United States District Court,
N.D. Illinois, Eastern Division.

SE-KURE CONTROLS, INC,
Plaintiff.
v.
DIAM USA, INC., Pop Displays, USA, LLC, Pop Displays, Inc., and Diam International, Inc,
Defendants.
Diam International, Inc,
Third Party Plaintiff.
v.
Telefonix, Inc,
Third Party Defendant.

June 19, 2008.

Richard Daniel Harris, Cameron Matthew Nelson, Herbert H. Finn, James J. Lukas, Greenberg Traurig, LLP, Chicago, IL, for Plaintiffs.

Lee F. Grossman, Niro, Scavone, Haller & Niro, Mark M. Grossman, Grossman Law Offices, Chicago, IL, for Defendants.

Charles C. Valauskas, Baniak, Pine & Gannon, Chicago, IL, for ThirdParty Plaintiff.

MEMORANDUM OPINION AND ORDER

RONALD A. GUZMAN**, District Judge.**

Plaintiff Se-Kure Controls, Inc. ("Se-Kure") has sued defendants Pop Displays USA, LLC, Pop Displays, LLC, Pop Displays, Inc., Diam USA, Inc, and Diam International, Inc. (collectively hereinafter "Diam") for infringement of U.S. Patent No. RE 37,590 ("the '590 Patent"), which is directed to a security-alarm system used to prevent the theft of portable devices from a retail store display. Diam, in turn, has sued third-party defendant Telefonix, Inc. ("Telefonix") for indemnification. The case is before the Court for construction of eleven claim terms disputed by the parties, FN1

FN1. For purposes of claim construction, defendants Diam and Telefonix have submitted claim construction briefs jointly. The parties initially submitted fifteen terms for claim construction, but only the eleven terms in dispute are addressed in this opinion.

Background

On June 10, 1994, Se-Kure filed patent application no. 258,663 for a retractable sensor for an alarm system on behalf of the inventors, Roger Leyden ("Leyden") and Terrance Surma ("Surma"). (*See* Pl.'s Comply., Ex. A, U.S. Patent No. 5,552,771 at 1.) On August 4, 1994, Leyden and Surma's rights in the application were assigned to Se-Kure. (Id. para. 9.) On September 3, 1996, the application issued as U.S. Patent No. 5,552,771 ("the '771 Patent"). (Id., Ex. A, '771 Patent.)

On February 19, 1997, Leyden and Surma submitted the '771 Patent for a reissue proceeding before the U.S. Patent and Trademark Office ("USPTO"). (*See* Pl.'s Compl., Ex. B, U.S. Patent No. RE 37,590.) After examining the '771 Patent, the USPTO issued U.S. Patent No. RE 37,590 ("the '590 Patent"). (Id.)

The abstract of the '590 Patent states:

A retractable sensor assembly for use with an alarm system to prevent theft of valuable products while eliminating the problem of entangled and unsightly sensor cords is disclosed. The retractable sensor allows the user to grasp the product and pull it to a comfortable position. The invention consists of a housing, a retractor means contained in the housing, a sensor having two states, 1) secured when attached to the product, and 2) unsecured when detached from the product, a multiconductor cable having a first end connected to the sensor, cooperating with the retraction means and a second end extending out of the housing, where the retraction means urges the sensor to the housing, yet allows the sensor to be pulled from the housing when an external force is exerted on the sensor, while maintaining a continuous electrical path from the first, sensor end of the cable to the second end of the cable.

(*See* id. at 1.) The '590 Patent has one amended claim and three new claims relative to the '771 Patent. (Id. para. 13.) The first ten claims of the '590 Patent are identical to those of the '771 Patent. (Id.)

On September 7, 2006, Se-Kure sued Diam for infringement of the '590 Patent. (*See* Pl.'s Compl.) On April 3, 2007, Diam filed a third-party complaint against Telefonix for indemnification. (*See* Third-Party Compl.)

The parties have asked this Court to construe eleven terms in the '590 Patent. They have submitted their initial claim construction briefs and a *Markman* hearing has been held.

Discussion

The first step in an infringement analysis is to determine the meaning of the patent claims. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed.Cir.1998) (en banc). The claims of a patent define the scope of the invention. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc). Claim construction is a question of law to be decided by the court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 372, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The terms used in a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art at the time of the invention. Phillips, 415 F.3d at 1313. In determining the ordinary and customary meaning, the Court must first look to the intrinsic evidence, which includes the claims, specification, and prosecution history. Id. at 1316-17. Extrinsic evidence, such as dictionaries and expert reports, may also be useful to the court, "but it is unlikely to result in a reliable interpretation ... unless considered in the context of the intrinsic evidence." Id. at 1319.

The following terms are in dispute: (1) means for retraction; (2) means for connecting the second end of the cable to an alarm system; (3) means for indicating the state of the sensor; (4) biasing means; (5) means for visually indicating whether the sensor is in the secured or unsecured state; (6) means for attaching the sensor

to the product; (7) means for attaching the cable first end to the product; (8) means for electrically connecting said first and second conductors; (9) a retracting mechanism in said housing; (10) a multiconductor cable; and (11) a cable. FN2

FN2. In its opening claim construction brief, Se-Kure submitted fifteen claim terms for interpretation by the Court, Diam and Telefonix have only addressed eleven of the claim terms initially raised by Se-Kure but have not submitted any claim terms of their own. Therefore, the Court deems them to have waived their objections to the four terms they did not address.

Nine out of the eleven claim terms are written as means-plus-function limitations. Means-plus-function claim limitations are governed by 35 U.S.C. s. 112 para. 6, which states:

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

Claim construction of a means-plus-function limitation requires a two-step process: (1) the court must determine the claimed function; and (2) the court must identify the corresponding structure in the specification that performs the function recited in the claim. FN3 JVW Enters., Inc. v. Interact Accessories, Inc., 424 F.3d 1324, 1330 (Fed.Cir.2005); Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1321-22 (Fed.Cir.2004); IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1430 (Fed.Cir.2000).

FN3. Se-Kure has repeatedly asserted that claim construction of a means-plus-function limitation requires a third step of determining "equivalents" of the corresponding structure. (*See* Se-Kure's Resp. Br. Supp. Claim Construction 4.) Se-Kure cites Smiths Industries Medical Systems., Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1357-59 (Fed.Cir.1999), to support this assertion. However, nowhere does *Smiths* state that a court is required to identify equivalent structures as part of its claim construction. *Id*. Equivalence is a question of fact. Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1268 (Fed.Cir.1999). "The determination of the claimed function and corresponding structure of a means-plus-function claim limitation is a question of law...." ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1087 (Fed.Cir.2003).

When determining the function, the court must adopt the function that is explicitly recited in the patent claim. JVW Enters., Inc., 424 F.3d at 1331. When identifying the corresponding structure, "the structure must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function," Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed.Cir.2002). Only structure that is relevant to performing the claimed function should be considered. Odetics, 185 F.3d at 1268. Identification of corresponding structure should include "distinct and alternative described structures for performing the claimed function." Creo Prods., Inc. v. Presstek, Inc., 305 F.3d 1337, 1346 (Fed.Cir.2002).

Several of the disputed claim terms incorporate by reference corresponding structures from U.S. Patent No, 5,172,098 ("the '098 Patent"). "Incorporation by reference provides a method for integrating material from various documents into a host document ... by citing such material in a manner that makes clear that the material is effectively part of the host document as if it were explicitly contained therein." Advanced

Display Sys. v. Kent State Univ., 212 F.3d 1272, 1282 (Fed.Cir.2000). "To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents." *Id*. The extent to which "material has been incorporated by reference into a host document is a question of law." *Id*. at 1283.

1. means for retraction

In relevant part, claims 1 and 11 of the '590 Patent claim a "means for retraction ... said retraction means urging the cable into the housing and thereby urging the sensor to the retraction means." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col. 4, ll. 42, 50-51; id., Col. 5, l. 55; id., Col. 6, ll. 1-2.) The parties agree that "means for retraction" is a means-plus-function limitation. Therefore, the first step in construing this term is to determine the claimed function. According to the explicit language in the claims, the function is to urge the cable into the housing.

The second step is to identity the corresponding structure in the specification. The Court addresses Se-Kure and defendants' proposed corresponding structures in turn.

Se-Kure argues that the corresponding structure is a "a spool mounted for rotation in the housing on which the multiconductor cable is wound and a device FN4 operatively associated with the spool for urging the spool in a direction to wind the cable onto the spool." (Id., Col. 1, ll, 66-67; id., Col. 2, ll. 1-3.) The specification also discloses that the retraction means may include a pulley instead of a spool. (Id., Col. 3, ll, 11-20.) Se-Kure's proposed corresponding structure is clearly associated with the claimed function because it is identified as the "retraction structure." (Se-Kure's Opening Br, Supp. Claim Construction, Ex. A, ' 590 Patent, Col, 1, ll. 66-67.) Furthermore, this passage identifies the claimed function by stating that the spool is urged "in a direction to wind the cable onto the spool." (Id., Col. 2, ll, 2-3.) These two portions of the specification link the described structure to the claimed function by using the word retraction and describing the function that the structure performs.

FN4. *See* discussion infra pp. 13-15 (construing the term "device").

Defendants, however, contend that the entire corresponding structure should be the following:

The retraction mechanism **32** has a double pulley **46,** with a top disk **48,** middle disk **50** and bottom disk **52.** The double pulley **46** has three hubs with three different radii, a sensor hub **54,** a recoil hub **56** and an alarm system hub **58.** In the preferred embodiment the radius of the alarm system hub **58** is smaller than the sensor hub **54.** The double pulley **46** has a tube **60** running through the center of the hubs **54, 56, 58,** as shown in FIG. 5. The double pulley **46** rotates around a rod **62** (see FIG. 4) which is formed by a male post **64,** attached to the housing part **28,** mating with a female post **66,** attached to the housing part **26.**

A coil spring **68** attaches to the double pulley **46** at the recoil hub **56.** In an embodiment, the coil spring **68** has a T-shaped end (not shown) which is inserted in a slot **70** in the recoil hub **56.** The end is then rotated so that it cannot be removed from the slot **70.**

The coil spring **68** sits in a circular cup **72.** The cup has an opening **74** through which the end of the coil spring **68** extends out onto the recoil hub **56.** When the coil spring **68** is placed in the cup **72,** it expands until it meets an interior surface **76** of the cup **72,** where it is held. The opening **74** is chosen so that the coil

spring **68** cannot pass through the opening **74** when the sensor **35** is fully extended.

(Defs.' Opening Br. Supp. Claim Construction 9-10; id., Ex. 1, '590 Patent, Col. 3, ll. 11-33.)

The Court disagrees with defendants' argument that the corresponding structure should be limited to the exact structure described in column 3, lines 11-33 of the '590 Patent. The exact structure described in this portion of the patent adds elements that are not required for performing the claimed function. "Under s. 112, para. 6, a court may not import ... structural limitations from the written description that are unnecessary to perform the claimed function." Wenger Mfg., Inc. v. Coating Mack Sys., Inc., 239 F.3d 1225, 1233 (Fed.Cir.2001), "[P]articular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments." Electro Med. Sys. S.A. v. Cooper Life Scis., 34 F.3d 1048, 1054 (Fed.Cir.1994). For example, in *Acromed Corp. v. Sofamor Danek Group, Inc.,* the function of the means-plus-function limitation was "blocking effluence and restricting transverse movement." Acromed Corp. v. Sofamor Danek Group, Inc., 253 F.3d 1371, 1382-83 (Fed.Cir.2001). The corresponding structure was comprised of a body portion and a shoulder portion. *Id.* The Federal Circuit refused to import a limitation requiring the diameter of the body portion to be at least as large as the crest diameter of a second externally threaded portion because such a limitation would "impermissibly import into the claim limitation specific dimensions of a preferred embodiment that are unnecessary to perform the claimed function." *Id.*

In this case, the structure described in column 3, lines 11-33 of the '590 Patent includes limitations which are unnecessary for performing the claimed function. The described structure requires the three hubs of the double pulley to be different sizes and the radius of the alarm system hub to be smaller than the sensor hub, ((Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, ' 590 Patent, Col. 3, ll. 12-13, 15-16.) However, hubs of different sizes are a feature of a preferred embodiment and are not required for urging the cable into the housing: The Court will not import this limitation from the specification into the claim when the claim is broader than such an embodiment and the limitation is not required for performing the claimed function.

The structure described in column 3, lines 11-33 of the '590 Patent also states that "[i]n an embodiment, the coil spring **68** has a T-shaped end (not shown) which is inserted in a slot **70** in the recoil hub **56.** The end is then rotated so that it cannot be removed from the slot **70."** (Id., Col, 3, ll. 23-26.) The T-shaped end of the coil spring is a preferred embodiment which is not required for urging the cable into the housing. This limitation cannot be read into the claim by the Court because the claim is broader than this embodiment and this limitation is not required for performing the claimed function.

Furthermore, beyond arguing that each detail of the preferred embodiment described in column 3, lines 11-33 of the '590 Patent should be included in the proper interpretation of the "means for retraction" claim, defendants fail to present any arguments regarding which components of their proposed corresponding structure are necessary to perform the claimed function. Defendants' taking this position has been thoroughly unhelpful to the Court in its determination as to which of the components of their proposed structure are necessary to perform the claimed function. Accordingly, the Court deems any such arguments waived for the purpose of construing this claim.

In sum, based on the arguments presented, the specification identifies a corresponding structure necessary to perform the function of urging a cable into the housing. That structure consists of a spool or pulley mounted for rotation in the housing on which the multiconductor cable is wound and a device operatively associated with the spool or pulley for urging the spool or pulley in a direction to wind the cable onto the spool or pulley.

2. means for connecting the second end of the cable to an alarm system

In relevant part, claims 1 and 11 of the '590 Patent claim a "means for connecting said second end of the cable to an alarm system." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col. 4, ll. 57-59; Col. 6, ll. 9-10.) The parties agree that "means for connecting the second end of the cable to the alarm system" is a means-plus-function limitation. According to the explicit language in the claims, the function of this limitation is to connect the second end of the cable to an alarm system.

Se-Kure proposes that the corresponding structure should include any modular connector capable of making an electrical connection. (Se-Kure's Opening Br. Supp. Claim Construction 7-8.) Se-Kure points out that the specification of the '590 Patent discloses that "[p]referably the second end of the cable contains a connecting device to mate with an alarm system, such as the alarm system described in U.S. Pat. No. 5,172,098." (Id. Ex. A, '590 Patent, Col, 1, ll. 63-65.) This language incorporates by reference the '098 Patent into the '590 Patent. Therefore, any type of connecting device that mates with the alarm system described in the '098 Patent will be a corresponding structure for performing the claimed function in the '590 Patent,

The Court does not see how Se-Kure's incorporation by reference of the ' 098 Patent supports its proposed claim construction. The '098 Patent discloses an alarm system consisting of an alarm housing which encloses an alarm circuit and a splitter box which connects each of the individual sensors to the alarm system. (*See* id., Ex. D, '098 Patent.) The '098 Patent explains that "[t]he splitter box **24** has six female phone jacks **28** ... for connection to six sensor assemblies." (Id., Ex. D, '098 Patent, Col. 4, ll. 4-6.) It goes on to say "[t]he sensor assembly **12** includes a male phone jack 36, an elongated cord **38,** and a sensor housing **40."** (Id., Col. 4, ll. 1344.) The '098 Patent clearly discloses the use of a phone jack to connect the sensor to the alarm system. It does not disclose any other type of connector (modular or otherwise) that is capable of making an electrical connection. Therefore, the Court is not persuaded that the '098 Patent supports the broad interpretation proposed by Se-Kure.

Se-Kure cites to another portion of the '590 specification that describes a phone plug and argues that the description of a phone plug is simply an example of a specific embodiment of a modular connector, (Se-Kure's Opening Br, Supp. Claim Construction 7.) The specification states:

The cable **34** is continuous through the housing **24,** from the sensor **35** to a phone plug **80.** From the sensor **35** the cable **34** winds around and spirals into the sensor hub **54.** Then the cable **34** extends through a hole **82** (shown in FIGS. 4-6), near the edge of the sensor hub **54,** in middle disk **50** where the cable **34** winds around and spirals out from the alarm system hub **58,** and then extends out of the housing **24** to the phone plug **80.**

(Id., Ex. A, Col. 3, ll. 33-40.) This section only describes a phone plug, not any other type of modular connector, and neither does the rest of the specification. Se-Kure is unable to point to any portion of the specification to support its argument that a phone plug is simply one embodiment of a modular connector. In fact, the term "modular connector" does not appear anywhere in the patent. Therefore, the phone plug is not a specific embodiment of a more broadly claimed modular connector. It is the only structure disclosed in the specification.

Defendants argue that the corresponding structure should be a phone plug. (Defs.' Opening Br. Supp. Claim Construction 12-13.) Defendants also point to column 3, lines 33-40 of the '590 Patent to support their

argument. The Court agrees with defendants that the structure for connecting the second end of the cable to an alarm system is a phone plug. As mentioned above, a phone plug is the only structure identified in the specification that performs the claimed function. Also, the '098 Patent, which is incorporated by reference, exclusively describes the use of male and female phone jacks for connecting a sensor to the splitter box. Because the specification of the '590 Patent makes no mention of any other type of modular connector, the corresponding structure for connecting the second end of the cable to an alarm system must be a phone plug,

3. means for indicating the state of the sensor

Claim 2 of the '590 Patent claims "[t]he retractable sensor assembly of claim 1 wherein said sensor has an indicating means for indicating the state of the sensor." (Id., Ex, 1, '590 Patent, Col. 4, ll, 63-65.) Again, the parties agree that the term "means for indicating the state of the sensor" is a means-plus-function limitation. The function of this limitation is to indicate the state of the sensor, *i.e.,* to indicate whether the sensor is in a secured or unsecured state.

Defendants argue that the structure corresponding to the "means for indicating" should only include a structure consisting of two different colored LEDs. Se-Kure argues that the term should be construed broadly to mean any visual indicator. The specification describes the sensor as having:

two LED's **165,167** ... one of the LED's **165** is conducting and emits red light. The red light indicates the sensor **35** is in the secured state. Alternatively, when the sensor **35** is removed from the remote control ... [t]he detector circuit **201** induces an electrical current to flow in a second direction through the indicator **164.** This results in LED **167** conducting and emitting a green light, which indicates the sensor **35** is in the unsecured state.

(Id., Col. 4, ll. 16-26.) Although this structure is consistent with the one described by defendants, the corresponding structure cannot be limited to include only this structure because the specification also discloses alternative structures that perform the claimed function. Creo Prods., Inc., 305 F.3d at 1346. The specification describes the alarm system as including "an alarm housing **210** enclosing an alarm circuit **212** having a horn **214** ... [t]he alarm housing **210** also includes an LED **222** in addition to the horn **214** to indicate the state of the alarm circuit **212.**" (*Id.,* Col. 3, ll. 60-67.) The combination of a horn and LED is an alternative structure that performs the claimed function. If the sensor is in the unsecured state, the LED on the alarm system emits a light and the horn emits a sound, thereby indicating that the sensor is unsecured.FN5

FN5. Se-Kure contends that the issue of whether the construction should include an audible indicator is moot. The Court disagrees. An audible indicator is specifically disclosed in the specification and is clearly associated with the claimed function. Therefore, the Court considers an audible indicator for purposes of claim construction.

The specification discloses two distinct and alternative structures which perform the claimed function. Therefore, the corresponding structure for performing the function of indicating the state of the sensor includes: (1) two LEDs on the sensor-one red, one green; and/or (2) a horn and LED on the alarm housing.

4. biasing means

In relevant part, claim 5 of the '590 Patent claims a "biasing means operatively associated with said spool in said housing for urging said spool in a direction to wind the cable on the spool." (Id., Col 5, ll, 7-9.) In relevant part, claim 6 of the '590 Patent claims a "biasing means operatively associated with said pulley in said housing for urging said pulley and a pair of hubs in a direction to wind the cable around the sensor hub." (Id., Col. 5, ll. 29-31.) The parties agree that "biasing means" is a means-plus-function limitation. The function of the biasing means is to urge the spool or pulley in a direction to wind the cable around the sensor hub.

In identifying the corresponding structure, the Court looks to column 2, lines 1-3 of the '590 Patent, which states: "a device operatively associated with the spool for urging the spool in a direction to wind the cable onto the spool" This section of the specification clearly states the claimed function, which is to urge the spool in a direction to wind the cable onto the spool. It also plainly identifies the structure for performing that function, which is a device operatively associated with the spool. The Federal Circuit has stated that the term "device" is a generic term that typically does not connote sufficiently definite structure. Mass. Inst of Tech. v. Abacus Software, 462 F.3d 1344, 1354 (Fed.Cir.2006). Therefore, the Court looks to a different portion of the specification to determine the meaning of the term "device." Column 3, lines 22-23 of the '590 Patent states, "[a] coil spring **68** attaches to the double pulley **46** at the recoil hub **56.**" This passage demonstrates that the device is a coil spring. Therefore, the corresponding structure is a coil spring operatively associated with a spool or pulley.

Se-Kure proposes that the corresponding structure should be any spring. (Se-Kure's Opening Br. Supp, Claim Construction 10.) The Court docs not find Se-Kure's argument persuasive. Se-Kure has not identified anything in the specification to support the contention that *any* spring will satisfy the corresponding structure requirement. In fact, contrary to Se-Kure's argument, the specification clearly identifies a coil spring. (Defs.' Opening Br. Supp. Claim Construction, Ex. 1, '590 Patent, Col. 3, ll, 22-33.) Therefore, Se-Kure's interpretation is too broad.

Defendants, on the other hand, argue that the corresponding structure should be;

A coil spring **68** attaches to the double pulley **46** at the recoil hub **56.** In an embodiment, the coil spring **68** has a T-shaped end (not shown) which is inserted in a slot **70** in the recoil hub **56.** The end is then rotated so that it cannot be removed from the slot **70.**

The coil spring **68** sits in a circular cup **72.** The cup has an opening **74** through which the end of the coil spring **68** extends out onto the recoil hub **56.** When the coil spring **68** is placed in the cup **72,** it expands until it meets an interior surface **76** of the cup **72,** where it is held. The opening **74** is chosen so that the coil spring 68 cannot pass through the opening **74** when the sensor **35** is fully extended.

(Defs.' Opening Br. Supp. Claim Construction 9; id., Ex. 1, '590 Patent, col. 3, ll. 22-33.) Defendants' proposed structure is overly narrow and excessively detailed and contains preferred embodiments which are unnecessary for carrying out the claimed function. The structure identified by defendants requires the coil spring to have a T-shaped end which is inserted into a slot in the recoil hub and requires the coil spring to sit in a circular cup offset from the spool or pulley. While these features are a preferred embodiment, they are not required for performing the claimed function. The specification discloses a broader structure in which the coil spring is operatively associated with the spool. The term "operatively associated" is broad language that encompasses a wide variety of ways to attach the coil spring to the spool and a wide variety of ways for the spring to interact with the spool. Inserting a T-shaped end into a slot with the coil spring in a

cup offset from the spool is only one way in which the coil spring can be operatively associated with the spool.

Because the features described in defendants' proposed structure are preferred embodiments of the corresponding structure containing elements not required to perform the claimed function, the Court will not import these unnecessary limitations into the claim. *See* Wenger Mfg., Inc. 239 F.3d at 1233; Electro Med. Sys. S.A., 34 F.3d at 1054. Therefore, the Court identifies a coil spring operatively associated with a spool or pulley as the corresponding structure for performing the claimed function of urging the spool or pulley in a direction to wind the cable around the sensor hub.

5. means for visually indicating whether the sensor is in the secured or unsecured state

Claim 7 of the '590 Patent claims "[t]he retractable sensor assembly of claim 6 wherein said sensor includes a means for visually indicating whether the sensor is in the secured or unsecured state." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col, 5, 11. 41-43.) The parties agree that "means for visually indicating" is a means-plus-function limitation. The function of "means for visually indicating" is to designate visually whether the sensor is in the secured or unsecured state.

Se-Kure readily admits that "[t]he patent discloses the use of ... a dual-LED setup for generating the red and green lights." (Se-Kure's Opening Br, Supp. Claim Construction 11.) After making such an admission, Sc-Kure chooses to ignore the law regarding claim construction of means-plus-function claim limitations by arguing that the structure for carrying out the visually indicating function should simply be a light. (Id.) The Court finds Se-Kure's interpretation overly broad and unpersuasive. Se-Kure is unable to point to any portion of the specification to support its position that the corresponding structure is simply a light. As a result, Se-Kure's interpretation is overly broad and the Court refuses to adopt it.

After examining the specification, the Court has found two alternatively described structures that are capable of visually indicating whether the sensor is in the secured or unsecured state. The first structure is described in the specification as consisting of:

two LED's **165,167** ... one of the LED's **165** is conducting and emits red light. The red light indicates the sensor **35** is in the secured state. Alternatively, when the sensor 35 is removed from the remote control ... [t]he detector circuit **201** induces an electrical current to flow in a second direction through the indicator **164,** This results in LED **167** conducting and emitting a green light, which indicates the sensor 35 is in the unsecured state.

(Id., Col. 4, ll. 16-26.) The alternative structure is described in the specification as follows: "[t]he alarm housing also includes an LED **222** ... to indicate the state of the alarm circuit **212.**" (Id., Col. 3, 11. 67-69.) In this alternative structure, the LED emits a light when the sensor is in an unsecured state.

Both of these structures qualify as corresponding structures that perform the claimed function because they are distinct and alternatively described structures, *i.e.,* neither structure is a preferred embodiment of the other, Creo Prods., Inc., 305 F.3d at 1346. Both structures disclose the use of LEDs, but one structure uses two different colored LEDs. One of the two LEDs is always emitting a light and the state of the sensor is color coded-green for secured, red for unsecured. The other structure discloses the use of a single LED which only emits a light when the sensor is unsecured. If the sensor is secured, the LED is turned off. Also, in the first structure, the LEDs are located on the sensor, whereas in the second structure, the single LED is

located on the alarm housing. Neither one of these structures is broader or narrower than the other. They are distinct and alternative structures. Therefore, both must be included as corresponding structures.

6. means for attaching the sensor to the product

Claim 9 of the '590 Patent claims "[t]he retractable sensor assembly of claim 6 in combination with a product and including means for attaching the sensor to the product so that the sensor is in the secured state," (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col. 5, ll. 46-48.) The parties agree that "means for attaching the sensor to the product" is a means-plus-function limitation. The function is to attach the sensor to the product so that the sensor is in the secured state.

Se-Kure argues that the corresponding structure should be an adhesive sheet, (Se-Kure's Opening Br, Supp, Claim Construction 12.) Defendants agree with Se-Kure that the corresponding structure includes an adhesive sheet but contend that the adhesive sheet must have a hole in it so that when the sensor is attached to the product, the button is depressed to close the circuit. (Defs.' Resp. Br. Supp. Claim Construction 14.) Both parties agree that the '098 Patent is incorporated by reference and both parties cite to the following portion of the '098 Patent specification to support their arguments:

FIGS. **3, 4** and **18-21** illustrate the attachment of the sensor housing **40** to the product **46.** An adhesive sheet **48** includes an adhesive layer **50, 52** on the top and bottom sides of the adhesive sheet **48,** respectively. A release liner **54, 56** is placed over the adhesive layer **50, 52,** respectively. A hole **58** is formed in the adhesive sheet **48.** To attach the adhesive sheet **48** to the product **46,** the release liner **56** is removed and the adhesive sheet **48** is attached to the product **46** via adhesive **52.** The release liner **54** is then removed, exposing adhesive **50.** The button **45** of the sensor housing **40** is then aligned with the hole **58** in the adhesive sheet **48** and the sensor housing **40** is pressed against the adhesive layer **50,** as best seen in FIG. **19** .

(Se-Kure's Opening Br. Supp. Claim Construction, Ex. D, '098 Patent, Col. 4, ll. 25-38.) The adhesive sheet described in the '098 Patent clearly includes a hole that aligns with the button on the sensor housing. The hole is necessary for ensuring that the sensor is in the secured state when the product is attached. If the adhesive sheet did not have a hole for the button, the button would be depressed by the adhesive sheet itself, instead of by the product. When the product is removed from the sensor, the adhesive sheet will either remain attached to the product or to the sensor. If the adhesive sheet remains attached to the sensor, then the button remains depressed and the sensor stays in the secured state even though the product is no longer attached to the sensor, This would defeat the purpose of the invention. Therefore, the corresponding structure is an adhesive sheet with a hole that aligns with the button on the sensor.

Though the parties do not address it, the '098 Patent discloses an alternative structure for attaching the sensor to the product so that the sensor is in the secured state. The alternative structure disclosed in the ' 098 Patent is a sensor with a female phone jack in the sensor housing. (Id., Col, 5, ll, 27-44.) An elongated strip is attached to the sensor housing at one end. The elongated strip has a male phone jack attached at the other end. (Id.) The product is attached to the sensor when the elongated strip is threaded through a portion of the product and the male phone jack is connected into the female phone jack. (Id.) When the male phone jack is connected to the female phone jack, the sensor is in the secured state. The only way to remove the product from the sensor is to break the elongated strip or unplug the male phone jack from the female phone jack. Either one of these actions will force the sensor into the unsecured state. This structure is an alternative to the adhesive sheet because it performs the same function in a completely different way. Therefore, the

elongated strip structure is a corresponding structure that performs the claimed function,

7. means for attaching the cable first end to the product

In relevant part, claim 12 of the '590 Patent claims "a cable having first and second conductors extending between opposite first and second ends of said cable; means for attaching said cable first end to a product." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col. 6, ll. 26-28.) The parties agree that "means for attaching the cable first end to the product" is a means-plus-function limitation. The function is to attach the end of the cable to the product.

Se-Kure would like the Court to construe this term to mean "a sensor." (Se-Kure's Opening Br. Supp. Claim Construction 13.) Defendants, on the other hand, argue that the proper construction is a sensor with an adhesive sheet. (Defs.' Opening Br. Supp. Claim Construction 15.) The structure cannot simply be a sensor, as Se-Kure contends, because a sensor by itself cannot perform the function of connecting the end of the cable to the product. The sensor connects to the end of the cable, but then one encounters the problem of attaching the sensor to the product.

This problem was addressed above when the Court construed "means for attaching the sensor to the product," In construing that term, the Court identified two structures that would perform the claimed function; (1) an adhesive sheet with a hole that aligns with the button on the sensor; and (2) an elongated strip structure that is threaded through a portion of the product. Therefore, the structure that attaches the end of the cable to the product is either a sensor with an adhesive sheet or a sensor with an attached elongated strip that is threaded through a portion of the product.

8. means for electrically connecting said first and second conductors

In relevant part, claim 12 of the '590 Patent claims:

means for electrically connecting said first and second conductors at said first end of said cable whereby 1) said first and second conductors form an alarm loop extending from said cable second end through said first conductor to said cable first end and back through said second conductor to said cable second end when said attaching means attach said cable to a product and 2) said alarm loop is broken by detaching said cable from a product

(Se-Kure's Opening Br, Supp. Claim Construction, Ex. A, '590 Patent, Col. 6, ll. 29-37.) The parties agree that "means for electrically connecting said first and second conductors" is a means-plus-function limitation. The function is to connect electrically the first and second conductors at the first end of the cable to create an alarm loop.

Defendants argue that the corresponding structure in the specification only discloses an electrical circuit that connects or disconnects the conductors in the cable by way of a plunger button. (Defs.' Opening Br. Supp. Claim Construction 13.) When the product is secured to the sensor, the plunger button is depressed and the first and second conductors are connected to create a closed alarm loop. (Se-Kure's Opening Br. Supp, Claim Construction, Ex. A, ' 590 Patent, Col. 4, ll. 4-25.) If the sensor is removed or tampered with, the plunger button releases and the connection between the first and second conductors is broken; thereby setting off the alarm. (Id.)

Defendants accurately identified the plunger button as a corresponding structure, but they overlooked the

fact that the '098 Patent is incorporated by reference into the '590 Patent. While the '590 Patent only discloses an electrical circuit that connects or disconnects the conductors in the cable by way of a plunger button, the '098 Patent discloses two alternatives to the plunger button structure.

The first structure disclosed in the '098 Patent is a short cylinder with a conductive surface. (Id., Ex. D, '098 Patent, Col. 4, ll. 65-66.) The conductive surface of the short cylinder connects a first and a second conductor. (Id., Col. 5, ll. 14-15.) If the sensor is removed or tampered with, the conducting surface breaks the connection between the first and second conductor thereby setting off the alarm. (Id., Col, 5, ll. 21-26.)

The second structure disclosed in the '098 Patent includes an elongate strip with a male phone jack that is threaded through a portion of the product and the male phone jack is connected into the female phone jack in the sensor housing. (Id., Col. 5, ll. 27-44.) When the male phone jack is plugged into the female phone jack, the first and second conductors are connected. (Id.) If the product is removed or tampered with, the connection of the male phone jack to the sensor housing breaks the circuit thereby setting off the alarm. (Id.)

Thus, the Court finds that the specification discloses three alternative corresponding structures that perform the function of electrically connecting the first and second conductors at the first end of the cable to create an alarm loop. The three corresponding structures are: (1) a plunger button; (2) a short cylinder with a conductive surface; and (3) an elongate strip with a male phone jack that is threaded through a portion of the product and the male phone jack is connected into the female phone jack in the sensor housing.

9. a retracting mechanism in said housing

In relevant part, claim 12 of the '590 Patent claims "a retracting mechanism in said housing continuously urging the cable first end toward the housing yet allowing the cable first end to be pulled away from the housing when an external force is exerted on the cable first end." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A. '590 Patent, Col. 6, ll. 41-45.) The parties dispute whether "a retracting mechanism" is a means-plus-function limitation.

The use of the word "means" raises a rebuttable presumption that the element is a means-plus-function limitation. Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1361 (Fed.Cir.2000). Conversely, absence of the word "means" creates a presumption that means-plus-function language has not been invoked, but this presumption may be rebutted if the claim limitation recites insufficiently definite structure for performing the claimed function. *Id*.

The Federal Circuit has stated that "[t]he generic terms 'mechanism,' 'means,' 'clement,' and 'device,' typically do not connote sufficiently definite structure." Mass. Inst. of Tech., 462 F.3d at 1354. The Court does not believe that this particular situation is an exception to the general rule. Se-Kure argues that "retracting mechanism" is not a means-plus-function limitation, but Se-Kure admits that "[t]he structure called for by the claim is any type of 'retracting mechanism' in a housing, whether it be a spool, a pulley, or any other device that retracts cable." (Se-Kure's Resp. Br. Supp. Claim Construction 11.) It is exactly this type of general language that overcomes the presumption that a means-plus-function limitation has not been invoked. The claim does not recite any structure whatsoever to define a "retracting mechanism." Therefore, this term invokes means-plus-function language even though the word "means" is not used because the claim does not recite sufficiently definite structure.

This point is further illustrated by a simple comparison of the language in this claim with the language in claims 1 and 11. Claim 1 states in relevant part: "said retraction means urging the cable into the housing and thereby urging the sensor to the retraction means, yet allowing the sensor to be pulled from the housing when an external force is exerted on the sensor," (Se-Kure's Opening Br, Supp. Claim Construction, Ex, A, '590 Patent, Col. 4, ll. 50-53.) Claim 11 states in relevant part: "said retraction means urging the cable into the housing and thereby urging the first end connected to ... the sensor to the retraction means, yet allowing the first end to be pulled from the housing when an external force is exerted on the first end." (Id., Col. 6, ll. 1-5 (emphasis omitted).) The language in claims 1 and 11 is virtually identical to the language at issue here. The only difference is that claims 1 and 11 use the term "retraction means" whereas claim 12 uses the term "retracting mechanism," Se-Kure does not dispute that the language in claims 1 and 11 is means-plus-function language. (Se-Kure's Resp. Br. Supp, Claim Construction 4.) Due to the similarity between the undisputed means-plus-function limitations in claims 1 and 11 and the language of the claim at issue here, the Court finds that "retracting mechanism" is a means-plus-function limitation. Simple substitution of "retracting mechanism" for the words "retraction means" is not enough to overcome a finding that the claim term is a means-plus-function limitation.

Based on the record before the Court, it holds that "retracting mechanism" is, in essence, means-plus-function language, "Retracting mechanism" is synonymous with "means for retraction," and therefore the same analysis and construction applies. The function of a "retracting mechanism" is to urge a cable in to the housing. The corresponding structure necessary to perform the claimed function is a spool or pulley mounted for rotation in the housing on which the multiconductor cable is wound and a device operatively associated with the spool or pulley for urging the spool or pulley in a direction to wind the cable onto the spool or pulley.

10. a multiconductor cable

The term "multiconductor cable" appears in claims 1 and 11. Claim 1 states in relevant part: "a multiconductor cable, having a first end attached to the sensor then extending into the housing, cooperating with the retraction means and a second end extending out of the housing." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, Col. 4, ll. 46-49.) Claim 11 states in relevant part: "a multiconductor cable, having a first end attached to the sensor attachable to a product then extending into the housing, cooperating with the retraction means and a second end extending out of the housing." (Id., Col. 5, ll. 56-59 (emphasis omitted).)

The parties agree that a multiconductor cable is a cable having more than one conductor. The parties dispute how the multiconductor cable has to be connected to the sensor.FN6

FN6. They also dispute whether the multiconductor cable should be a single, continuous one-piece cable or whether it can be comprised of segments that are joined together, which is discussed in the next section.

Se-Kure argues that the term should be construed to require the multiconductor cable to be electrically attached to the sensor. (Se-Kure's Opening Br. Supp. Claim Construction 7.) Defendants contend that the term should be construed to require the multiconductor cable to be physically, but not necessarily electrically, attached to the sensor, (Defs.' Resp. Br. Supp. Claim Construction 8-9.) Defendants support their contention by arguing that the claim requires the cable to be attached to the sensor but does not explicitly state that the cable must be electrically attached to it. (Id.) Defendants further argue that when Se-

Kure intended two components to be electrically connected, it plainly stated so in the claims. (Id.)

Though some claims in the '590 Patent specifically mention an electrical connection, the Court does not believe that that fact requires it to adopt defendants' claim construction. Claims 1 and 11 require the multiconductor cable to maintain a continuous electrical path from the first, sensor end of the cable to the second end of the cable, (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A, '590 Patent, col. 4, ll. 54-55; id., col. 6, ll. 5-8.) If defendants' claim construction is adopted by the Court and the sensor is physically attached to the multiconductor cable without necessarily being electrically connected, then the continuous electrical path described in the claims will stop at the end of the cable instead of continuing into the sensor. This would allow a thief to break the physical connection between the sensor and the cable without setting off the alarm. Such an interpretation would defeat the purpose of the invention.

Moreover, the specification of the '590 Patent supports this construction. Figure 8 in the '590 Patent shows a schematic view of the sensor with the cable. The specification states:

FIG. **8** shows a schematic view of the sensor **35.** When the sensor **35** is adhered to the remote control **14** the button **160** is depressed as shown in FIG. **8** and FIG. **3.** The depression of button **160** causes a first conductor **161** to come into contact with a second conductor **163** to complete an electrical circuit.

(Id., col.4, ll.4-9.) Figure 8 shows the first and second conductors, which are described in claims 1 and 11, attached to the multiconductor cable. The conductors are obviously electrically connected to the sensor because they interact with the button to complete an electrical circuit when a product is attached to the sensor. The multiconductor cable is comprised of these conductors, If the individual parts of an overall structure are connected to something, then, by definition, the overall structure is also connected. Therefore, if the individual conductors in a multiconductor cable are electrically connected to the sensor, the multiconductor cable is electrically connected to the sensor as well.

The Court construes the term "multiconductor cable" to mean a cable having more than one conductor and the cable is electrically connected to a sensor.

11. a cable

The parties dispute the meaning of the term "a cable." Se-Kure contends that the term should be construed to mean any cable whether segmented or not. Defendants contend that the term should be construed to mean a single, continuous, one-piece cable without segments. The term appears in several claims of the '590 Patent. A canon of claim construction states that a term should be construed consistently throughout the claims. *N*. Am. Container, Inc. v. Plastipak Packaging, Inc., 415 F.3d 1335, 1344-45 (Fed.Cir.2005); Acromed Corp., 253 F.3d at 1382.

Claims 1 and 11 explicitly require the cable to maintain a "continuous electrical path from the first, sensor end of the cable to the second end of the cable." (Se-Kure's Opening Br. Supp. Claim Construction, Ex. A. '590 Patent, Col. 4, ll. 52-55; id., Col. 6, ll. 5-8.) This language only requires that the electrical path be continuous. It does not require the actual cable to be continuous.

Defendants cite claim 12 in support of their position. Claim 12 claims "a cable having first and second conductors extending between opposite first and second ends of said cable." (Id., Col, 6, ll. 26-27.) This language neither settles the dispute at hand nor persuades the Court that the claimed cable must be

continuous. Claim 12 stales that a conductor must extend between a first and second end, but it is silent as to whether a continuous conductor must extend between the two ends or whether the conductor can be segmented. In order to construe the term consistently throughout the claims, this language is construed to mean that only the electrical path, not the actual cable, must be continuous.

Defendants point to the specification to support their claim construction. The specification states: "[t]he cable is continuous through the housing from the sensor to a phone plug." (Defs.' Resp. Br. Supp. Claim Construction 8.) Although this passage specifically mentions a continuous cable, it has no bearing on the claim construction because when a claim contains only structural limitations, a court cannot "import limitations from the specification into the claims." CollegeNet, Inc. v. ApplyYourself, Inc., 418 F.3d 1225, 1231 (Fed.Cir.2005); *see* Toro Co. v. White Consol. Indus., Inc., 383 F.3d 1326, 1330 (Fed.Cir.2004). The rationale for not reading limitations from the specification into the claims is that:

[i]f everything in the specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims. Nor could an applicant, regardless of the prior art, claim more broadly than that embodiment. Nor would a basis remain for the statutory necessity that an applicant conclude his specification with "claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention," 35 U.S.C. s. 112. It is the claims that measure the invention.

SRI Int'l v. Matsushita Elec. Corp., 715 F.2d 1107, 1121 (Fed.Cir.1985). In this case, the claim language is broader than the limitation in the specification cited by defendants. The continuous cable described in the specification is a particular embodiment of the claimed cable. The scope of the claim is broader than that particular embodiment. Therefore, the Court will not use the specification to limit the scope of the claim language.

The Court construes the term "a cable" to mean any cable, whether segmented or not, that maintains a continuous electrical path.

Claim Construction Summary

1. *means for retraction:* a spool or pulley mounted for rotation in the housing on which the multiconductor cable is wound and a device operatively associated with the spool or pulley for urging the spool or pulley in a direction to wind the cable onto the spool or pulley

2. *means for connecting the second end of the cable to an alarm system:* a phone plug

3. *means for indicating the state of the sensor:* (1) two LEDs on the sensor-one red, one green; and/or (2) a horn and LED on the alarm housing

4. *biasing means:* a coil spring operatively associated with a spool or pulley for urging the spool or pulley in a direction to wind the cable around the sensor hub

5. *means for visually indicating whether the sensor is in the secured or unsecured state:* (1) two different colored LEDs located on the sensor, one of which is always emitting a light and the state of the sensor is color coded-green for secured and red for unsecured; and (2) a single LED located on the alarm housing that only emits a light when the sensor is unsecured

6. *means for attaching the sensor to the product:* (1) an adhesive sheet with a hole that aligns with the button on the sensor; and (2) an elongate strip with a male phone jack that is threaded through a portion of the product and the male phone jack is connected into the female phone jack in the sensor housing

7. *means for attaching the cable first end to the product:* (1) an adhesive sheet with a hole that aligns with the button on the sensor; and (2) an elongate strip with a male phone jack that is threaded through a portion of the product and the male phone jack is connected into the female phone jack in the sensor housing

8. *means for electrically connecting said first and second conductors:* (1) a plunger button; (2) a short cylinder with a conductive surface; and (3) an elongate strip with a male phone jack that is threaded through a portion of the product and the male phone jack is connected into the female phone jack in the sensor housing

9. *a retracting mechanism in said housing:* a spool or pulley mounted for rotation in the housing on which the multiconductor cable is wound and a device operatively associated with the spool or pulley for urging the spool or pulley in a direction to wind the cable onto the spool or pulley

10. *a multiconductor cable:* a cable having more than one conductor and the cable is electrically connected to a sensor

11. *a cable:* any cable, whether segmented or not, that maintains a continuous electrical path

Conclusion

For the foregoing reasons, the disputed claim terms of the '590 Patent are construed as set forth in this Memorandum Opinion and Order.

SO ORDERED.

N.D.Ill.,2008.
Se-Kure Controls, Inc. v. Diam USA, Inc.