the Court **AFFIRMS** its
2 tentative construction.

3 **2. "Engagement Surface Means to Re-engage in a New Relative Orientation"**

4 The second phrase at issue in Claim 2 is "engagement surface means to re-engage in a new
5 relative orientation." Plaintiff contends that the phrase is an easily understood phrase using words
6 in their customary and ordinary manner and the Court does not need to construe the phrase.
7 Defendant contends that this phrase should be construed in context to mean: "means relative
8 engagement between the coupling element and the first end piece of the second hinge element; as
9 explained above, the engagement surface means must be hexagonal and its relative orientation
10 upon re-engagement is limited accordingly (that is, limited to 60° angular intervals)." The Court
11 tentatively constructed the phrase "the engagement surface means to re-engage in a new relative
12 orientation" where the engagement surface means is "hexagonal in shape and its relative
13 orientation upon re-engagement is limited by its hexagonal shape." Defendant stipulates to this
14 construction. Plaintiff disputes the construction, arguing that it is too narrow.

15 Based on the Court's construction of the phrase "correspondingly shaped mating
16 engagement surface means for preventing relative rotation" in Claim 1, and Claim 2 being a
17 dependant claim, the Court declines to affirm its tentative construction and agrees with Plaintiff
18 that the phrase can be understood without further construction to mean "engagement surface
19 means to re-engage in a new relative orientation."

20 **C. Claim 4**

21 Claim 4 of the '100 patent provides:

22 "A hinge in accordance with claim 1, the end pieces of the second hinge element
23 comprising respective flanges, each flange having an aperture therethrough."

24 A single term of Claim 4 is in dispute: "the end pieces of the second hinge element comprising
25 respective flanges." Plaintiff asserts this is an easily understood phrase that is used in its
26 customary and ordinary manner and the Court does not need to construe the phrase. Defendant
27 contends that this phrase should be construed in context to mean that "the second hinge element
28 must include a unitary flange at both of its ends." The Court tentatively agreed with Plaintiff that

1 this is an easily understood phrase that one of ordinary skill in the art would construe to mean "the
2 end pieces of the second hinge element comprising respective flanges." The parties stipulate to
3 this construction. Accordingly, the Court **AFFIRMS** the tentative instruction.

4 **CONCLUSION**

5 For the reasons stated above, the disputed terms of United States Patent Number 5,584,100
6 are construed as set forth in this Order.

7 **IT IS SO ORDERED.**

8 DATE: 3-20-09



HON. MICHAEL M. ANELLO
United States District Judge

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COURT'S EXHIBIT A

TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
5,584,100, Claim 1 A hinge, comprising a first hinge element including a hollow cylindrical housing having longitudinal central axis and a hinge body portion having means for securing said first hinge element to a structure,		Plaintiffs contend that the terms first hinge element, housing, and first hinge element including a hollow cylindrical housing are easily understood phrases that are used in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: first hinge element is a major component of a hinge in the form of a single unitary piece. <i>Intrinsic Evidence:</i> USP 5,584,100 ("100 Doyle") at col. 2, ll. 36-45; DDT000103-000115 ("DDT" refers to numbered series of documents produced by Plaintiffs). <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"first hinge element" means "a component of a hinge" - IE cited by Defendant does not indicate that the first hinge element is the "major" component of the hinge, there being several additional components apparently of equal importance to the function of the invention

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
A hinge, comprising a first hinge element including a hollow cylindrical housing having longitudinal central axis and a hinge body portion having means for securing said first hinge element to a structure,		Plaintiffs contend that the terms first hinge element , housing , and first hinge element including a hollow cylindrical housing are easily understood phrases that are used in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: housing is a structure that substantially encloses one or more components. <i>Intrinsic Evidence:</i> 100 Doyle at col. 4, ll. 46-50, col. 5, ll. 54-56; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term; <i>Webster's Third New International Dictionary</i> at p. 1097, definition of "housing" (attached to Defendant's Preliminary Claim Constructions ("PCC") as Exhibit A).	"housing" means "something that encloses something else" - IE does not support Defendant's suggestion that the term means "a structure" or that the housing encloses anything "substantially"

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
A hinge, comprising a first hinge element including a hollow cylindrical housing having longitudinal central axis and a hinge body portion having means for securing said first hinge element to a structure,		Plaintiffs contend that the terms first hinge element, housing, and first hinge element including a hollow cylindrical housing are easily understood phrases that are used in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: first hinge element including a hollow cylindrical housing means that the cylindrical housing portion of the first hinge element must be unitary with the rest of the first hinge element. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, ll. 36-45; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	“first hinge element including a hollow cylindrical housing” means “first hinge element that is a single piece including a hollow cylindrical housing” - “First hinge element” and “housing” have already been construed, and Defendant does not seek construal of the terms “hollow” and “cylindrical” - IE cited by Defendant does not support use of the technical term “unitary” - IE does support that the first hinge element is a single physical piece comprised of more than one constituent part

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
A hinge, comprising a first hinge element including a hollow cylindrical housing having longitudinal central axis and a hinge body portion having means for securing said first hinge element to a structure,	Plaintiffs and Defendant agree that the term means for securing said first hinge element to a structure properly falls within the ambit of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is outer portion 13 including apertures 14. The claim is construed to cover this structure and its equivalents.	Plaintiffs and Defendant agree that the term means for securing said first hinge element to a structure properly falls within the ambit of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is outer portion 13 including apertures 14. The claim is properly construed to cover this structure and its equivalents.	means for securing said first hinge element to a structure is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, that performs the function of providing a securing interface and is limited to the structure of multiple holes through a relative flat hinge body portion, with the holes being sized and shaped to respectively accommodate screws to secure the hinge. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, 11. 38-41; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	“means for securing said first hinge element to a structure” is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is outer portion 13 including apertures 14. The claim is properly construed to cover this structure and its equivalents. - Court adopts the Agreed Proposed Construction of the parties - IE cited by Defendant does not support adding the extraneous narrow terms suggested by Defendant

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
a second hinge element including first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween, and a hinge body portion arranged to be secured to a second structure,		Plaintiffs contend that the terms second hinge element, end pieces, second hinge elements including first and second end pieces, and first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween are easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: second hinge element is a major component of a hinge in the form of a single unitary piece, with the second hinge element being a different piece than the first hinge element. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, ll. 36-38, col. 2, ll. 51-61; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"second hinge element" means "a component of a hinge, being a different component than the first hinge element" - IE cited by Defendant does not indicate that the second hinge element is a "major" component of the hinge

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
a second hinge element including first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween, and a hinge body portion arranged to be secured to a second structure,		Plaintiffs contend that the terms second hinge element, end pieces, second hinge elements including first and second end pieces, and first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween are easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: end piece] is a portion of a hinge element located at or near the end of the axis of rotation of the hinge. <i>Intrinsic Evidence:</i> 100 Doyle at Fig. 3, reference numerals 26, 27, Fig. 6 at flanges (no separate reference numerals) at top and bottom ends of hinge member 12; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> Defendants may also rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"end piece" means "end piece" - Court agrees with Plaintiff that this term is an easily understood phrase - IE cited by Defendant is insufficient to support the proposed narrower construction of the term.

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
a second hinge element including first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween, and a hinge body portion arranged to be secured to a second structure,		Plaintiffs contend that the terms second hinge element , end pieces , second hinge elements including first and second end pieces , and first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween are easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: second hinge element including first and second spaced apart end pieces means that there must be two separate end pieces and both the end pieces must both be unitary with the rest of the second hinge element. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, ll. 55-61; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	“second hinge element including first and second spaced apart end pieces” means “second hinge element including two end pieces, the first end piece being located at one end of the second hinge element and the second end piece being located at the opposing end of the second hinge element” - IE cited by Defendant is insufficient to support the proposed narrower construction of the term , particularly use of the word “unitary” - IE however gives more specific meaning to term “spaced apart,” the invention features end pieces that are spaced apart at a specific distance, i.e. one at either end of the second hinge element

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
a second hinge element including first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween , and a hinge body portion arranged to be secured to a second structure,		Plaintiffs contend that the terms second hinge element, end pieces, second hinge elements including first and second end pieces, and first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween are easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween means that when the hinge is assembled, the cylindrical housing portion of the first hinge element must be physically located between and in close proximity to both of the first end piece portion of the second hinge element and the second end piece portion of the second hinge element. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, ll. 55-61, Fig. 6 at flanges (no separate reference numerals) at top and bottom ends of hinge member 12 and cylindrical housing 52; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	“first and second spaced apart end pieces receiving the cylindrical housing of the first hinge element therebetween” means that when the hinge is assembled, the cylindrical housing portion of the first hinge element is positioned between the first end piece of the second hinge element and the second end piece of the second hinge element. - where “positioned” means “physically located” - Court agrees with Defendant that term should be construed more narrowly, as the proper construction of the hinge depends upon the cylindrical housing being located between the two end pieces

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
biasing means being located within the cylindrical housing and coupling the first hinge element to a coupling element;	Plaintiffs and Defendant agree that the term biasing means properly falls within the ambit of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is helical spring 20. Plaintiffs contend that the claim is properly construed to cover this structure and <u>its equivalents</u> .	Plaintiffs and Defendant agree that the term biasing means properly falls within the ambit of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is helical spring 20. Plaintiffs contend that the claim is properly construed to cover this structure and <u>its equivalents</u> .	biasing means is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, that performs the function of biasing and is limited in structure to a helical spring. <i>Intrinsic Evidence:</i> 100 Doyle at col. 2, ll. 46-50, col. 4, ll. 48-60, col. 5, ll. 47-56; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"biasing means" is a means plus function element that properly falls within the ambit of 35 U.S.C. §112, ¶6. The structure in the specification corresponding to this element is helical spring 20. The claim is properly construed to cover torsion springs, of which a helical spring is one kind, and <u>its equivalents</u> . - where "kind" means type - Defendant's proposed narrow construction is not supported by the patent itself, which uses the term "torsion spring" of which a helical spring is a type

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
biasing means being located within the cylindrical housing and coupling the first hinge element to a coupling element;		Notwithstanding the foregoing construction of biasing means, Plaintiffs contend that the terms biasing means being located within the cylindrical housing and coupling element are easily understood words that are used in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these words.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: biasing means being located within the cylindrical housing means that the entire biasing means is located in an interior space physically defined by the cylindrical housing portion of the first hinge element; consistent with the definition of "housing" above, the biasing means is the component that is substantially enclosed within the "housing." <i>Intrinsic Evidence:</i> DDT000112; 100 Doyle at ABSTRACT, col. 2, ll. 46-50, col. 4, ll. 34-37, Fig. 6 at spring 20 and cylindrical housing 52; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"biasing means being located within the cylindrical housing" means "the biasing means being enclosed wholly within the cylindrical housing" - Defendant's additional terms "interior space physically defined by" are not supported by the IE - The term "wholly" is supported by the patent itself and is a more accurate construction of the claim than the term "substantially" as suggested by Defendant

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
biasing means being located within the cylindrical housing and coupling the first hinge element to a coupling element;		Notwithstanding the foregoing construction of biasing means, Plaintiffs contend that the terms biasing means being located within the cylindrical housing and coupling element are easily understood words that are used in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these words.	coupling element is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, because it is defined only in terms of its function (that is, coupling) and recites no recognized structure (an "element" is not a recognized structure); the coupling element performs the function of coupling other hinge components to each other and is limited to the particular corresponding shape disclosed in the specification, specifically, the shape of first coupling element 30; for example, it must include a recess that is shaped, like recess 40, to accommodate the tip of a flat head screwdriver; as a further example, it must have, at its top, a circular shaped top section, like top section 38. <i>Intrinsic Evidence:</i> 100 Doyle at Figs. 1-5 at coupling element 30 (including head portion 32, body portion 33, top section 38, intermediate section 39 and recess (or slot) 40) and Fig. 6 at coupling elements 50-51, col. 3, ll. 1-62, col. 4, l. 62 to col. 5, l. 16, col. 5, ll. 34-64; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> DDT000284; DDT00035; Defendants also may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"coupling element" is a means plus function element that properly falls within the ambit of 35 U.S.C. §112, ¶6. The coupling element performs the function of coupling other hinge components to each other. - This construction is supported by the patent, i.e. col. 1, ll. 34 through col. 2, ll. 2. - IE cited by Defendant, including prosecution history, is persuasive - Patent describes it in "functional" way using verbs: i.e. "varies torque" "translates its corresponding torque" "rotate relative to the hinge members" "move between the first position" "couple the first flange to the first end" - no definite mechanical structure is recited

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
said coupling element having a first portion received within one end of the cylindrical housing and having a cylindrical bearing surface bearing against an inner wall of the cylindrical housing	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this portion of the claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.
whereby the biasing means is arranged to restrain relative rotation of the coupling element with respect to the first hinge element about said central axis,	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this portion of the claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
the coupling element further including a second portion having a first engagement surface means being received within an aperture provided in the first end piece of the second hinge element,	logical	Plaintiffs contend that the term aperture is an easily understood word used in its customary and ordinary manner, and that the Patentee did not assign any special meaning to the word.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: aperture is an opening or open space, as between parts or sections of solid matter, such as a hole, gap, cleft, chasm or slit. <i>Extrinsic Evidence: Webster's Third New International Dictionary</i> at p. 99, definition of "aperture" (attached to the PCC as Exhibit B). Defendants also may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"aperture" means "open space" - Court finds construction of this term necessary because an "aperture" can be understood in materially different ways, i.e. hole, slit, gap. Here, those terms are not supported by the patent. The patent supports a construction of the term in its plainest meaning, "open space"

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
said aperture having a correspondingly shaped mating engagement surface means for preventing relative rotation between said second hinge element and said coupling element,		Plaintiffs contend that the term shaped mating engagement surface means for preventing relative rotation is an easily understood phrase using words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to this phrase. Plaintiffs also dispute that the term "shaped mating engagement surface means" is a means-plus-function term, where the claim recites sufficient structure ("shaped mating engagement surface") to remove the term from the ambit of Section 112, ¶6. However, if the term is deemed to fall under Section 112, ¶6, the term would be construed to include the recited structure (the hexagonal shaped surface) <u>and its equivalents</u>.	Correspondingly shaped mating engagement surface means for preventing relative rotation is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, that performs the function of preventing relative rotation between two components and is limited in structure to a hexagonal shaped surface, like hexagonally shaped portion 42 of the aperture 28. <i>Intrinsic Evidence:</i> 100 Doyle at ABSTRACT, col. 3, ll. 50-52, col. 5, ll. 5-10; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"Correspondingly shaped mating engagement surface means for preventing relative rotation" is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, that performs the function of preventing relative rotation between two components and is limited in structure to a hexagonal shaped surface, like hexagonally shaped portion 42 of the aperture 28. - preventing relative rotation is the function - prosecution history, Defendant's Ex. B at p.66, shows illustrations of the invention clearly demonstrating the hexagonal shape - term "hexagonal" appears in the patent itself multiple times - patent describes "six different positions" which only applies if the surface is shaped like a hexagon

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
the biasing means also resiliently biasing the coupling element in a direction axially outwardly of the cylindrical housing along said central axis urging the second portion to engage with the aperture of the first end piece	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this portion of the claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.
so that when the second hinge element is pivoted with respect to the first hinge element the coupling element rotates with the second hinge element	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this portion of the claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
and the bearing surface of the first portion rotates against the inner wall of the cylindrical housing	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this portion of the claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
5,584,100, Claim 2 A hinge in accordance with claim 1, wherein the engagement surface means of the coupling element is disengageable from the corresponding mating engagement surface means of the first end of the second hinge element by moving the coupling element against the bias of the biasing means axially inwardly along the central axis towards the cylindrical housing		Plaintiffs contend that that this claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases. As set forth above in connection with Claim 1, Plaintiffs contend that coupling element and engagement surface means are not properly construed under 35 U.S.C. §112, ¶6. If they are deemed to fall within §112, ¶6, they would properly be construed to cover the recited structure and their <u>equivalents</u>.	coupling element is disengageable...by moving the coupling element: the coupling element is a means plus function element, governed by the law of 35 U.S.C. §112, ¶6, as explained above in connection with claim language portion 1.2; the disengageability function is provided by a recess, like recess 40, shaped to accommodate the tip of a flat head screwdriver. <i>Intrinsic Evidence</i>: 100 Doyle at col. 3, ll. 30-33, col. 4, l. 61 to col. 5, l. 16, col. 5, ll. 40-47; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence</i>: DDT000283; DDT000287; Defendants may also rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term. - D suggests structure should be defined as including ... (need to confer with transcript of hearing)	"coupling element is disengageable from the corresponding mating engagement surface means of the first end of the second hinge element by moving the coupling element" where "disengageable" means "able to be disengaged by inserting a screwdriver into the recess 40" - The above-construction is supported by the patent itself. col.5, ll.40-47, and Figure 1, 40 and Figure 2, 40, which demonstrate the shape of the recess 40

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TENTATIVE CLAIM CONSTRUCTION WORKSHEET (prepared by the Court)

PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
and torsion applied by the biasing means between the first and second hinge elements, via the coupling element, may be adjusted by rotating the engagement surface means relative to each other and subsequently releasing the coupling element to cause the engagement surface means to re-engage in a new relative orientation.		Plaintiffs contend that that this claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases. As set forth above in connection with Claim 1, Plaintiffs contend that coupling element and engagement surface means are not properly construed under 35 U.S.C. §112, ¶6. If they are deemed to fall within §112, ¶6, they would properly be construed to cover the recited structure and their equivalents.	the engagement surface means to re-engage in a new relative orientation means relative engagement between the coupling element and the first end piece of the second hinge element; as explained above, the engagement surface means must be hexagonal and its relative orientation upon re-engagement is limited accordingly (that is, limited to 60° angular intervals). <i>Intrinsic Evidence:</i> 100 Doyle at col. 3, ll. 30-33, col. 4, l. 61 to col. 5, l. 16, col. 5, ll. 40-47; DDT000103-000115; DDT000128-000145. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	“the engagement surface means to re-engage in a new relative orientation” where the engagement surface means is hexagonal in shape and its relative orientation upon re-engagement is limited by its hexagonal shape - IE cited by Defendant supports this construction of the term - patent itself uses the term “hexagonal” as mentioned previously
5,584,100, Claim 3 A hinge in accordance with claim 1, wherein the biasing means is a torsion spring.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself.	Plaintiffs and Defendant agree that that this claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to the terms. Plaintiffs and Defendant further agree that no further definition is required, and that the jury should be allowed to use its own understanding of the words to construe the claim.	No construction necessary; plain and ordinary meaning best expressed by the claim language itself. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	No construction necessary.

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PATENT CLAIM	AGREED PROPOSED CONSTRUCTION	PLAINTIFFS' PROPOSED CONSTRUCTION	DEFENDANT'S PROPOSED CONSTRUCTION	COURT'S TENTATIVE CONSTRUCTION
5,584,100, Claim 4 A hinge in accordance with claim 1, the end pieces of the second hinge element comprising respective flanges , each flange having an aperture therethrough.		Plaintiffs contend that this claim involves easily understood phrases that use words in their customary and ordinary manner, and that the Patentee did not assign any special meaning to these phrases.	Defendant contends that this claim language should be construed in context in accordance with its plain and ordinary meaning, which is: the end pieces of the second hinge element comprising respective flanges means that the second hinge element must include a unitary flange at both of its ends. <i>Intrinsic Evidence:</i> 100 Doyle at Fig. 3, reference numerals 26, 27, Fig. 6 at flanges (no separate reference numerals) at top and bottom ends of hinge number 12; DDT000103-000115. <i>Extrinsic Evidence:</i> Defendants may rely on the testimony of expert witness(es), and on any type of extrinsic evidence cited by Plaintiffs for interpreting this term.	"the end pieces of the second hinge element comprising respective flanges" means "the end pieces of the second hinge element comprising respective flanges" - IE does not support Defendant's use of the term "unitary"

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