United States District Court,
M.D. Pennsylvania.

ARLINGTON INDUSTRIES, INC,
Plaintiff.
v.
BRIDGEPORT FITTINGS, INC,
Defendant.
Bridgeport Fittings, Inc,
Plaintiff.
v.
Arlington Industries, Inc,
Defendant.

Feb. 25, 2008.

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MEMORANDUM

CHRISTOPHER C. CONNER**, District Judge.**

Presently before the court in this patent infringement action are the parties' contentions regarding the proper interpretation of claim terms. The issues are ripe for disposition, and the court will enter an order pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

I. *Factual Background*

The patent *sub judice* (patent no. Re. 5,266,050, hereinafter "the '050 patent") covers quick connect fittings for electrical junction boxes. (*See* Doc. 284, Ex. 3.) It is a continuation of patent no. 5,171,164 (hereinafter, "the '164 patent") and issued to employees of Arlington Industries, Inc. ("Arlington"). FN1 (*See* id.) The patent describes a new type of electrical connector to replace previous units that required the use of two hands to screw the device into an electrical junction box. (*See* id.)

FN1. The '050 patent was assigned to Arlington. (*See* Doc. 284, Ex. 3.)

The patent encompasses eight claims, only one of which Bridgeport Fittings, Inc. ("Bridgeport"), is alleged to have infringed. FN2 The claim at issue-claim 8-reads as follows:

FN2. Arlington originally instituted a patent infringement action against Bridgeport in 2001, alleging that Bridgeport's snap-in connectors infringed various claims of the '164 and '050 patents. The memorandum and order of court dated November 7, 2003 (Doc. 170) construed six disputed terms and denied most of Bridgeport's request for summary judgment of non-infringement. Subsequently, the parties settled the action and Bridgeport signed a Confession of Judgment and Injunction permanently enjoining it from "directly or indirectly making, using, selling, offering for sale or importing ... [the accused products] or any colorable imitations." (Doc. 270.) In 2005, Bridgeport launched a new line of connectors which Arlington contends infringe claim 8 of the '050 patent and violate the previous settlement agreement between the parties.

A quick connect fitting for an electrical junction box comprising:
a hollow electrical connector through which an electrical conductor may be inserted having a leading end thereof for insertion in a hole in an electrical junction box;

a circular spring metal adaptor surrounding said leading end of said electrical connector which has a leading end, a trailing end, and an intermediate body;

at least two outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor which engage the side walls of the hole in the junction box into which said adaptor is inserted;

at least two spring locking members carried by said metal adaptor that spring inward to a retracted position to permit said adaptor and locking members to be inserted in a hole in an electrical junction box and spring outward to lock said electrical connector from being withdrawn through the hole; and

an arrangement on said connector for limiting the distance said connector can be inserted into the hole in the junction box.

(*Id*. at col. 10.) The '050 patent also includes a detailed specification, containing descriptions and illustrations of various embodiments of the invention. (*See id.,* Ex. 3.)

II. ***Discussion***

An inventor may assert ownership only over those designs encompassed within the claims section of the patent. *See* 35 U.S .C. s. 112; Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63, 119 S.Ct. 304, 142 L.Ed.2d 261 (1998); Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005), *cert. denied,* 546 U.S. 1170, 126 S.Ct. 1332, 164 L.Ed.2d 49 (2006). The proper construction of claims is a question of law. Markman v. Westview Instruments, Inc. ., 52 F.3d 967, 979 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). It requires the court to determine the "ordinary and customary meaning" of the claim terms as they would be understood by "a person of ordinary skill in the art in question at the time of the invention." Phillips, 415 F.3d at 1312-13; *see also* Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 290 F.Supp.2d 508, 519 (M.D.Pa.2003). This meaning should be discerned, if possible, from intrinsic evidence, i.e., the language of the patent and its prosecution history. *See* Home Diagnostics, Inc. v. Lifescan, Inc., 381 F.3d 1352, 1355-56 (Fed.Cir.2004); Novartis Pharm. Corp. v. Abbott Labs., 375 F.3d 1328, 1334-35 (Fed.Cir.2004). The court may use extrinsic evidence, e.g., dictionaries, treatises, and expert testimony, to

aid in claim construction, but such evidence is "less significant than the intrinsic record" and is "unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Phillips, 415 F.3d at 1317-19, 1324; *see also* Home Diagnostics, 381 F.3d at 1355-56.

In using the language of the patent itself, "claims 'must be read in view of the specification,' ... [which] is the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (citing Markman, 52 F.3d at 979 and Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Likewise, "the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id*. at 1314 (citing Vitronics, 90 F.3d at 1582). To this end, the context in which a claim term is used, the language of other claims in the patent, and the differences among claims can assist the court in construing disputed claim terms. *See id*. at 1314-15.

Four terms of claim 8 of the '050 patent are in dispute: "circular," "spring metal adaptor," "outwardly sprung members," and "carried by said metal adaptor near said trailing end of said adaptor." FN3 (*See* Docs. 283, 286, 298, 308.) The court will examine them *seriatim*.

FN3. The undersigned is well aware of my colleague's claim construction of these disputed terms in a separate proceeding. *See* Arlington Indus., Inc. v. Bridgeport Fittings, Inc., No. 3:06-CV-1105, 2007 WL 4276565 (M.D.Pa. Dec. 4, 2007) (Caputo, J.). Neither party has asserted that I am bound by Judge Caputo's claim construction, and I have undertaken an independent review of the disputed terms based upon the evidence of record.

A. "*Circular*"

The term "circular" is used in all claims of the '050 patent to describe the spring metal adaptor. Bridgeport contends that "circular" means "cylindrical or tubular, such that [the adaptor's] diameter is substantially constant along its axial length ." FN4 (Doc. 283 at 7.) Arlington argues that this term should be construed to mean "hav[ing] circular cross sections." (Doc. 286 at 15.) The evidence supports Arlington's construction.

FN4. In its *Markman* claim construction brief, Bridgeport also states that "circular" is implicitly defined in the specification as "cylindrical or tubular, such that [the adaptor] has a constant diameter at both the leading end and the trailing end." (Doc. 283 at 9.) During the claim construction hearing, however, Bridgeport did not advance this slightly different construction. (*See* Doc. 341 at 29.) Therefore, the court will not address it when construing "circular."

To support its proposed construction, Bridgeport notes that the spring metal adaptor is a three-dimensional object and that Arlington's proposed construction focuses on a two-dimensional definition. Bridgeport argues that Arlington implicitly defined "circular" in the specification of the '050 patent as "cylindrical or tubular, such that its diameter is substantially constant along its axial length" because the specification consistently depicts and describes an adaptor with this characteristic. *See* Phillips, 415 F.3d at 1321 ("[T]he specification 'acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.' " (citations omitted)). Along with emphasizing various figures depicting a cylindrical adaptor (*see, e.g.,* Doc. 284, Ex. 3, figs. 11, 15), Bridgeport notes that a "laid-out" view of the adaptor shows a flat rectangular strip of metal (*see id.*, fig. 10). Bridgeport contends that "[b]asic geometry dictates that a 'circular' adaptor formed from a rectangle must take the shape of a cylinder." FN5 (Doc. 283 at 8.)

Bridgeport also points to language in the specification and claim 1 that describes the adaptor with a single, constant diameter:

FN5. Bridgeport's expert supports this contention. (Doc. 284, Ex. 7 para. 19 ("It is clear from an elementary consideration of geometry and morphology that one can not bend a rectangular strip into a cylinder that does not have a constant cross-section.")).

The spring steel adaptor 20 typically has an outer diameter of 0 .845 inches in its relaxed state....

* * *

After being formed into a circular shape, the inside diameter of the spring steel adaptor 20 of FIGS. 11, 12, and 13 is typically 0.782 inches.

* * *

Said circular spring metal adaptor being less than a complete circle that is of a relaxed diameter less than the diameter of the hole into which it is to be inserted ....

(Doc. 284, Ex. 3 at cols. 5, 7, 9.)

Bridgeport also relies on the prosecution history to support its proposed construction. The U.S. Patent & Trademark Office initially rejected claims 1 and 13 of the parent patent, the '164 patent, in light of the Recker patent. (*See* Doc. 308, Ex. F at 2.) After amending these claims, Arlington responded to the initial rejection by stating:

Recker discloses a connector for attaching electrical cables to outlet boxes that utilizes a tubular shell member 16 .... The shell member 16 is a tube that forms a complete undivided circle so there can be no *springing apart of the periphery of the tube as provided for in [Arlington's] broad claims 1 and 13*. The versatility of [Arlington's] circular spring metal adaptor permits it to be used with a variety of connectors.

(Doc. 284, Ex. 5 at 5 (emphasis added)). Bridgeport contends that this response demonstrates that Arlington defines "circular spring metal adaptor" in the '164 patent, and therefore the '050 patent, as a tube.

Dr. Brian Williamson, Bridgeport's expert in the field of electrical connectors, testified that "this is a case where one must look to the specification to illuminate the meaning of [circular]." (Doc. 341 at 182.) In doing so, Dr. Williamson noted that the specification only shows and describes a cylindrical adaptor with tangs inward and outward from it. (*See id*. at 182-83.) Dr. Williamson also testified that Arlington could have easily depicted non-constant cross sectional diameters by showing "phantom rings" to illustrate differences in diameter. (*See id*. at 184.) Dr. Williamson noted that "[n]othing in the specification demonstrates, or even suggests, that the patentee ever conceived of, or disclosed in his patent, any adaptor other than one that had a constant cross-section along its axial length." (Doc. 284, Ex. 7 para. 21.)

To counter Bridgeport's arguments, Arlington notes that Bridgeport's proposed construction is contradicted by the preferred embodiment in the specification because this embodiment discloses a ridge on the body of the spring metal adaptor with a different diameter than other portions of the adaptor:

A ridge 54 is pressed into the spring steel adaptor 20 along its length as shown in FIG. 14. The ridge 54 improves the springing action of the outward-bent tensioner tangs 23 and thereby improves the electrical continuity between the adaptor and the electrical junction box. The ridge 54 is typically pressed out to an *outer diameter of 0.875 inches*.

The spring steel adaptor 20 of FIG. 16 is typically *0.838 inches in outer diameter measured across the flat surface of the spring*.

(Doc. 284, Ex. 3 at col. 8, lines 12-19.) Arlington also emphasizes that "*nowhere* in the entire patent specification or file history of the '050 Patent, or its parent, the '164 Patent, does the patentee describe the adaptor as 'cylindrical,' 'tubular,' or having a diameter that 'remains substantially constant along it axial length.' " (Doc. 286 at 15-16.) With respect to the prosecution history relied on by Bridgeport, *see supra,* Arlington contends that the terms "tube" and "tubular" refer to the Recker device, not the circular spring metal adaptor in the '164 and '050 patents. Arlington's expert, Dr. Christopher Rahn, reiterated these arguments during his testimony at the claim construction hearing. He also stated that the '050 patent does not require the adaptor to be formed from a rectangular strip of metal. (*See* Doc. 308, Ex. A at 2.)

The court will construe "circular" with respect to the three-dimensional adaptor to mean "having circular cross-sections." This construction is supported by the claim language and the specification. The adaptor is described in the claims and the specification as being inserted into a round hole FN6 in a junction box. The claims of the '050 patent do not address the diameter of the adaptor along its axial plane. Nor does the specification. Although the specification describes the flat surface of the adaptor using a single diameter, the specification is replete with different diameters at various cross sections of the adaptor where the tangs or ridge are located. (*See, e.g.,* Doc. 284, Ex. 3 at col. 8.) Likewise, there is nothing in the specification regarding the operation of the adaptor that requires a cylindrical adaptor. Therefore, contrary to Bridgeport's assertion, the specification does not implicitly define "circular" as cylindrical or tubular and the court will not import such a limitation from the specification. Accordingly, the court will construe "circular" to mean "having circular cross-sections."

FN6. Although the patent does not explicitly describe the hole as round, the entire patent, including the figures, reveals that the hole in the junction box is indeed round. (*See, e.g.,* Doc. 284, Ex. 3 at col. 9, lines 28 (using the term "diameter" when describing the hole)); *id*. at col. 5, lines 57-59 ("The *diameter* of the standard hole in the electrical junction box ... is 0.875 inches." (emphasis added))).

B. "*Spring Metal Adaptor*"

Bridgeport contends that the term "spring metal adaptor" should be construed to mean "an adaptor that is a split ring, such that there is a gap which permits the diameter of the adaptor to be changed." FN7 (Doc. 283 at 21.) Arlington argues that this term simply means "an adaptor that is made of spring metal." (Doc. 286 at 19.) The evidence does not support Bridgeport's proposed limitation.

FN7. The meaning of the separate terms "spring metal" and "adaptor" is not in dispute. Arlington incorrectly states that the court previously construed the term "spring metal." (*See* Doc. 286 at 20); *see also* Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 290 F.Supp.2d 508, 521-28 (M.D.Pa.2003) (construing the terms "surrounding the leading end," "lanced," "carried on the intermediate portion," "smooth," "relaxed diameter," and "less than a complete circle"). The court need not address this issue, however, because the

term is not in dispute.

In arguing for the split ring limitation, Bridgeport relies on the specification, claim 7 of the '050 patent, the prosecution history of the parent patent, and expert testimony. The specification, Bridgeport contends, implicitly defines spring metal adaptor as a split ring because it consistently depicts a split ring and contains the following description:

The circular metal spring adaptor 20 *has an opening that results from not forming a complete circle*. When the outward-bent tangs or spring locking members are bent inward to permit the adaptor to be inserted in a hole, there is also a slight reduction in the diameter by the *opening* narrowing, therefore, there are two spring actions involved during insertion.

(Doc. 284, Ex. 3 at col. 3, lines 20-27 (emphasis added)). Bridgeport also points to the following language in the '164 patent's prosecution history:

The shell member 16 [of the Recker patent] is a tube that forms a *complete undivided circle* so there can be no springing apart of the periphery of the tube as provided for in [Arlington's] broad claims 1 and 13. The versatility of [Arlington's] circular spring metal adaptor permits it to be used with a variety of connectors.

(Id., Ex. 5 at 5 (emphasis added)). Bridgeport argues that this language demonstrates that Arlington "expressly informed the examiner-and the world-that their 'circular spring metal adaptor' was different from Recker because it was *not* a 'complete undivided circle' and therefore permitted 'springing apart of the periphery of the tube.' " (Doc. 283 at 24.)

Bridgeport's expert, Dr. Williamson, reiterates the arguments above. He also notes that every embodiment in the specification includes a connector with a shoulder at the leading end and that the specification explains that a "*slight force* is required to push the spring steel adaptor 20 over the raised shoulder 30 which is typically 0.848 inches in diameter." (Doc. 284, Ex. 3 at col. 5, lines 38-41 (emphasis added)). If only slight force is required to push the spring metal adaptor over the shoulder, Dr. Williamson contends, the adaptor must be split. Dr. Williamson and Bridgeport note that claim 7 of the ' 050 patent contains this shoulder requirement on the connector, but, like claim 8, does not contain an express "split ring" limitation to the spring metal adaptor of claim 7. Using the measurements of specific embodiments in the specification, Dr. Williamson argues that claim 7 supports the "split ring" limitation for the term "spring metal adaptor" because an unsplit adaptor in claim 7 would become permanently deformed when the adaptor was pushed over the shoulder.FN8

FN8. Dr. Williamson also believes that claim 8 requires a shoulder on the connector, despite no such express language in the claim. (*See* Doc. 341 at 217.)

Arlington relies on the difference between claims 1 and 8 of the '050 patent, the prosecution history of the parent patent and the '050 patent, and expert testimony to support its proposed construction of "spring metal adaptor." Claim 1 of the '050 patent reads, in pertinent part, as follows:

A quick connect fitting for an electrical junction box comprising:

* * *

a circular spring metal adaptor surrounding said leading end of said electrical connector which has a leading end, a trailing end, and an intermediate body;

* * *

said circular spring metal adaptor being *less than a complete circle* that is of a relaxed diameter less than the diameter of the hole into which it is to be inserted with said spring locking members extending radially outward beyond the diameter of the hole into which they are to be inserted; ....

(Doc. 284, Ex. 3 at col. 9 (emphasis added)). Notably, Arlington points out, claim 8 does not include the "less than a complete circle" limitation from claim 1.

Arlington asserts that the prosecution history of the '164 and '050 patents demonstrates that "spring metal adaptor" is not confined to split rings. The originally-filed claims 1 and 2 of the '164 patent did not contain a split ring limitation.FN9 (*See* Doc. 308, Ex. E at 12.) Although the Examiner *rejected* originally-filed claim 1 "as being clearly anticipated by Recker" (*see* id., Ex. F at 2), the Examiner only *objected to* originally-filed claim 2 because it was dependent on a rejected base claim, i.e, originally-filed claim 1 (*see* id. at 3). Importantly, the Examiner stated that originally-filed claim 2 "would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims." (Id.) In seeking to have the ' 164 patent issued, Arlington did not rewrite claim 2 in independent form. Instead, Arlington chose to amend originally-filed claim 1 to include a "less than a complete circle" limitation to distinguish the claim from the Recker patent. (*See* Doc. 284, Ex. 2 at col. 9; *see also* Doc. 284, Ex. 5 at 5 ("Both Claims 1 and 13 have been amended in a manner to distinguish them from Recker.")).FN10 However, in the continuing patent application, which was issued as the '050 patent, Arlington rewrote originally-filed claim 2 in independent form and advised the Examiner that:

FN9. Originally-filed claims 1 and 2 of the '164 patent read:
1. A quick connect fitting for an electrical junction box comprising:
a hollow electrical connector through which an electrical conductor may be inserted having a leading end thereof for insertion in a hole in an electrical junction box;

a circular spring metal adaptor surrounding said leading end of said electrical connector which also has a leading end, a trailing end, and an intermediate body;

at least two spring locking members carried by said metal adaptor that spring inward to a retracted position to permit said adaptor and locking member to be inserted in a hole in an electrical junction box and spring outward to lock said electrical connector from being withdrawn through the hole; and

an arrangement on said connector for limiting the distance said connector can be inserted into the hole in the

junction box.

2. The quick connect fitting of claim 1 which further includes:
at least two outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor which engage the side walls of the hole in the junction box into which said adaptor is inserted.

(Doc. 308, Ex. E at 12.)
FN10. Originally-filed independent claim 13 was also rejected by the Examiner "as being clearly anticipated by Recker." (*See* Doc. 308, Ex. F at 2.) As with originally-filed independent claim 1, Arlington amended claim 13 by adding a "split" limitation to the spring metal adaptor. (*Compare* Doc. 308, Ex. E at 13-14, *with* Doc. 284, Ex. 2 at col. 10.) With the amendments, all claims that issued in the '164 patent contain the "less than a complete circle" or "split" limitation regarding the spring metal adaptor. (*See* id. at cols. 8-10.)

Claim [8] is based on combining *original* claims 1 and 2 and since the first Official Action in the parent application indicated that claim 2 contained allowable subject matter if combined with the independent claim, this claim should be allowable.
(Doc. 308, Ex. J at 5 (emphasis added)). This claim was allowed without objection. (*See* id., Ex. K.)
Arlington's expert, Dr. Rahn, reiterates the arguments above. He also notes that an unsplit adaptor could be "press fit" onto a connector with a shoulder.FN11
FN11. Dr. Williamson acknowledged at least one instance where an unsplit ring goes over a shoulder in a product based on the Conners patent. (*See* Doc. 341 at 218.)

The court will construe "spring metal adaptor" to be "an adaptor made of spring metal." This construction is based on the claim language, the specification,FN12 and the prosecution history of the '164 and '050 patents. Reading in a "split ring" limitation to the term "spring metal adaptor" renders the "less than a complete circle" limitation of claim 1 superfluous. *See* AllVoice Computing PLC v. Nuance Commc'ns, Inc., 504 F.3d 1236, 1247 (Fed.Cir.2007) ("[C]laim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent claim superfluous." (citations omitted)); Phillips, 415 F.3d at 1314 ("Differences among claims can also be a useful guide in understanding the meaning of particular claim terms."); *see also* Arlington Industries, Inc., 290 F.Supp.2d at 523. The presumption of claim differentiation is not rebutted by the specification or prosecution history of the ' 164 patent, as Bridgeport contends. Indeed, the prosecution history supports the court's construction as Arlington clearly chose to write claim 8 of the '050 patent without the "split ring" limitation of the ' 164 patent. It is undisputed that originally-filed claims 1 and 2 of the ' 164 patent, which became claim 8 of the '050 patent, did *not* contain a "split ring" limitation. Notably, while all of the claims of the ' 164 patent contain an express "split ring" limitation, only some of the claims in the ' 050 patent contain such an express limitation. *See* Saunders Group, Inc. v. Comfortrac, Inc., 492 F.3d 1326 (Fed.Cir.2007) ("When the patentees filed the continuation application, they omitted [a] limitation from some, but not all, of the new claims. Had they omitted the limitation from all of the claims, it might be argued that the limitation was assumed to be present and did not need to be explicitly recited. Making such a change to only some of the claims, however, is a strong indication that the claims not reciting [the limitation] were not intended to require [the limitation].").

FN12. The court notes that the specification includes the originally-filed claims. *See N*. Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 938 (Fed.Cir.1990) ("The original claims as filed are part of the patent specification.").

Bridgeport urges the court to read a "split ring" limitation from the specification into the claims. The court declines to do so. Given the language of all of the claims in the '050 patent and the prosecution history of the ' 164 and '050 patents, the meaning of "spring metal adaptor" is clear. The drawings and language of the specification relied on by Bridgeport and its expert merely refer to specific embodiments of the invention with split rings. The specification clearly warns that such embodiments "should not be construed as limiting the scope of the invention." (Doc. 284, Ex. 3 at col. 8.) *See* Phillips, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments."); *see also* PBI Performance Prods., Inc. v. NorFab Corp., 514 F.Supp.2d 732, 739 (E.D.Pa.2007). Therefore, the court will not import a "split ring" limitation from the specification into the claims of the patent. Accordingly, the court will construe "spring metal adaptor" to be "an adaptor made of spring metal."

C. "*Outwardly Sprung Members*"

Bridgeport contends that the term "outwardly sprung members" should be construed to mean "members bent outward at an angle relative to the normal plane of the adaptor." (Doc. 341 at 34.) Arlington argues that "outwardly" means "towards the outside" and "sprung members" means "members that display resiliency." (Doc. 286 at 26, 29.) The parties do not appear to dispute that "outwardly" means "towards the outside of the adaptor." Therefore, the court's analysis will focus on the construction of "sprung members." The evidence supports Bridgeport's construction.

Bridgeport notes that the "outwardly sprung members" of claim 8 are referred to as tensioner tangs in the specification.FN13 Within the description and operation sections of the specification, these tensioner tangs are discussed twenty-six times and each time are described as "outward-bent." (*See* Doc. 284, Ex. 3 at cols. 3-8.) In addition, Bridgeport states that the figures of the '050 patent consistently and exclusively depict the tensioner tangs as being bent outward, away from the main body of the adaptor. Bridgeport also supports its proposed construction by pointing to the diameter measurements in the specification-the specification describes the tensioner tangs as having an outer diameter greater than that of the adaptor itself.

FN13. Arlington does not dispute this assertion.

Bridgeport's expert, Dr. Williamson, testified at the claim construction hearing regarding the distinction between the terms "spring" and "sprung." According to Dr. Williamson, "spring" involves elastic deformation or resiliency such that an item will bend and return to its starting position. "Sprung" involves plastic deformation such that an item is permanently bent into a different position. (*See* Doc. 341 at 188-89.) Dr. Williamson explained that metal that has been "plastically deformed and sprung in the plastic [ ] sense does not stop ... from having elasticity and springiness in the elastic sense." (*Id*. at 223.)

Arlington and its expert, Dr. Rahn, argue that the plain and ordinary meaning of "sprung members" is members that display resiliency. (*See* Doc. 286 at 29-31; Doc. 341 at 101-02.) In support of this definition,

they point to the dictionary definition. (*See* Doc. 286, Ex. C.) Arlington notes that this resiliency is required for the tensioner tangs to perform their function of maintaining firm contact with the side walls of the junction box to ensure electrical continuity or ground. Arlington also states that claim 8 involves "an adaptor that has already been formed, heat treated, and assembled" (Doc. 286 at 33), whereas Bridgeport's proposed construction describes the formation of the tensioner tangs. Finally, Arlington contends that Bridgeport is attempting to import limitations from the embodiments of the specification into claim 8.

The court will construe "outwardly sprung members" to be "members bent outward at an angle relative to the normal plane of the adaptor." This construction is supported by the claims and the specification. When claiming other types of members on the adaptor, Arlington chose the term "spring." For example:

at least two *spring* locking members carried by said metal adaptor that *spring* inward to a retracted position ... and *spring* outward to lock said electrical connector from being withdrawn through the hole ....

(Doc. 284, Ex. 3 at col. 10 (emphasis added)). That Arlington chose a different term, "sprung," for the tensioner tangs is indicative of a different meaning. The court finds that a person of ordinary skill in the art would understand "sprung" to refer to plastic, or permanent, deformation. This understanding is confirmed by the specification, which always depicts and describes the tensioner tangs as "outward-bent." Accordingly, the court will construe "outwardly sprung members" to be "members bent outward at an angle relative to the normal plane of the adaptor."

D. "*Carried by Said Metal Adaptor Near Said Trailing End of Said Adaptor*"

The entire third clause of claim 8 reads:

at least two outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor which engage the side walls of the hole in the junction box into which said adaptor is inserted.

(Doc. 284, Ex. 3 at col. 10.) Bridgeport argues that the term "carried by said metal adaptor near said trailing end of said adaptor" within this clause should be construed to mean that the outwardly sprung members are "attached to the adaptor at a point that is between the trailing end and the mid-point of the adaptor." (Doc. 283 at 40.) Arlington contends that "carried by" means "part of the metal adaptor" and that "near said trailing end of said adaptor which engage the side walls of the hole in the junction box" refers to the location where the outwardly sprung members engage the side walls of the hole in the junction box. (Doc. 286 at 36.) The evidence supports Arlington's broader construction.

To support its position, Bridgeport refers to figures in the specification which only show the outwardly sprung members attached to the adaptor in close proximity to the trailing end or mid-point of the adaptor, i.e., *not* near the leading end of the adaptor. (*See* Doc. 284, Ex. 3, figs. 1, 4, 8, 11.) Bridgeport's expert, Dr. Williamson, opines that the plain and ordinary meaning of the disputed language is that the outwardly sprung members are attached, or joined, to the adaptor at places near its trailing end. (*Id.,* Ex. 7 para. 30.)

Bridgeport also argues that Arlington improperly attempts to create two separate limitations-"carried by said metal adaptor" and "near said trailing end of said adaptor"-and to read these limitations out of context. However, it is Bridgeport's proposed construction that does not consider the entire limitation in context .FN14 *See* Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed.Cir.1999) ("Proper claim construction ... demands interpretation of the entire claim in context, not a single element in

isolation."). The entire third clause of claim 8 involves the functioning of the outwardly sprung members (i.e., the tensioner tangs). This functioning is described in various embodiments in the specification as follows:

FN14. Contrary to Bridgeport's assertion, Arlington does not propose a construction for "near said trailing end of said adaptor" alone. Rather, Arlington proposes a construction for "near said trailing end of said adaptor *which engage the side walls of the hole in the junction*." (Doc. 286 at 36 (emphasis added)).

After the connector is pushed in completely, the three outward-bent tensioner tangs 23 exert force on the exterior wall of the electrical junction box 38, keeping the connector under tension and firmly in place against the wall....
The outward-bent tensioner tangs 23 provide electrical continuity or ground between the spring steel adaptor 20 and the wall of the electrical junction box 38 by keeping the two in firm contact....

* * *

After the outward-bent locking tangs 22 are locked in place, the outward-bent tensioner tangs 23, at 0.910 inch diameter, exert tension between the spring steel adaptor 20 and the inner circumference of the opening in the electrical junction box.

(Doc. 284, Ex. 3 at cols. 6, 8.) The specification makes no reference to the outwardly sprung members being attached or joined to the adaptor. Nor does it place any importance on where such "attachment" may occur. It is clear from the specification and the claim itself that the importance of the location of the outwardly sprung members is to enable the members to engage with the wall of the junction box. Indeed, the specification reveals that an outward-bent *locking* tang will become a *tensioner* tang (i.e., an outwardly sprung member) if it does not pass through the wall of the junction box such that it "provide[s] tension and electrical continuity between the spring steel adaptor 20 and the electrical junction box." (*See id*. at col. 7, lines 4-9.)

The court finds that a person of ordinary skill in the art would *not* give this disputed term the narrow construction that Bridgeport proposes. The specification and the claim reveal a broad meaning that focuses on the functioning of the outwardly sprung members. Accordingly, the court will construe "carried by said metal adaptor near said trailing end of said adaptor" to be "part of said metal adaptor with a portion of each member located near said trailing end of said adaptor." FN15

FN15. Because the court rejects Bridgeport's proposed construction, the court need not address Arlington's judicial estoppel and law of the case arguments (*see* Doc. 286 at 38-40; Doc. 308 at 50-56).

III. *Conclusion*

The court will construe the disputed claims as set forth in this decision. An appropriate order will issue.

ORDER

AND NOW, this 25th day of February, 2008, upon consideration the parties' contentions regarding the proper construction of claim terms, and for the reasons set forth in the accompanying memorandum, it is

hereby ORDERED that the following claim construction shall apply in the above-captioned matter:

1. "Circular spring metal adaptor" means "an adaptor made of spring metal that has circular cross sections."

2. "Outwardly sprung members carried by said metal adaptor near said trailing end of said adaptor" means "members bent outward at an angle relative to the normal plane of the metal adaptor that are part of said adaptor with a portion of each member located near said trailing end of said adaptor."

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