United States District Court, N.D. Indiana, Fort Wayne Division.

#### **INVISIBLE FENCE,**

INC. Plaintiff. v. **PERIMETER TECHNOLOGIES,** INC. Defendant.

No. 1:05-CV-361

May 25, 2006.

Jon A. Bragalone, Larry L. Barnard, Carson Boxberger LLP, Fort Wayne, IN, Todd T. Taylor, Taylor & Aust PC, Avilla, IN, for Plaintiff.

Gregory F. Ahrens PHV, John Paul Davis PHV, Wood Herron & Evans LLP, Cincinnati, OH, Jason M. Theobald PHV, Perimeter Technologies, Blue Ash, OH, for Defendant.

## **OPINION AND ORDER**

COSBEY, Magistrate J.

The case law says that before we can determine if a patent infringement has occurred, before we can read the patent on the accused device, we must first decide, as a matter of law, what the patent truly claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 367, 376 (Fed.Cir.1995) (en banc), *aff'd* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). That job is the focus of this Order.

Overall, this case is about a patent for an electronic device that attaches to an animal's collar that generates a shock if the animal gets too close to a buried wire. (*See* Compl. para.para. 2-5.) At present, however, we are only concerned with one component of the device, the battery pack, and generally only one claim of the patent. (Compl.para. 4.)

## I. FACTUAL AND PROCEDURAL BACKGROUND

Invisible Fence filed a complaint for patent infringement against Perimeter alleging, among other things, that Perimeter infringed United States Patent Number 5,445,900 (" '900 Patent"), which Invisible Fence has owned since its issuance. FN1 (Compl.7-8.) The patented invention at issue is a battery pack that powers an electronic receiver worn by an animal as part of an electronic pet containment system. *See* '900 Patent col.1 1.6-10 (filed Aug. 18, 1993). The battery pack is removable from the receiver so the battery may be replaced. *See* '900 Patent col.1 1.28-46. Invisible Fence alleges that Perimeter manufactures a battery pack infringing claims 9, 11, and 14 of the '900 Patent. FN2 The parties disagree about the meaning of various terms in claim 9, which reads as follows:

FN1. Invisible Fence also alleged federal and common law trademark infringement, unfair competition, and trade dress infringement against Perimeter, but these claims are not relevant to the claim construction.

FN2. In the '900 Patent, claim 14 is dependent on claim 11, which is dependent on claim 9.

9. An electronic device comprising:(a) a housing having a receptacle; and

(b) a battery pack removably insertable into the receptacle of the housing for supplying power to the electronic device including:

(1) a battery holder shaped for containing a battery having first and second terminals, the battery holder having an opening at one end and a generally closed base at the other end;

(2) a contactor having a spring located inside the battery holder between the base of the battery holder and the battery for biasing the battery toward the opening of the battery holder and at least one contact for electrical connection with the first terminal of the battery, the contact extending outside the opening of the battery holder for electrical connection with the electronic device; and

(3) a mounting connector on the battery holder for removably mounting the battery pack with the receptacle of the housing.

'900 Patent col.6 1.27-44. FN3

FN3. Claim 11 provides:

11. The device in accordance with claim 9 wherein the receptacle comprises at least one internal guide groove and the mounting connector comprises at least one external lug on the battery holder of the battery pack for movement within the guide groove in the receptacle for guiding and locating the battery pack within the receptacle of the housing.

'900 Patent col.6 1.57-63.

Claim 14 provides:

14. The device in accordance with claim 11 wherein the guide groove is generally L-shaped having a longitudinal section to guide the lug for longitudinal movement of the battery pack within the receptacle to permit insertion of the battery pack into the receptacle and an adjoining transverse section to permit the battery pack to be moved within the receptacle to hold the battery pack in position.

# '900 Patent col.7 1.11-18.

Specifically, the parties dispute the construction of the following terms: (1) "an opening," (2) "closed base," (3) "biasing," (4) "a contactor having a spring ... and at least on contact," (5) "a contactor," (6) "a spring," (7) "at least one contact," (8) "located inside," (9) "for electrical connection," (10) "the first terminal of the

battery," and (11) "extending outside the opening." (Joint Claim Construction & Pre-Hearing Statement 3-5.) This Order will construe those terms as a matter of law.

# **II. LEGAL STANDARD**

Patent infringement analysis involves two steps: (1) claim construction, which is a question of law; and (2) comparison of the construed claims to the accused product, which is a question of fact. *Markman*, 52 F.3d at 376; Wilson Sporting Goods Co. v. Hillerich & Bradsby Co., 442 F.3d 1322, 1326 (Fed.Cir.2006).

Claim construction begins with the actual words of the claim. Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n, 383 F.3d 1352, 1364 (Fed.Cir.2004) (citing Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1201 (Fed.Cir.2002)). There is a "heavy presumption" that the terms in patent claims receive "their ordinary and accustomed meaning." Johnson Worldwide Assocs. v. Zebco Corp., 175 F.3d 985, 989 (Fed.Cir.1999). The ordinary meaning is determined from the perspective of "a person of ordinary skill in the relevant art." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed.Cir.2002).

To ascertain the meaning of the claim, courts first examine the intrinsic evidence, i.e., the patent itself, because it is "the most significant source of the legally operative meaning of disputed claim language." Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1332 (Fed.Cir.2001) (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996)). All intrinsic evidence, however, is not equal; courts should begin by examining the claim language, followed by the specification, and "concluding with the prosecution history, if in evidence." *Id*. (citations omitted). If the claim language remains unclear after examining the intrinsic evidence, courts may rely on extrinsic evidence (e.g., expert testimony, inventor testimony, technical writings). *Id*.

# **III. DISCUSSION**

# A. Introduction

Here, the parties primarily differ regarding the proper weight to be given to the '900 Patent's written specifications. FN4 Perimeter's proposed constructions generally rely upon intrinsic evidence taken from the written specification of the patent, specifically a section entitled "Detailed Description of the Preferred Embodiments" ("Description"). FN5 Invisible Fence, however, counters that the meaning of the disputed terms are clear and unambiguous on the face of claim 9, concluding that the language of the patent should not be limited by the preferred embodiment.

FN4. A patent's written specification is simply a "description of the invention, and of the manner and process of making and using it...." 35 U.S.C. s. 112.

FN5. A preferred embodiment is defined as "the best mode contemplated by the inventor of carrying out his invention." 35 U.S.C. s. 112.

The correct claim construction "stays true to the claim language and most naturally aligns with the patent's description [i.e., specification] of the invention." Nystrom v. TREX Co., Inc., 424 F.3d 1136, 1142 (Fed.Cir.2005) (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed.Cir.1998)). Care must be taken, however, when utilizing the specification to interpret claim language,

because although courts must "interpret the claims in light of the specification," they must also "avoid impermissibly importing limitations from the specification" into the claim construction. Alloc, Inc. v. Int'l Trade Comm'n, 342 F.3d 1361, 1370 (Fed.Cir.2003) (citing *Markman*, 52 F.3d at 979; Comark Comm'n v. Harris Corp., 156 F.3d 1182, 1186 (Fed.Cir.1998)). Indeed, the Federal Circuit has specifically cautioned against limiting the scope of the claim to the preferred embodiment. *See* Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1303 (Fed.Cir.1997) ("While examples disclosed in the preferred embodiment may aid in the proper interpretation of a claim term, the scope of a claim is not necessarily limited by such examples."); Intervet American, Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1053 (Fed.Cir.1989) ("[L]imitations appearing in the specification will not be read into claims, and ... interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper." ') (citation omitted).

Accordingly, courts should examine whether "the specification read as a whole suggests that the very character of the invention requires the limitation [as in the preferred embodiment] be a part of every embodiment" or whether it is merely one of various possible iterations encompassed by the claim language. Alloc, Inc., 342 F.3d at 1370. It is proper to limit the claim to the preferred embodiment when the specification clearly indicates that the claimed invention is narrower than the claim language. *Id.* (citing SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1345 (Fed.Cir.2001). It is impermissible, however, "to read the one and only disclosed embodiment into a claim without other indicia that the patentee so intended to limit the invention." *Id.* (citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1327 (Fed.Cir.2002).

Therefore, as the reader will see, this Court will not, as Perimeter proposes, take the limitations from the single disclosed embodiment and import them into claim 9, unless there is an indication that the claim is to be limited. Instructive in this regard is the last paragraph in the Description, which expressly reveals that the patentee did not intend the patent claims to be limited by the preferred embodiment:

It will be recognized by those skilled in the art that changes or modifications may be made to the abovedescribed embodiments without departing from the broad inventive concepts of the invention. It should therefore be understood that this invention is not limited to the particular embodiments described herein, but is intended to include all changes and modifications that are within the scope and spirit of the invention as set forth in the claims.

'900 Patent col.9 1.55-63. Accordingly, we will not read the preferred embodiment into claim 9 unless the language of the claim, along with the written specification, clearly mandates such a limitation. *See* Dayco Prods., Inc. v. Total Containment, Inc., 258 F.3d 1317, 1327 (Fed.Cir.2001) (citing Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1347 (Fed.Cir.1998); SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1121 (Fed.Cir.1985)) ("[A]dding limitations to claims not required by the claim terms themselves, or unambiguously required by the specification or prosecution history, is impermissible.").

Accordingly, based on these principles, the Court will now address the disputed claim terms in order.

## **B.** Construction of Disputed Terms in Claim 9

## 1. "An opening" and "closed base"

Claim 9 includes "a battery holder shaped for containing a battery having first and second terminals, the battery holder having *an opening* at one end and a generally *closed base* at the other end...." '900 Patent

col.11 1.32-35 (emphasis added). Invisible Fence asserts that the term "an opening" means "[a]n opening of the battery holder at an end opposite the generally closed base," and the term "closed base" means "[a]n end of the battery holder that is opposite the opening." (Joint Statement 3.) Perimeter, however, submits that "an opening" is defined as "[t]he open end of the cup-shaped battery holder through which the battery is inserted," and "closed base" is defined as "[t]he end of the single-piece cup-shaped battery holder that is opposite the open end through which the battery is inserted." (Joint Statement 3.)

Perimeter argues that the opening and the closed base are at opposite ends of a cup-shaped battery holder, while Invisible Fence counters that the claim language does not limit the battery holder to being cup-shaped. Perimeter supports its proposed construction by citing the Description, which provides that "the battery holder ... is *generally cup-shaped* having a generally tubular sidewall ... and a hollow interior with an opening at one end and a closed base ... at the other," '900 Patent, col.6 1.8-11. Perimeter additionally cites to the Summary of the Invention ("Summary"), asserting that the following language necessarily depicts a cup-shaped battery holder: "The battery pack ... includes a generally hollow holder for receiving and containing a battery ... [which] is generally cylindrical in shape having an opening at one end and a generally closed base at the other end." '900 Patent col.1 1. 1.54-58.

To adopt Perimeter's position, we would have to read the limitation from the Description into the claim construction. *See* Dayco Prods., 258 F.3d at 1327. Claim 9, however, merely provides that the battery holder is "shaped for containing a battery." '900 Patent col.11 1.32. Thus, the clear language of claim 9 does not limit the battery holder to a particular shape, and certainly does not limit it to being cup-shaped.

Perimeter also claims that the battery holder is a single-piece design, with the "closed base" and the "generally tubular sidewall" integrally connected as illustrated in the drawings. *See* '900 Patent figs. 8,10. However, claim 9 does not specify that the battery holder is single-piece; in fact, the written specification, including the Description, never describes the battery holder that way. Therefore, the Court will not import this limitation into claim 9. *See* Dayco Prods., 258 F.3d at 1327.

Furthermore, Perimeter proposes that the opening is defined as the end through which the battery is inserted and the base is defined as opposite the opening through which the battery is inserted. Any requirement, however, which limits the insertion of the battery is clearly not found in claim 9 or in the written specifications. Indeed, Perimeter points to fig. 3, "an enlarged perspective view of the battery pack," in which the battery is seemingly inserted through the opening, as the only intrinsic evidence in support of its proposed construction.

Perimeter does urge a common-sensical approach, arguing that the opening is the only possible way that the battery can be inserted into the battery holder, since the battery cannot be inserted through a closed base. This argument, however, seemingly depends upon the notion that the closed base and tubular sidewall are integrally connected-a concept we already have rejected. In addition, Invisible Fence proposes that even in a single-piece design, the battery could be inserted through the base before it is ultrasonically welded to the tubular sidewall. FN6 Because generally the entire battery pack, and not just the battery, is replaced when the battery weakens, Invisible Fence's proposition is consistent with the invention's purpose-to make battery replacement simple. *See* '900 Patent col.1 1.40-46.

FN6. We do not suggest that the manufacturing process is limited in that way; indeed, the patent poses no requirements regarding the manufacturing process of the battery pack. Instead, Invisible Fence offered this explanation as just one example of how the claim could encompass more than just the limitation proposed

by Perimeter.

Because claim 9 makes no reference to the insertion of the battery, the Court will not limit the definition of the opening to "the end ... through which the battery is inserted." FN7

FN7. Invisible Fence also supports its argument with intrinsic evidence from the prosecution history, specifically the Office Action dated April 5, 1994, when the Examiner stated that "the ends of the spring are recited as being in contact with the base of the battery pack, but they appear to actually be located opposite the base, at the open end closed by the retaining ring." U.S. Dep't of Commerce Patent & Trademark Office, *Examiner's Action* 2 (Apr. 5, 1994). Invisible Fence claims that because the Examiner made no reference to the insertion of the battery, the battery holder being cup-shaped, or the battery holder being single-piece, the Office Action reveals that claim 9 should not be narrowly construed in conformance with Perimeter's proposed construction. However, the Court does not find the prosecution history particularly helpful here. The Office Action ostensibly has little to do with defining the opening or the closed base, since the Examiner was merely seeking clarification regarding the configuration of the "ends of the spring." Regardless, because the Court finds the language of claim 9 to be unambiguous, we need not rely on the prosecution history. *See* Interactive Gift Exp., 256 F.3d at 1332.

Finally, the parties dispute how the retaining ring defines the opening. Invisible Fence asserts that once the retaining ring is ultrasonically welded to the tubular sidewall, *see* '900 Patent col.7 1.44-47, the opening and the central aperture of the retaining ring become "one in the same." (Pl.'s Opening Br. 10.) Perimeter counters that the opening and the central aperture cannot be coincident with one another, since the central aperture is necessarily smaller than the opening in order to retain the battery within the holder. The Court agrees that the retaining ring does not define the opening. Because welding the retaining ring to the tubular sidewall is merely a preferred embodiment, it is impermissible to limit the definition of opening to coincide with the central aperture. *See* '900 Patent col.7 1.44-45 ("[The] retaining ring ... may be securely attached to [the] battery holder....")

For the reasons discussed above, the Court construes the term "an opening" to mean "an opening of the battery holder at an end opposite the generally closed base," and interprets the term "closed base" to mean "an end of the battery holder that is opposite the opening."

## 2. "Biasing"

Claim 9 includes "a contactor having a spring located inside the battery holder between the base of the battery holder and the battery for *biasing* the battery toward the opening of the battery holder...." '900 Patent col.11 1.36-39 (emphasis added). Invisible Fence asserts that the term "biasing" should be construed as "[m]echanically biasing or urging," while Perimeter claims that the term means "[e]xerting force in a particular direction, [i.e., the direction of the open end of the battery holder]." (Joint Statement 4.)

Invisible Fence argues that "claim 9 simply states that the spring causes the battery to be biased toward the opening, which can be as a result of a direct force applied by the spring or a reactionary force resulting from the spring." (Pl.'s Opening Br. on Claim Construction 15.) Referencing the basic principle of physics that "for every action, there is an equal and opposite reaction," Invisible Fence explains that the battery is held in place within the battery holder as a result of two opposing forces. Newton's Third Law of Physics, *available* 

*at* http://www.physicsclassroom.com/Class/newtlaws/U2L4a.html. While the spring exerts a force biasing the battery towards the opening, the contact simultaneously exerts a force biasing the battery in the opposite direction. Invisible Fence characterizes the force exerted by the contact as a "reactionary force resulting from the [force of the spring]."

Ultimately, this discourse about opposing forces is utterly irrelevant to the interpretation of claim 9; although other objects could be exerting forces that cause the battery to be biased away from the opening, claim 9 only concerns the spring and the force it exerts in biasing the battery *toward* the opening. Because the Court's duty is to give the words in the claim their ordinary meaning, *see* Johnson Worldwide Assocs., 175 F.3d at 989, we will not construe the language in claim 9 to encompass anything broader than what it explicitly says. Therefore, the Court construes the term "biasing," to mean "exerting force in a particular direction toward the open end of the battery holder." FN8

FN8. In fact, Invisible Fence seemingly concedes that this is the proper construction, since its proposed construction for the term "spring" is "[a] spring for biasing the battery toward the opening ..." *See infra*, Part III.B.3.

## 3. "A contactor having a spring ... and at least one contact"

Claim 9 includes "a *contactor having a spring* located inside the battery holder between the base of the battery holder and the battery for biasing the battery toward the opening of the battery holder *and at least one contact* for electrical connection with the first terminal of the battery...." '900 Patent col.11 1.36-41 (emphasis added). The parties dispute the construction of the terms "a contactor"; "a spring"; and "at least one contact" but do suggest that they overlap, so we will discuss them as an inter-related unit.FN9

FN9. Each party also provides a proposed claim construction for the entire phrase, "a contactor having a spring ... and at least one contact," but because their proposed constructions for this phrase are identical to their proposed constructions for "a contact," a separate discussion concerning that term is unnecessary.

## i. To form "a contactor," the spring and contact arm(s) are not required to be connected

Invisible Fence proposes the following construction of "a contactor": "[a] contactor including a spring and at least one contact, or equivalent thereof," while Perimeter proposes that a contactor is "[a]n electrically conductive component having a pair of elongated contact arms that are interconnected by an elongated flexion spring." (Joint Statement 3.)

Perimeter first claims that the spring and the contact arms are required to be interconnected to form the contactor, while Invisible Fence argues that the spring and the contact arms can be separate pieces.FN10 Perimeter takes its proposed construction from the specification, arguing that because its construction is the only embodiment depicted by the Description and the figures, the specification necessarily limits claim 9. *See* '900 Patent col.6 1.39-42 ("The contactor ... includes two elongated contact arms ... which are interconnected by an elongated flexion spring ...."); col.6 1.65-67 ("The flexion spring ... spans between and connects with the ends of the contact arms ...."); figs. 3, 8, 10. However, the language of claim 9, the Summary, and the doctrine of claim differentiation refute this narrow construction.

FN10. The number of contact arms required by claim 9 will be discussed infra. For purposes of the

discussion, we refer to a pair of contact arms, although we hold that claim 9 can also encompass a contactor with a single contact arm.

The language of claim 9 does not mandate that the spring and the contact arms be connected to each other; indeed, it provides only that the "contactor [has] a spring ... and at least one contact...." '900 Patent col.11 1.36-40. Furthermore, the Summary does not actually preclude the spring and the contact arms from being separate, as it provides that "the electrical contact *may* be connected with one end of the spring for electrical connection with the first terminal of the battery." '900 Patent col.2 1.6-8 (emphasis added). Perimeter's reliance on the written description as well as the drawings is misplaced.

Furthermore, the doctrine of claim differentiation supports a reading of claim 9 whereby the spring and contact arms are separate. The doctrine of claim differentiation stems from "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope." Seachange Int'l, Inc. v. C-Cor Inc., 413 F.3d 1361, 1368 (Fed.Cir.2005) (quoting Karlin Tech. Inc. v. Surgical Dynamics, Inc., 177 F.3d 968, 971-72 (Fed.Cir.1999)). Here, claim 21 provides for "a contact connected with one end of the spring," '900 Patent col.13 1.12-13, while claim 9 makes no reference to the spring and contact arms being connected. Although claim 21 is an independent claim, under claim differentiation "there is still a presumption that two independent claims have [a] different scope when different words or phrases are used in those claims." Seachange Int'l, Inc., 413 F.3d at 1369 (citing Kraft Foods, Inc. v. Int'l Trading Co., 203 F.3d 1362, 1365-69 (Fed.Cir.2000)). Thus, claim 21 is presumed to have a narrower scope than claim 9.FN11

FN11. "[T]he doctrine of claim differentiation is not a hard and fast rule of construction," and therefore "claims that are written in different words may ultimately cover substantially the same subject matter." *Id.* (citations omitted). The presumption created by the doctrine, however, can only be overcome "by a contrary construction dictated by the written description or prosecution history." *Id.* (citing Kraft Foods Inc., 203 F.3d at 1368). Here, the language from the Summary quoted above hardly suggests, let alone dictates, that the contact arms and the spring be connected.

In light of the foregoing, the Court finds that claim 9 does not mandate that the spring and the contact arms be connected.

Invisible Fence includes "or equivalent thereof" in its proposed construction of "a contactor," explaining that this phrase was added to preserve a potential argument under the doctrine of equivalents. The Court, however, is not to consider the doctrine of equivalents when construing claims, because whether the claim includes an equivalent is a question of infringement rather than an issue of claim construction. *See* Dayco Prods., Inc. v. Total Containment, Inc., 258 F.3d 1317, 1327 (Fed.Cir.2001) ("We do not reach the issue of the infringement under the doctrine of equivalents, because that issue must be addressed first under a proper claim construction."); Microsoft Corp. v. Multi-Tech Sys., Inc., Nos. Civ. 00-1412ADMRLE, Civ. 00-1627ADMRLE, 2002 WL 1949755, at (D.Minn. Aug.16, 2002) (declining to address any issues related to the doctrine of equivalents because it is an infringement issue); *Jackson v. Thomson Consumer Elecs., Inc.,* 39 F.Supp.2d 1003, 1008 (S.D.Ind.2001) (articulating that the doctrine of equivalents analysis "is a fact question not at issue in claim construction"). Thus, the Court declines including "or equivalent thereof" in its construction of "a contactor." FN12

FN12. Also included in Perimeter's proposed construction of "a contactor" is the notion that the contactor is an "electrically-conductive component." (Joint Statement 3.) Neither of the parties discuss this specific construction, ostensibly because the contactor must be an electrically-conductive component if it is to make electrical connection with the first terminal of the battery. Therefore, we will include this definition in our construction of "a contactor."

## ii. "A spring" is not limited to an elongated flexion spring

Claim 9 also recites that the contactor has "a spring." Perimeter, looking to the patent's Description, argues that the spring must be an elongated flexion spring. *See* '900 Patent col.6 1.39-42 ("The contactor ... includes ... an elongated flexion spring ....); figs. 3, 8, 10. Claim 9, however, cannot be limited based solely on the preferred embodiment. *See* Ekchian, 104 F.3d at 1303; Intervet American, Inc., 887 F.2d at 1053. Indeed, the Summary indicates that the spring is not necessarily limited to an elongated flexion spring at all, remarking only that "[t]he spring *may* be in the form of an elongated flexion spring...." '900 Patent col.1 1.64-65 (emphasis added).

The broader interpretation of "a spring" is further supported by the doctrine of claim differentiation. Here, claim 20, which is ultimately dependant on claim 9, reads as follows: "The device in accordance with claim 13 or 16 *wherein the spring is an elongated flexion spring* ...." '900 Patent col.12;. 60-61. Claim differentiation is at its strongest "where the limitation sought to be 'read into' an independent claim already appears in a dependant claim." Seachange Int'l, Inc., 413 F.3d at 1368-69 (citing Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed.Cir.2004)). Through the doctrine of claim differentiation, the term "a spring" as used in claim 9 is broad enough to cover various types of springs, while the spring recited in claim 20 is specifically an elongated flexion spring.

Claim 21, which includes "a contactor having an elongated flexion spring ... " '900 Patent col.13 1.5, provides additional evidence that claim 9 should not be limited to an elongated flexion spring. Although claim 21 is an independent claim, under the doctrine of claim differentiation "there is still a presumption that two independent claims have different scope when different words or phrases are used in those claims." Id. at 1369.

In addition to Perimeter's proposed construction with the spring and contact arm forming a unit, each party also provides an independent construction for "a spring." Invisible Fence proposes "[a] spring for biasing the battery toward the opening, or equivalent thereof," while Perimeter proposes "[a] spring for biasing the battery toward the opening and that spans between and connects with the ends of the contact arms at the base of the battery holder." (Joint Statement 4.)

Since both parties ostensibly agree that the spring is "for biasing the battery toward the opening," a point we discussed earlier, we include the limitation "for biasing the battery toward the opening" in our construction of "a spring."

Furthermore, Invisible Fence once again includes the phrase "or equivalent thereof" in its proposed construction of "a spring." We addressed this issue in regards to the construction of "a contactor," and for the reasons stated above, we decline to add "or equivalent thereof" to our construction of "a spring" as well.

Perimeter proposes that the spring "spans between and connects with the ends of the contact arms at the

base of the battery holder." (Joint Statement 4.) Since we earlier concluded that the spring is not required to connect with the contact arms, we decline to include any reference to such a connection in our construction of "a spring." FN13 The language of claim 9, however, supports the inclusion of "at the base of the battery," as it provides that the spring is "located inside the battery holder between the base of the battery holder and the battery... " '900 Patent col.111.37-38.

FN13. Insofar as Perimeter proposes in its construction of "a spring" that claim 9 requires a pair of contact arms, we decline to include this limitation for the reasons to be discussed infra.

# iii. Claim 9 does not limit the term "at least one contact" to a pair of contact arms

Finally, the parties dispute the proper construction of the term "at least one contact." Although Invisible Fence argues that the term is defined as "[o]ne or more electrical contacts for electrical connection with the first terminal of the battery," Perimeter believes that the term means "[a] pair of electrically-conductive elongated arms that are interconnected by an elongated flexion spring." (Joint Statement 4.)

Perimeter again bases its construction on the Description, claiming that because it depicts a pair of contact arms, this limitation must be read into claim 9. *See* '900 Patent col.6 1.39-42 ("The contactor ... includes two elongated contact arms ...."); figs. 3, 8, 10. This construction, however, runs counter to the clear language of claim 9. Giving the language of claim 9 its ordinary meaning, *see* Johnson Worldwide Assocs., 175 F.3d at 989, the phrase "at least one contact" (which also appears in the Summary at col.1 1.63-64) necessarily implies that the number of contact arms is not limited to two and certainly could be one.

To credit Perimeter's argument would mean that the requirement of a pair of contact arms would have to be read into every claim of the '900 Patent. Other claims, however, reveal that the patentee did not intend to limit the invention in this way; for example, claims 1, 7, and 21 include "a contactor having ... *a contact*." '900 Patent col.6 1.5-13, col.6 1.54-61, col.10 1.3-6.

The prosecution history further suggests that the invention is not limited to a dual contact arm design. Upon initial rejection of claims 7 and 21, the Examiner wrote, "the recitation that 'at least one contact' is 'connected with one end of the spring' is confusing, because when there are two contacts (encompassed by the phrase 'at least one'), they are at opposite ends of the spring." U.S. Dep't of Commerce Patent & Trademark Office, *Examiner's Action* 2 (Apr. 5, 1994). The phrase "when there are two contacts" indicates that the Examiner did not view the invention as *always* having two contacts.

For the aforementioned reasons, the Court will not limit the contactor in claim 9 to having a pair of contact arms.FN14

FN14. Also included in Perimeter's proposed construction is the notion that the contact arms are electrically conductive and elongated. (Joint Statement 3.) Neither party discusses these proposed constructions, ostensibly because they are consistent with claim 9. The contact arm(s) would have to be electrically conductive in order to make an electrical connection with the electronic receiver. *See* '900 Patent col.11 1.41-43. In addition, the contact arms should be elongated so they can extend outside the opening to make the electrical connection. *See* '900 Patent col.11 1.41-42.

Invisible Fence adds "for electrical connection with the first terminal of the battery" to its proposed

construction. The Court will specifically discuss the terms "for electrical connection" and "the first terminal of the battery" infra, Parts III.B.5-6. For now, it is enough to say that the phrase "for electrical connection with the first terminal of the battery" modifies the phrase "contactor," and not "at least one contact"; therefore, we decline to include this phrase in our construction of "at least one contact." Finally, in an attempt to support all of its proposed constructions related to "a contactor having a spring ... and at least one contact," Perimeter cited the following language from the patentee's Amendment to the April 5, 1994, Office Action: "As described in the specification, the contactor ... 'includes two elongated contact arms ... which are interconnected by an elongated flexion spring...." 'Amendment 11 (Sept. 8, 1994). Perimeter asserts that this comment limits claim 9 because it does not contain the following caveats: (1) that the contact arms could be separate from the spring, (2) that the spring could encompass more than an elongated flexion spring, and (3) that the contactor could have only one contact arm. The paragraph's thesis, however, clearly indicates that it was only being offered to clarify claims 4 and 20, or stated another way, since the amendment had no relationship to claim 9, the Court is not obligated to import its purported limitations into that claim's construction. Cf. Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1347 (Fed.Cir.1998) (When comments "were made without reference to a particular claim [,] ... arguments made to obtain the allowance of one claim are relevant to interpreting other claims in the same patent.") (emphasis added).

#### iv. Summary

For the foregoing reasons, the Court construes the terms "a contactor having a spring ... and at least one contact" and "a contactor" as follows: "An electrically-conductive component having a spring and at least one contact arm. The spring may, or may not, be interconnected to the contact arm(s)." In addition, the Court interprets the term "a spring" to mean "a spring located between the base of the battery holder and the battery for biasing the battery toward the opening." Finally we define the term "at least one contact" as "one or more electrically conductive elongated contact arms."

#### 4. "Located inside"

Claim 9 includes "a contactor having a spring *located inside* the battery holder between the base of the battery holder and the battery for biasing the battery toward the opening of the battery holder...." '900 Patent col.11 1.36-39 (emphasis added). Invisible Fence's proposed claim construction for the term "located inside" is that it means "[p]artially or completely located inside or within," while Perimeter's proposed construction is that "[t]he spring must be positioned completely within the battery holder and is not exposed outside of the battery holder." (Joint Statement 4.)

The language of claim 9 supports Perimeter's proposed construction, as the spring is "located inside the battery holder between the base of the battery holder and the battery." '900 Patent col.11 1.36-38. For the spring to be located between the base of the battery holder and the battery, it must necessarily be completely within the battery holder. Indeed, the language of the claim contains no indication that the qualifier "partially" should be read into claim 9.FN15

FN15. The written specification does little to elucidate the definition of "inside," as the Summary merely provides that "[t]he battery pack also includes a contactor having a spring located within the battery holder...."900 Patent col.1 1.62-63.

Dictionary definitions also support Perimeter's proposed construction. For example, the Oxford English

Dictionary defines "inside" as "[t]he inner part, or the space within something; the interior," *Oxford English Dictionary, available at* http://dictionary.oed.com/ (2006), suggesting that an object is "inside" if it is located completely within the interior.

Therefore, the Court construes the term "located inside" to mean "the spring must be positioned completely within the battery holder and is not exposed outside of the battery holder."

# 5. "For electrical connection"

Claim 9 includes "a contactor having a spring ... and at least one contact *for electrical connection* with the first terminal of the battery...." '900 Patent col.11 1.36-44. Invisible fence says that the term "for electrical connections" means "[a]llows for electrical connection," and Perimeter argues that it means "[t]he spring and the elongated contact arms make electrical connection to only one terminal of the battery (i.e., the first terminal)." FN16 (Joint Statement 5.)

FN16. Both parties ostensibly agree that Claim 9 clearly reads that the electrical connection is made with the first terminal of the battery.

The parties disagree as to what components of the contactor are required to make the electrical connection. Invisible Fence argues that any combination of contact arm(s) and/or the spring can make the electrical connection, while Perimeter argues that the pair of contact arms and the spring are all required to make the electrical connection.FN17

FN17. Perimeter's claim that there must be a pair of contact arms was rejected supra, Part III.B.3.

As a threshold matter, the Court construes the term "for electrical connection" as modifying "a contactor" and not "at least one contact." If the term were read to modify "at least one contact," then claim 9 would curiously exclude the possibility that the spring might also make an electrical connection with the first terminal of the battery, a position neither party advocates and one clearly not supported by the Summary. *See* '900 Patent col.2 1.1-6 ("The flexion spring may be positioned within the battery holder so that ... a resiliently bowed center portion is positioned for electrically contacting the first terminal of the battery....").

While claim 9 provides that the contactor makes electrical connection with the first terminal of the battery, it does not specify which component makes the connection. The Summary, however, contemplates that any combination of contact arm(s) and/or the spring can make this connection:

The flexion spring *may* be positioned within the battery holder so that the respective ends of the spring are in contact with the base of the battery holder and a resiliently bowed center portion is positioned for electrically contacting the first terminal of the battery when the battery is inserted into the battery holder. The electrical contact *may* be connected with one end of the spring for electrical connection with the first terminal of the battery.

'900 Patent col.2 1.1-8 (emphasis added).

In addition, the doctrine of claim differentiation supports the proposition that the spring is not always

required to make an electrical connection. Claim 20, which is ultimately dependent on claim 9, provides that the spring has a "resilient center portion for electrically contacting the first terminal of the battery." '900 Patent col.12 1.61-64. In sum, a presumption is created whereby claim 20 specifically recites that the spring *must* make the electrical connection, while broader claim 9 merely provides that the spring *may* make the electrical connection. *See* Seachange Int'l, Inc., 413 F.3d at 1368-69.

In light of the foregoing, the Court interprets the term "for electrical connection" to mean "any combination of contact arm(s) and/or the spring makes the electrical connection with the first terminal of the battery."

## 6. "With the first terminal of the battery"

Claim 9 includes "a contactor having a spring ... and at least one contact for electrical connection *with the first terminal of the battery*." '900 Patent col.11 1.36-41 (emphasis added). Invisible Fence proposes that the "first terminal of the battery" is "[o]ne of the two terminals of the battery," while Perimeter argues that a proper reading should be that the "first terminal of the battery is "[t]he anode terminal of the battery that is positioned adjacent to the base, i.e., opposite the open end of the cup-shaped battery holder through which the battery is inserted." FN18 (Joint Statement 5.)

FN18. Perimeter's inclusion of "opposite the open end of the cup-shaped battery holder through which the battery is inserted" was rejected *supra*, Part III.B.1, and therefore will not be considered here.

Perimeter provides no scientific or technical reason for why the first terminal must be the anode terminal, and instead relies on the Description. FN19 *See*, *e.g.*, '900 Patent col.7 1.14-18 ("The battery ... is orientated inside the battery holder ... so that the anode terminal faces the battery base ... and the cathode terminal faces the opening of the battery holder...."). Because the language of claim 9 does not require that the first terminal be the anode terminal, the Court declines to read that limitation into claim 9. *See* Ekchian, 104 F.3d at 1303.

FN19. Indeed, Perimeter does not refute Invisible Fence's argument that the orientation of the anode and cathode terminals of the battery can easily be reversed by switching the mating terminals in the receptacle of the electronic housing device.

Although the first terminal is not limited to the anode terminal, the patent does limit the orientation of the first terminal, specifically positioning it at the closed base. Although claim 9 does not explicitly furnish this limitation, the Summary provides that "[t]he retaining ring includes a central aperture through which the second terminal of the battery is exposed at the opening...." '900 Patent col.2 1.22-24. With the second terminal exposed at the opening, the first terminal must necessarily be positioned at the closed base. Unlike purported limitations made in the Description, statements found in the Summary can be used to limit claim language. *See* C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 864 (Fed.Cir.2004) ("Statements that describe the invention as a whole [such as the Summary], rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term."); Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1348 (Fed.Cir.2004) ("Those statements, some of which are found in the 'Summary of the Invention' portion of the specification, are not limited to describing a preferred embodiment, but more broadly describe the overall inventions....").

The proposition that the cited language in the Summary limits the entire patent is supported by the numerous claims which describe the second terminal as exposed either at the opening or the central aperture. *See* '900 Patent col.10 1.13-14 (claim 1), col.10 1.24-25 (claim 2), col.11 1.7-8 (claim 7), col.11 1.52-54 (claim 10), col.13 1.27-29 (claim 21). Moreover, the claims that specifically provide for the spring to make electrical connection at the base of the battery holder via a resilient center portion provide that this connection is made with the first terminal of the battery. *See* '900 Patent col.10 1.33-36 (claim 4), col.10 1.59-60 (claim 7), col.12 1.61-64 (claim 10), col.13 1.5-12 (claim 21). Accordingly, the patent read as a whole suggests that the "very character of the invention" requires the first terminal to be positioned at the base.FN20 *See* Alloc, Inc., 342 F.3d at 1370.

FN20. Although one could argue that the doctrine of claim differentiation creates a presumption that the cited claims are narrower than claim 9, this presumption is easily overcome. Claim differentiation "can not broaden claims beyond their correct scope, determined in light of the specification and the prosecution history and any relevant extrinsic evidence ... [C]laims that are written in different words may ultimately cover substantially the same subject matter." Seachange Int'l, 413 F.3d at 1369 (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1480 (Fed.Cir.1998)). Given that the Summary and the cited claims above all describe the orientation of the second terminal of the battery as exposed at the opening, and since the specification states nothing to the contrary, it is apparent that the very nature of the invention requires this limitation.

For the foregoing reasons, the Court construes the "first terminal of the battery" as "the terminal positioned at the closed base of the battery holder."

# 7. "Extending outside the opening"

Claim 9 includes "a contactor having a spring ... and at least one contact ..., the contact *extending outside the opening* of the battery holder for electrical connection with the first terminal of the battery...." '900 Patent col.11 1.36-41 (emphasis added). Invisible Fence's proposed construction asks us to read the phrase as "[e]xtending or protruding from the battery holder," while Perimeter proposes the construction, "[t]he electrically-conductive elongated arms of the contactor must extend through and beyond the open end of the battery holder through which the battery is inserted." FN21 (Joint Statement 5.)

FN21. The terms "contactor" and "opening" were construed *supra*, Part III.B.1 and Part III.B.3, and do not require further discussion here.

Invisible Fence claims that the contact arm is not required to extend through the opening of the battery holder, arguing instead that the contact arm must only "extend from the battery holder in an area outside the opening, such that the one or more contacts can electrically connect with the electronic device." (Pl.'s Opening Br. 32.) In support of this argument, Invisible Fence cites to language in the Summary, which provides that "[t]he battery holder also includes ... at least one contact extending externally of the battery holder. " '900 Patent col.1 1.62-64. This argument ignores, however, the Summary's later clarification that "[t]he contact extends outside the opening of the battery holder...." '900 Patent col.2 1.11.

Indeed, Invisible Fence's proposed construction would read the term "the opening" out of the claim, rendering it essentially superfluous, whereas the claim itself necessarily entails that the contact arms will

extend through the opening to reach outside the battery holder.

Moreover, fig. 3 and the Description, when considered along with the language of claim 9, supports a construction requiring the contact arm to extend through the opening. *See* Alloc, Inc., 342 F.3d at 1370. For example, the specification provides, "When the contactor ... is inserted into the battery holder ... each contact arm ... extends generally from the base ... of the battery holder *beyond the opening* of the battery holder ... [.] The ends of the contact arms ... *that project from the open end* of the battery holder are rounded and flared...." FN22 '900 Patent col.6 1.55-60.

FN22. The specification also describes two notches, which are "along the outer periphery of the retaining ring ... to provide passageways for the ends of the contact arms ... projecting from the open end of the battery holder."'900 Patent col.7 1.32-36. During the claim construction hearing, Invisible Fence argued that the notches ostensibly were not part of the opening, suggesting that the contact arms could not possibly extend through the opening. This argument seemingly flows from their previous claim, discussed *supra* Part III.B.1, that the central aperture and the opening are one and the same after the retaining ring is attached. However, as we concluded above, the central aperture does not describe or define the opening. Additionally, the specification ostensibly defines the notches as part of the opening, since the notches provide a "passageway" for the contact arms to "project[ ] from the open end of the battery holder." '900 Patent col.7 1.32-36.

Therefore, we construe the term "extending outside the opening" to mean "extending through and beyond the opening."

## **IV. CONCLUSION**

For the foregoing reasons, the Court interprets the language of claim 9 as set forth above.

SO ORDERED.

N.D.Ind.,2006. Invisible Fence, Inc. v. Perimeter Technologies, Inc.

Produced by Sans Paper, LLC.