**UNITED STATES DISTRICT COURT**
**DISTRICT OF CONNECTICUT**

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| HUBBELL INC., Plaintiff, | : | CIVIL CASE NO. 3:08-cv-1656 (JCH) |
| v. | : | |
| PASS & SEYMOUR, INC. Defendant. | : | MARCH 17, 2011 |

**RULING RE: MOTIONS FOR SUMMARY JUDGMENT (DOC. NOS. 51, 65, 75)**

## I. INTRODUCTION

This case involves numerous claims in two patents related to ground fault circuit interrupter receptacles (GFCIs). GFCIs are electrical outlets designed to protect users from electrocution in the event of a ground fault. A ground fault occurs when an abnormal current path is established permitting electricity to flow from the outlet to the ground, potentially causing electrocution. GFCIs are designed to sense a ground fault and stop the flow of electricity through the outlet. GFCIs have been in wide use for years, and numerous companies offer them for sale. However, GFCI manufacturers, such as the plaintiff here, continue to seek patent protection for improved GFCI designs.

The patent claims at issue concern improvements to GFCIs that are intended to prevent problems arising from improper installation. In earlier designs, if a GFCI was miswired at installation, the GFCI could still provide power to the outlets and, when tested, could appear to protect against ground fault. Yet, due to miswiring, the device would not provide protection from actual ground faults. Plaintiff, Hubbell, Inc., sought and obtained patents relating to improvements intended to address this issue, including

the two patents at issue here, U.S. Patent No. 5,363,269 (the '269 Patent) and U.S. Patent No. 7,538,994 (the '994 Patent).

Hubbell contends that defendant, Pass & Seymour, Inc. ("P&S"), sells two GFCIs, the "G4" and the "G5," that infringe numerous claims in Hubbell's '269 and '994 patents. P&S contests the accusation of infringement and counters that certain of the claims at issue are invalid due to anticipation and obviousness. P&S also asserts that Hubbell obtained the '994 Patent through inequitable conduct and that Hubbell is not entitled to priority through relation back to an early provisional application.

Hubbell first moved for partial summary judgment on the issues of priority and inequitable conduct (Doc. No. 51). The parties then filed cross motions for summary judgment on all or nearly all of the patent claims at issue (Docs. No. 65, 75). After the motions were fully briefed, the court heard oral argument. The court now issues this Ruling addressing the three pending motions.

## II. LEGAL STANDARDS

On a motion for summary judgment, the burden is on the moving party to establish that there are no genuine issues of material fact in dispute and that it is entitled to judgment as a matter of law. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 256 (1986); White v. ABCO Engineering Corp., 221 F.3d 293, 300 (2d Cir. 2000). Once the moving party has met its burden, in order to defeat the motion the nonmoving party must "set forth specific facts showing that there is a genuine issue for trial," Anderson, 477 U.S. at 255, and present such evidence as would allow a jury to find in his favor. Graham v. Long Island R.R., 230 F.3d 34, 38 (2d Cir. 2000).

In assessing the record to address questions of fact, the trial court must resolve

all ambiguities and draw all inferences in favor of the party against whom summary judgment is sought. Anderson, 477 U.S. at 255; Graham, 230 F.3d at 38. "This remedy that precludes a trial is properly granted only when no rational finder of fact could find in favor of the non-moving party." Carlton v. Mystic Transp., Inc., 202 F.3d 129, 134 (2d Cir. 2000). "When reasonable persons, applying the proper legal standards, could differ in their responses to the question" raised on the basis of the evidence presented, the question must be left to the jury. Sologub v. City of New York, 202 F.3d 175, 178 (2d Cir. 2000).

In a patent case, where a party moves for summary judgment on the issue of infringement or non-infringement, "determination of infringement is a two-step process." Lockheed Martin Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1318 (Fed. Cir. 2003). First, the court must construe the patent claims at issue to determine their scope. Claim construction is a question of law. Id. "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Although the claims are to be read in light of the entire patent, including the written specification and drawings, "[t]he written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of the claims." Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1985) (en banc), aff'd, 517 U.S. 370 (1996). The words of the claim "are generally given their ordinary and customary meaning." Phillips, 415 F.3d at 1312 (quotation omitted). In the context of patent law, the ordinary and customary meaning is "the

meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Id. at 1313. The primary sources for determining the scope of the claims are the claims read as a whole, the written specification and figures, and the prosecution history giving rise to the patent. See id. at 1314-17. As a secondary and "less significant" source, the court may also consult "extrinsic evidence," including dictionaries, technical treatises, and expert opinions. See id. at 1317-19.

Second, the court must determine whether an accused device infringes the claims by "compar[ing] the properly construed claims to the accused device." Lockheed Martin, 324 F.3d at 1318. This second step in the infringement analysis presents an issue of fact. Id. Summary judgment is appropriate only if, "with all reasonable factual inferences drawn in favor of the non-movant, it is apparent that only one conclusion as to infringement could be reached by a reasonable jury." ATD Corp. v. Lydall, Inc., 159 F.3d 534, 540 (Fed. Cir. 1998). "To support a summary judgment of noninfringement, it must be shown that, on the correct claim construction, no reasonable jury could have found infringement on the undisputed facts or when all reasonable factual inferences are drawn in favor of the patentee." Network, LLC v. Centraal Corp., 242 F.3d 1347, 1353 (Fed. Cir. 2001). "Where the evidence is such that no reasonable jury could determine two elements to be equivalent, district courts are obliged to grant partial or complete summary judgment." Warner-Jenkinson Co. v. Hilton Davis Chemical, 520 U.S. 17, 39 n.8 (1997).

Where a party moves for summary judgment on the grounds that a patent claim is invalid, the court must also construe the claims as a matter of law, and then determine whether the moving party has met its burden of proof. "A patent is presumed

valid[,] and the party asserting invalidity has the burden of persuasion to show the contrary by clear and convincing evidence." Research Corp. Tech., Inc. v. Microsoft Corp., 627 F.3d 859, 870 (Fed. Cir. 2010). "A determination that a patent is invalid as anticipated under 35 U.S.C. § 102 requires that a prior art reference disclose every limitation of the claimed invention, either explicitly or inherently." Liebel-Flarsheim Co. v. Medrad, Inc., 481 F.3d 1371, 1381 (Fed. Cir. 2007). Upon a motion for summary judgment on invalidity by anticipation, "[t]he challenger has the burden of going forward with invalidating prior art. The patentee then has the burden of going forward with evidence to the contrary, i.e., the patentee must show that the prior art does not actually invalidate the patent or that it is not prior art because the asserted claim is entitled to the benefit of an earlier filing date." Research Corp., 627 F.3d at 870 (citations omitted). Thus, if the movant meets its initial burden of proving invalidity by anticipation and the patentee fails to respond with evidence rebutting that showing of anticipation, then summary judgment should be granted in favor of the movant. See id.

## III. BACKGROUND OF THE CLAIMED INVENTIONS

Analysis of the patent claims and the issues in this case requires some background understanding of conventional GFCI devices and their shortcomings. The following background facts are not disputed by the parties.

GFCI devices are intended to be connected to a source of AC power. AC power is provided by a set of three wires: a "hot conductor," a "neutral conductor," and a "grounded conductor." The hot conductor should be attached to the hot line terminal on the GFCI; the neutral conductor should be attached to the neutral line terminal of the GFCI; and the grounded conductor should be attached to a ground terminal. In addition

to the hot and neutral line terminals, a GFCI device typically has hot and neutral load terminals. These load terminals can be used to connect the GFCI device to one or more non-GFCI receptacles. AC power would then flow through the GFCI receptacle to these non-GFCI receptacles, permitting them to benefit from the ground fault protection offered by the GFCI device. Of course, GFCIs also have "face terminals" (i.e., sockets) where a person may connect the plug for an appliance or electrical device. When installed and working properly, AC power flows from the two line terminals through the face terminals and into any attached electrical device. It should also flow to the load terminals and to any "downstream" receptacles connected to them.

A GFCI device usually includes a sensing mechanism, or a "toroid," typically shown in schematic drawings as a ring encircling the two internal lines that carry electricity from the line terminals to the face and load terminals. See, e.g., '269 Patent, Figs. 2-5. The toroid is designed to detect a current imbalance in the two lines, which occurs when there is a ground fault. When an imbalance is detected, the GFCI "trips," causing switches in the two lines to open, thus breaking the flow of electricity from the line terminals to the face and load terminals.

GFCI devices also commonly include a "test circuit" or "supervisory circuit" attached to a "test" button on the face of the receptacle. Pushing the test button will close the test circuit and simulate an imbalanced current through the toroid, thus simulating a ground fault and causing the device to trip. These devices are also typically equipped with a "reset" button that can be used to return the open switches to their normal, closed position, thus permitting the flow of electricity from the line terminals to resume.

In conventional GFCIs, problems can occur when the AC power source is mistakenly attached to the load terminals instead of the line terminals during installation. In these conventional GFCIs, the circuit connecting the load terminals and the face terminals is not broken when the device trips. The switches only break the path running from the line terminals to the face and load terminals. Therefore, when conventional GFCI devices are miswired in this way, power is supplied to the face terminals via the load terminals, and it will not cut off in the event of a ground fault. Moreover, in such conventional GFCIs, use of the test and reset buttons may not alert the user that there is a problem. In some GFCIs, use of the test button provides a visual indication, such as a light, to show that the switches had opened, regardless of whether or not their opening provides any protection against ground fault. Thus, when the device is miswired, use of the test button can provide a false indication of proper functioning.

The patents at issue in this litigation relate to two solutions to these problems. The parties dispute the construction of many of the particular claims and the precise scope of those claims, but there is no dispute about the basic nature of the solutions taught in the two patents. The '269 Patent, issued on November 8, 1994, relates to a way of arranging the supervisory circuit, i.e., the test circuit linked to the test button. By arranging the supervisory circuit in a particular way, operation of the test button will cause the protective device to trip, and provide visual indication thereof, only if the GFCI is properly wired. This should eliminate the false indication of proper installation.

The '994 Patent, issued on May 26, 2009, but claiming priority based on a provisional application filed on May 9, 2002, is directed toward a different solution with two primary elements. First, the '994 Patent discloses a latching mechanism, or a set of

switches, capable of isolating the face terminals from both the line terminals and the load terminals. Thus, the flow of electricity to the face terminals can be stopped regardless of whether the AC power is attached to the line or load terminals. Second, the '994 Patent discloses an "initial miswire prevention mechanism" that prevents the latching mechanism from closing and connecting the face terminals to the line and load terminals as long as the AC power source is improperly connected to the load terminals. Thus, as long as the GFCI is miswired, the face terminals are electrically isolated from both the line and the load terminals. This is referred to as a "dead face" arrangement, connoting the lack of electricity flowing to the outlets at the face of the device. These two features render the device unusable until it is correctly installed.

The detailed construction and the scope of the particular claims at issue is discussed further below. The specific, undisputed facts concerning the design and operation of the accused devices are also discussed below, where they are relevant to the particular infringement or invalidity analysis.

## IV. NON-INFRINGEMENT OF CLAIM 2 OF '269 PATENT

Both Hubbell and P&S seek summary judgment on Claim 2 of the '269 Patent. The parties do not contest the design and operation of the accused P&S devices, and the dispute can be resolved based entirely on the construction of Claim 2. Hubbell contends that, on what it sees as the appropriate claim construction, there is no genuine issue of fact that P&S's devices infringe, whereas P&S contends that, on its preferred claim construction, there is no genuine issue of fact that its devices do not infringe. The court will construe the claim and then determine, on the uncontested facts, whether or not the accused devices infringe.

### A. Claim Construction

Claim 2 of the '269 Patent reads as follows:

> A method of testing a ground fault circuit interrupter (GFCI) receptacle having terminals for connecting to an AC source, terminals for connection to a load, a receptacle with hot and neutral connectors, conductors connecting the AC source terminals to the receptacle connectors, openable contacts for interrupting the conductors in the event of excessive ground current and an indicator for visually indicating that the contacts have been opened, the method including
>
> [1] providing a manually operable supervisory circuit for selectively opening the contacts, and
>
> [2] connecting the supervisory circuit between the hot connector of the receptacle and ground without passing through a neutral wire so that operation of the supervisory circuit will cause opening of the contacts and the visual indication thereof only when the GFCI receptacle is properly installed.

Nocilly Declaration (Doc. No. 69), Exh. C ('269 Patent) (emphasis added).

The parties agree that the "manually operable supervisory circuit" in [1] refers to a circuit that can normally be operated, i.e., closed, by use of the "test" button. When the GFCI device is properly installed, pushing the "test" button closes the supervisory circuit, causing electricity to flow through it, simulating a ground fault, and causing the opening of a set of contacts that prevents electricity from following to the outlets.

The parties dispute the significance of the limitation stated in [2]. P&S argues that the plain language limits the scope of the claim to devices in which the supervisory circuit is connected "to ground without passing through a neutral wire." P&S's proposed construction amplifies this language, stating that it should be interpreted to require "a supervisory circuit that extends from the hot connector of the receptacle directly to

ground, i.e., earth ground, but in no event passing through a neutral wire." P&S Memorandum (Doc. No. 67) at 15. Hubbell argues that this language should be construed not to refer to any neutral wire, but only to one particular neutral wire. As Hubbell puts it, the phrase "'without passing through a neutral wire' refers to the lack of current flowing through the neutral wire that passes through the sensing coil when the supervisory circuit (i.e., the test button) is operated." Hubbell Mem. (Doc. No. 75-1) at 23. Thus, Hubbell argues that this limitation does not exclude coverage of devices in which the supervisory circuit connects to ground via a neutral wire other than the one particular neutral wire that passes through the "sensing coil." Accordingly, Hubbell also objects to the use of the word "directly" in P&S's construction.

When construing patent claims, there is a "heavy presumption in favor of the ordinary meaning of claim language as understood by one of ordinary skill in the art." Prima Tek II, L.L.C. v. Polypap, S.A.R.L., 318 F.3d 1143, 1148 (Fed. Cir. 2003). Focusing on the claim language itself, there is little to recommend Hubbell's construction. Essentially, Hubbell contends that, although it used the indefinite article ("a neutral wire"), it meant the definite article ("the neutral wire that passes through the sensing coil"). There is little basis for such a reading in the claim language itself. The claim does go on to recite that the purpose of avoiding a neutral wire is to ensure that the supervisory circuit will only open the contacts when properly installed, but this purpose does not show that Hubbell referred only to the one neutral wire passing through the sensing coil. Instead, the claim language indicates that Hubbell took a more cautious approach, proposing that the supervisory circuit should not pass through any neutral wire—i.e., that it should pass directly to ground--and thus ensuring the

stated purpose would be accomplished. The ordinary meaning of the claim language indicates that Hubbell meant to extend its claim only to devices in which the supervisory circuit connects directly to ground without passing through any neutral wire.

The specification and associated figures support this construction to the extent that they show embodiments in which the supervisory circuit connects directly to ground, bypassing not just one, but at least two neutral wires. See '269 Patent, Figs. 4 & 5 (showing a direct connection to ground, 63, without connecting to wires 15 or 33); Col. 3, Line 33 (identifying 15 and 33 as neutral wires). Given the presence of multiple neutral wires in the specification and figures, the use of the indefinite article in the claim language naturally indicates that the claim is limited to supervisory circuits that do not pass through any neutral wire.

To overcome the presumption in favor of this ordinary meaning, Hubbell points to a number of passages in the specification indicating that a desired effect of bypassing neutral wires is that the supervisory circuit will not cause an imbalance of current flowing through the sensing coil or "toroid." See, e.g., '269 Patent, Col. 5, Lines 21-31 ("since no net current flows through the toroid, the trip circuit does not operate and the installer is alerted to the fact that there is a problem with the system"); Col. 5, Lines 39-47 ("depressing the test button would again cause no current through the toroid, failing to trip the contacts and thereby alerting the installer"); Col. 5, Lines 48-53 ("there would again be no current through the toroid in response to depression of the test button and the installer would be alerted"). These passages in the specification indicate that the invention takes advantage of the fact that, by bypassing the particular neutral wire connected to the toroid, operation of the supervisory circuit will not create an imbalance

of current through the toroid when the device is miswired. Nonetheless, they fail to provide a clear indication that the language in the claim refers only to that specific neutral wire connected to the toroid. Though these excerpts do not address the rationale for the broader limitation suggested by the claim language, they are perfectly consistent with such a limitation.[1]

In addition to the claims and specification, "a court 'should also consider the patent's prosecution history, if it is in evidence.'" Phillips, 415 F.3d at 1317 (quoting Markman, 52 F.3d at 980). "The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution." Phillips, 415 F.3d at 1317 (quoting Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005)). In this case, the prosecution history is telling—it removes any doubt that the claim language must be given its plain, broad meaning.

Claims 1 and 2 of the '269 Patent were initially rejected by the examiner as anticipated in a patent previously issued to Bienwald. Hubbell added the language at issue here in order to distinguish that prior art. The relevant passage of the prosecution history is reproduced in full as follows:

> As noted at column 4, lines 47-49 of Bienwald (referred to in the rejection), closing of test switch 71 provides a path for current to flow from the phase wire 25 to ground "through the neutral lead 5 bypassing the transformer 33." (Emphasis added). Thus, Bienwald is arranged exactly like the prior art circuit shown in Fig. 2 insofar as the

[1] The parties dispute the significance of another passage in the specification. P&S contends that Hubbell acted as its own lexicographer in the following sentence: "It must be understood that the term 'ground' in this context always means 'earth ground' and never refers to a neutral wire such as wires 15 or 33." '269 Patent, Col. 3, Lines 31-33. Hubbell makes a reasonable argument that this sentence was not intended to serve as an all-purpose definition of "ground" throughout the patent. The sentence is expressly limited to its context, and that context involves discussion of how prior art devices can be triggered, not how the supervisory circuit is arranged in Hubbell's claimed invention.

> connection of supervisory circuit 60 is concerned, i.e., the supervisory circuit is connected to the neutral wire and is connected to ground only through that neutral wire.
>
> The present invention is based on the recognition that connecting the supervisory circuit directly to ground, bypassing the neutral wire, provides significant advantages, as discussed in the present application.
>
> In order to clarify this distinction, claims 1 and 2 are amended to specifically recite the fact that the connection is not made to the neutral wire. This eliminates Bienwald as a reference under § 102. Furthermore, since Bienwald teaches nothing about using a direct ground connection in the manner of the invention, it is an inappropriate reference for a rejection under § 103. The method claim [i.e., Claim 2] was not separately rejected, but it is clear that the same distinction applies thereto.

Nocilly Decl., Exhibit H at 60 (emphasis in original).

Hubbell argues that this prosecution history does not contain a clear or unambiguous disavowal of claim scope. To the contrary, the prosecution history could hardly be clearer. In short, Bienwald involved a circuit that connected to ground via a neutral wire, and in order to distinguish that prior art, Hubbell emphasized that "connecting the supervisory circuit directly to ground" was at the heart of its invention. Hubbell reiterated that a "direct ground connection" is not taught in the prior art. Thus, Hubbell plainly indicated to the examiner that it claimed only a supervisory circuit that connected directly to ground, and it disavowed coverage of devices in which the connection to ground is indirect. The claim language at issue here was inserted to accomplish precisely this objective, and consistent with the broad disavowal in the prosecution history, Hubbell chose broad language to limit its claim. The use of the indefinite article in the claim language expressed Hubbell's intent to claim only a "direct

ground connection."

It may well be that a more narrow disavowal would have satisfied the examiner. The court is not in a position to speculate about that. Nor would it be relevant to do so. In light of the broad exclusion expressed both in the prosecution history and in the claim, it would be improper to recast and narrow the claim language. The claim language must be construed to mean what it says, that is, to exclude coverage of devices in which the supervisory circuit connects to ground indirectly through "a neutral wire."

**B. Infringement**

As just explained, Claim 2 of the '269 Patent must be construed to be limited to devices in which the supervisory circuit is connected directly to ground "without passing through a neutral wire." The parties agree that, in the accused P&S devices, "the supervisory circuit . . . was not connected directly to ground and was instead indirectly connected to ground by virtue of . . . the neutral AC power supply wire . . . ." P&S Local Rule 56 Statement (Doc. No. 68) ¶¶ 6, 16; Hubbell Local Rule 56 Statement (Doc No. 90) ¶¶ 6, 16. Therefore, the accused P&S devices do not literally infringe Claim 2 of the '269 Patent.

Given the prosecution history, Hubbell is also estopped from arguing infringement based on the doctrine of equivalents. "When a patentee responds to the rejection by narrowing his claims, this prosecution history estops him from later arguing that the subject matter covered by the original broader claim was nothing more than an equivalent. Competitors may rely on the estoppel to ensure that their own devices will not be found to infringe by equivalence." Festo Corp. v. Shoketsu Kinzoku Kogyo

Kabushiki Co., 535 U.S. 722, 727 (2002). While "a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel," the use of estoppel is particularly well established "in the context of amendments made to avoid the prior art." Id. at 735-36 (citing Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126, 137 (1942), and Keystone Driller Co. v. Northwest Engineering Corp., 294 U.S. 42, 48 (1935)); see also Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 15, 30-34 (1997) (surveying cases applying prosecution history estoppel to limit the doctrine of equivalents). As a matter of law, the accused P&S devices do not infringe Claim 2 of the '269 Patent under the doctrine of equivalents.

There is no genuine issue of material fact as to the non-infringement of Claim 2 of the '269 Patent. Accordingly, summary judgment is granted in favor of P&S on this issue.[2]

## V. INVALIDITY OF CLAIMS 14-17, 20-22, 23-25, & 26-29 OF THE '994 PATENT

The '994 Patent relates to the use of a "dead face" arrangement in a GFCI to address potential miswiring. As explained above, "dead face" refers to the electrical isolation of the face terminals from both the line and load terminals, so that the sockets can be cut off from power regardless of whether the AC power source is connected to the line or load terminals. The claims addressed in this section—14-17, 20-22, 23-25 & 26-29—all relate specifically to an internal design in which the face terminals can be isolated from and connected to the line and load terminals. Both Hubbell and P&S move for summary judgment with respect to these claims. The claims addressed in the

[2] In light of this holding, the court need not consider P&S's alternative arguments that it does not infringe Claim 2 directly because it does not practice every step in the claimed method and that it does not induce infringement or contribute to infringement by selling devices that could be used to practice the claimed method.

next section, below, concern a separate, but related safety feature intended to ensure that the face terminals remain electrically isolated as long as the device is miswired.

### A. Claim Construction of Independent Claims 14, 23, and 26

#### 1. Claims 14 and 26

Among the claims addressed in this section, Claims 14, 23 and 26 are independent. The remaining claims, Claims 15-17, 20-22, 24, 25 and 27-29, are dependent on one or the other of these three claims. The court first construes Claims 14 and 26. Claims 14 and 26 both address the use of a "latching mechanism" to achieve dead face capability in a GFCI. The parties' claim construction arguments focus on the term "latching mechanism."

Claim 14 of the '994 Patent reads as follows:

> A protective device having source and load terminals between a conductive path, and face terminals, the protective device comprising:
>
> > a latching mechanism, adapted to be operable between a first state in which said latching mechanism permits electrical contact between said source and load terminals and said face terminals, and a second state in which said contact is broken; and
> >
> > a sensing circuit, adapted to selectively place the latching mechanism in said second state upon detection of a ground fault condition to electrically isolate said face terminals from said source and load terminals.

'994 Patent, Col. 13, lines 8-19.

Claim 26 reads as follows:

> A method for protecting against powering face terminals of a protective device having source terminals and load terminals

connected between a conductive path, comprising:

> providing separate contacts for each one said face terminals, source and load terminals; providing a latching mechanism operable to be in one of a first state which electrically connects said face, source and load terminals and a second state which electrically isolates said face, source and load terminals; and
>
> placing said latching mechanism in said second state when a sensing circuit detects a ground fault condition in said conductive path.

'994 Patent, Col. 14, lines 1-12.

The parties accuse each other of improperly shifting positions on the construction of "latching mechanism." Ultimately, however, Hubbell contends that that the term should be given a means-plus-function construction and, therefore, should be limited to the allegedly novel latching mechanism disclosed in the patent specification. P&S argues that latching mechanism is well understood in the art, and that the term should be construed broadly to claim any sort of structure that would be used by those skilled in the art to latch and unlatch the contact points. P&S contends that, given such a construction, Claims 14 and 26, and those that depend on them, are invalid because they are anticipated and obvious in light of the prior art.[3]

In support of its favored claim construction, P&S cites the Initial Expert Report of Hubbell's expert, Dr. Mark N. Horenstein:

> The "latching" mechanism disclosed in [Claims 14 and 26] would be well understood by a person skilled in the art to mean a set of contacts and associated mechanical

[3] P&S also argues that, if a means-plus-function construction is appropriate, then the claims would also be invalid because they would not relate back to an earlier provisional application and therefore would not be entitled to priority. Nevertheless, P&S ultimately favors a broad, non-means-plus-function, construction.

> apparatus capable of engaging and separating the contacts. The two states of the contacts – open and closed – would likewise be very well understood by a person skilled in the art to mean a state in which current cannot and can flow, respectively, between the three sets of terminals. For example, with the latch in the closed (first) state, the three hot-referenced terminals of the protective device are connected together electrically, as are the three neutral-referenced terminals.

Nocilly Decl., Exh. A (Horenstein Rpt.) ¶ 50. P&S contends that this is an admission that "latching mechanism" has a well understood meaning in the art, and that a means-plus-function construction is, therefore, inappropriate.

P&S also cites Hubbell's interrogatory responses, issued before Hubbell began to argue for a means-plus-function construction. Hubbell's responses do not expressly indicate that Hubbell viewed the term as requiring means-plus-function construction. Instead, Hubbell asserted that "latching mechanism" should be construed as claiming:

> a mechanism that is selectively latched into one of two positions, a first position where there is electrical continuity between the terminals that connect to a source, the terminals that connect to a load and the terminals accessible on the face of the device, and a second position where the electrical continuity between the terminals is broken and the terminals accessible on the face of the device are electrically isolated from the source and load terminals.

Nocilly Decl., Exh. I (Hubbell's Resp. to First Set of Interrogatories), at Exh. A. P&S stresses that Hubbell's construction does not identify the function performed and does not indicate that the claim is limited to the particular means disclosed in the specification.

Hubbell, on the other hand, asserts that the term, "latching mechanism," would not be "understood by those of ordinary skill in the art of the GFCI device to refer to any

particular type of structure." Hubbell Mem. (Doc. No. 75-1) at 10. Hubbell does not cite any extrinsic evidence or expert opinion directly supporting this position. However, Hubbell contends that its position is consistent with the above quoted portion of Hubbell's expert's report. Under Hubbell's characterization, the reference to an "associated mechanical apparatus" shows that Dr. Horenstein was advancing a means-plus-function interpretation. Hubbell Reply at 3. Hubbell also argues that dictionary definitions of "latch" generally refer to the sort of latch used to close a door or gate, and Hubbell argues that such definitions offer no guidance on the meaning of "latching mechanism" in this context. Hubbell Mem. at 10-11.

Hubbell further argues that a means-plus-function interpretation should be favored because a broader interpretation might render the claim invalid. Hubbell Mem. at 11 (citing In re Yamamoto, 740 F.2d 1569, 1571 (Fed. Cir. 1984)). Hubbell admits that a prior patent, U.S. Patent No. 6,246,558 to DiSalvo, et al. (the '558 Patent), "clearly describes source, load and face terminals which can be electrically isolated from one another" and "a contact structure . . . that is capable of isolating line, load and user accessible connections." Id. at 12. Hubbell admits that if "latching mechanism" is construed broadly to claim any latching structure capable of separating or connecting the contacts, then the '994 Patent "may read on the '558 patent" and "render claim 14 invalid." Id. Hubbell contends that if the term is given a means-plus-function construction, these claims would be valid because it relates to a novel design for the "latching mechanism" involving multiple contact points and a "mechanical cantilever contact arm structure" as disclosed in the specification and figures. Hubbell Opp. at 13. Hubbell emphasizes that the patent specification states that this latching mechanism

design “provides improved safety while maintaining a relatively low level of complexity with regard to conventional approaches.” ‘994 Patent, Col. 6, Lines 51-53.

The primary dispute, then, is whether the term, “latching mechanism,” should be given a means-plus-function term in accordance with 35 U.S.C. section 112, ¶ 6. In construing claim terms, there is a presumption against means-plus-function treatment where a claim limitation does not use the word “means.” Massachusetts Institute of Tech. v. Abacus Software (“MIT”), 462 F.3d 1344, 1353 (Fed. Cir. 2006). This presumption can be overcome where “the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” Id. (quotations omitted). The Federal Circuit has held that the presumption can be overcome where a claim limitation refers to a “mechanism,” without additional claim language sufficient to indicate the structure of such mechanism. See Welker Bearing Co. v. PHD, Inc., 550 F.3d 1090, 1096-97 (Fed. Cir. 2008); MIT, 462 F.3d at 1353-54. However, the Federal Circuit has also made clear that use of the term “mechanism” is not, on its own, sufficient to show that a means-plus-function construction is appropriate. See Welker Bearing, 550 F.3d at 1096 (citing Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996)).

If the language of the claim conveys to one reasonably skilled in the art the general sort of structure claimed, then a means-plus-function construction should be avoided. In Greenberg, the Federal Circuit held that the claim language, “detent mechanism defining the conjoint rotation of said shafts . . .,” did not call for means-plus-function construction. 91 F.3d at 1583. The Federal Circuit explained that “the fact that a particular mechanism—here ‘detent mechanism’—is defined in functional terms is not

sufficient to convert a claim element containing that term into a 'means for performing a specified function' within the meaning of section 112(6)." Id. The Federal Circuit noted that dictionary definitions made clear that the noun, 'detent,' was well-understood to identify a particular type of device. The court conceded that "the term 'detent' does not call to mind a single well-defined structure," but it emphasized that "the same could be said of other commonplace structural terms such as 'clamp' or 'container.' What is important is not simply that a 'detent' or 'detent mechanism' is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art." Id.

The reasoning of Greenberg applies to the claim language at issue here. Hubbell's own interrogatory responses confirm a connection between the term "latching mechanism" and the root word "latch." The claimed mechanism is one that can be "selectively latched into one of two positions . . . ." Hubbell's First Resp. to Interrogatories. By reference to the root word, "latch," the term "latching mechanism" suggests a general and familiar kind of structure. Although the term may not "call to mind a single well-defined structure," people commonly understand the idea of a latch as a structure. As discussed below, the intrinsic and extrinsic evidence both indicate that "latching mechanism" would be understood by one reasonably skilled in the art to refer to a structure.

Hubbell correctly points out that many dictionary definitions of "latch" note that latches are commonly used to close doors or gates. Hubbell contends that this shows that the idea of a latch or a latching mechanism would not be understood in this context. However, dictionary definitions also indicate that the common understanding of the term

is not limited to the context of doors and gates. See, e.g., Merriam-Webster's Online Dictionary, www.Merriam-Webster.com ("any of various devices in which mating mechanical parts engage to fasten but usually not to lock something"); Webster's Encyclopedic Unabridged Dictionary of the English Language (1994) ("a device for holding a door, gate, or the like, closed, consisting basically of a bar falling or sliding into a catch, groove, hole, etc.") (emphasis added); Webster's Third New International Dictionary, Unabridged 1275 (1993) ("a device that holds something in place by entering a notch or cavity"). As these definitions indicate, latches are a kind of device, used in a variety of contexts, involving "mating mechanical parts" that can fasten or hold parts together. Consistent with these definitions, common usage indicates that the term "latch" refers not only to a closure on a door or gate, but also to attachments or closures found on windows, cases, trunks, luggage, jewelry, and countless other things. It is true that neither the claim language nor the dictionary definitions identify the precise structure of the claimed "latching mechanism," but that is not required. "Latch," like "detent," does not convey "a single well-defined structure, but the same could be said of other commonplace structural terms such as 'clamp' or 'container.'" Greenberg, 91 F.3d at 1583. "What is important is not simply that a ['latch'] or ['latching mechanism'] is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art." Id.

Nonetheless, Hubbell seeks to narrow its claim by drawing attention to a passage in the patent specification that indicates that Hubbell had designed a particular latching mechanism that it viewed as superior to other available designs. At Column 6, lines 51-53, the specification states that the latching mechanism described therein "provides

improved safety while maintaining a relatively low level of complexity with regard to conventional approaches." Focusing on this passage and the accompanying description of that design, Hubbell argues that it claimed only a specific latching mechanism design involving three points of contact and "cantilever arms." Hubbell Mem. at 13.

This passage does not show that Hubbell intended to limit its claim to a particular, allegedly novel structure. Although Hubbell now emphasizes the number of contacts and the "cantilever arms," neither aspect is clearly emphasized in the specification. Indeed, the terms "cantilever" and "cantilever arms," or any variant thereof, do not even appear in the specification. Even if they did, the language in the specification does not show that Hubbell viewed that embodiment of the latching mechanism as novel. It merely indicates that Hubbell viewed this embodiment as advantageous relative to other possible embodiments. As Hubbell states in the specification, "[t]hose skilled in the art can now appreciate from the foregoing description that the broad teachings of the present invention can be implemented in a variety of forms," and although "described in connection with particular examples thereof, the true scope of the invention should not be so limited." '994 Patent, Col. 11, Lines 36-43.

Another portion of the patent confirms that Hubbell expected that people skilled in the art would understand the idea of a latching mechanism. Claims 30 and 35 also both claim a "latching mechanism," but the claim language indicates that this latching mechanism is configured only to close or open the connection between the line and load terminals: these claims do not reference isolation of the face terminals. '994

Patent, Col. 14-15. Similarly, the specification states that "another embodiment of the present invention" is shown in Figure 12, and that figure shows a "latching mechanism" that does not have the three contact point feature emphasized by Hubbell. '994 Patent, Col. 9, Lines 40-42; Col. 10, Lines 1-10 (referring to "latching mechanism 178"); and Fig. 12 (showing "latching mechanism 178"). Because this embodiment does not show isolation of the face terminals, see '994 Patent, Fig. 12 & Col. 9, Lines 42-45 (stating that this embodiment "does not contain isolated face terminals"), it appears to illustrate the "latching mechanism" that is claimed as a part of claim 30 and 35. Thus, this portion of the specification is not intended to provide a direct illustration of the meaning of "latching mechanism" as used in the claims at issue here. However, what is important is that the specification and figures provide virtually no description of the specific structure of this other latching mechanism. The use of the term "latching mechanism" to refer to another structure differing in detail and situated in a different context, without any detailed description of that structure, shows that Hubbell expected that term would be understood to refer to a general type of structure familiar to those skilled in the art.

Furthermore, the claims, taken as a whole, cast serious doubt on Hubbell's contention that it viewed the cantilever arms and contact structure as the heart of its invention. In dependent Claims 18 and 19, Hubbell sought to limit the "latching mechanism" of Claim 14 by expressly claiming specific structural aspects of that mechanism. Claim 18 adds that the "latching mechanism comprises: an electromagnetic device, adapted to place said latching mechanism in one of said first and second states; a first transformer, adapted to detect a current imbalance in said conductive path; and a second transformer, adapted to detect an amount of the current

imbalance in said conductive path." Claim 19 adds that "said electromagnetic device comprises a solenoid." If Hubbell had sought to limit its claim to the allegedly novel structure supposedly disclosed in the specification, it would not have been difficult to draft similar claim language to focus its claims on those specific features.[4] In light of its decision to claim other specific features of the latching mechanism, Hubbell's failure to expressly claim that the latching mechanism "comprises" the allegedly novel arrangement of contacts and cantilever arms disclosed in the specification casts serious doubt on its contention that these features are the heart of its invention. The absence of such language in the claims outweighs the specification language indicating that it viewed that particular embodiment as an improvement upon other available embodiments.

Hubbell's own expert report also indicates that the term "latching mechanism" would have a reasonably well understood meaning in the art. Dr. Horenstein states, "The 'latching' mechanism disclosed in [Claims 14 and 26] would be well understood by a person skilled in the art to mean a set of contacts and associated mechanical apparatus capable of engaging and separating the contacts." Horenstein Rpt. ¶ 50. Hubbell's attempt to re-read this sentence to support its later-adopted means-plus-function construction is not convincing. The first part of the quoted sentence is phrased in precisely the language one would avoid if seeking to convey that means-plus-function construction was appropriate. Naturally, Hubbell emphasizes the second part of the sentence. Taking both parts together, however, the opinion expressed is that people

[4] Alternatively, simply using the words, "means for," would have created a presumption in favor of means-plus-function construction. Welker Bearing, 550 F.3d at 1096.

skilled in the art would understand the idea of a latching mechanism as general kind of structure, although they might implement the latching mechanism with designs that differ in detail.

In light of the use of "latching mechanism" in the claims and specification, the definitions confirming the familiarity of the term "latch" in a variety of contexts, and the opinion of Hubbell's own expert, Hubbell fails to support its claim that people reasonably skilled in the art of electric circuitry and electrical outlets would not readily understand the idea of a latching mechanism used to connect and disconnect various contact points in a conductive path. It may be true that the term "latching mechanism" as used in the claim would not convey any one particular design for a latching mechanism, but it is implausible that people reasonably skilled in the art would not understand what a latching mechanism is and how it could be designed. The term "latching mechanism" is therefore directly analogous to the term "detent mechanism" construed by the Federal Circuit in Greenberg. It conveys the idea of a structure that can be used to fasten or hold together, but not lock, separate parts, in this case, the contact points of the line, load and face terminals. People skilled in the art would recognize that such a mechanism could be accomplished in a number of ways, and that the precise details of the latching mechanism were not essential to Hubbell's claim.

In light of this conclusion, the principle that claims should be interpreted to preserve their validity has no application here. In a recent en banc opinion, the Federal Circuit limited that principle "to cases in which 'the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous.'" Phillips, 415 F.3d at 1327 (quoting Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 911 (Fed.

Cir. 2004)). After determining that the term at issue there was not susceptible to the narrow construction sought, the court concluded that "[t]he doctrine of construing claims to preserve their validity, a doctrine of limited utility in any event, therefore has no applicability here." Phillips, 415 F.3d at 1328. Here, the available tools of claim construction, including both the intrinsic and extrinsic evidence provided by the parties and the presumption against means-plus-function construction, all weigh against a means-plus-function construction. There is no ambiguity. Claim 14 and Claim 26 both claim a latching mechanism that can be used to selectively latch the contacts in one of two positions, one in which the contacts for the line and load terminals and the contacts for the face terminals are connected and one in which they are separated. The latching mechanism is designed to permit a dead face arrangement when the GFCI is miswired.

2. Claim 23

Claim 23 is the remaining independent claim among the claims at issue in this section. Claim 23 of the '994 Patent reads as follows:

> A ground fault circuit interrupter, comprising:
>
> face terminals;
>
> load terminals; and
>
> source terminals;
>
> wherein said face terminals are adapted to be electrically isolated from said source and load terminals and a conductive path of said GFCI when said GFCI detects a ground fault condition.

'994 Patent, Col. 13, Lines 54-62.

When arguing for a claim construction that avoids P&S's invalidity arguments, Hubbell groups Claim 23 and its dependent claims in with Claims 14 and 26 and their

dependent claims. Hubbell argues generally that a means-plus-function construction of the term "latching mechanism" saves all of these claims from invalidity. See Hubbell Opp. (Doc. No. 80) at 30-32 (arguing for a means-plus-function construction of "latching mechanism," and concluding that, thereby, "claims 14-17, 20-22, 23-25, and 26-29 [are] properly construed"). However, neither Claim 23, nor dependent Claims 24 and 25, refers in any manner to a "latching mechanism." See also Hubbell Opp. at 36 (". . . the term 'latching mechanism' in claim 14, 26, 30, and 35 . . . "). Instead, Claim 23 simply refers to face, load, and line terminals arranged in a manner that causes the face terminals to be isolated when a ground fault is detected. The meaning of this Claim is obvious. The claim language is, essentially, a definition of dead face arrangement. Hubbell conceded this point at oral argument. Therefore, the court construes Claim 23 to cover any GFCI with a dead face arrangement.

**B. Validity**

1. Independent Claims 14, 23, and 26

P&S moves for summary judgment on the ground that Claims 14-17, 20-22, 23-25 and 26-29 of the '994 Patent are anticipated by the prior art and, therefore, invalid. "A patent is presumed valid[,] and the party asserting invalidity has the burden of persuasion to show the contrary by clear and convincing evidence." Research Corp. Tech., Inc. v. Microsoft Corp., 627 F.3d 859, 870 (Fed. Cir. 2010). P&S "has the burden of going forward with invalidating prior art. The patentee then has the burden of going forward with evidence to the contrary, i.e., the patentee must show that the prior art does not actually invalidate the patent or that it is not prior art because the asserted claim is entitled to the benefit of an earlier filing date." Research Corp., 627 F.3d at 870

(citations omitted). If Hubbell fails to rebut an adequate showing of anticipation, then P&S would be entitled to summary judgment. See id.

Here, P&S provides ample evidence that the three independent claims are anticipated by the disclosure in earlier patents. Assuming for the sake of argument that these claims in the '994 Patent relate back to a provisional application filed on May 9, 2002, P&S cites four prior patent publications disclosing a dead face arrangement with a set of contacts that connect and separate in order to isolate the face terminals from the line and load terminals. First, Nelson Bonilla, Hubbell's 30(b)(6) witness on the topic of validity admitted that U.S. Patent No. 6,807,036, filed on March 4, 2002, discloses a "dead face" design. Nocilly Decl., Exh. P (U.S. Patent No. 6,807,036); Exh. G (Transcript of Deposition of Nelson Bonilla) at 118-21. Second, Mr. Bonilla also conceded that WIPO Publication No. WO02/33720, published on April 25, 2002, discloses a dead face design with figures showing a set of contacts that can be opened or closed to isolate the face from the line and load terminals. Nocilly Decl., Exh. Q (WIPO Publication No. WO02/33720); Exh. G at 132. Third, U.S. Patent No. 7,049,910, filed on March 20, 2001, includes similar figures disclosing opening and closing contact points, including one set of figures disclosing contact points on cantilever arms, that can be used to isolate the face from the line and load terminals. Nocilly Decl. Exh. R; Exh. G at 137-41. Fourth, Dr. Horenstein, Hubbell's expert witness, admitted that U.S. Patent No. 6,246,558, filed on August 20, 1999 and issued on June 12, 2001, discloses contact points on cantilever arms that can be opened to isolate the face terminals from both the line and load terminals when a sensing device is tripped. Nocilly Decl., Exh. S (U.S. Patent No. 6,246,558), Exh. D, (Transcript of Deposition of Dr. Horenstein) at 193-

94.

Hubbell does not dispute that, given the Court's construction, this prior art would render all three of the independent claims invalid. See Hubbell Opp. at 35 ("P&S again relies on prior art that merely discloses the general electrical concept of 'dead face' receptacles"), 30-36 (arguing against invalidity solely by arguing for a narrow claim construction). Indeed, Hubbell argues against the foregoing construction on the ground that, so read, the claims at issue "may read on the '558 Patent." Hubbell Mem. (Doc. No. 75-1) at 12 (admitting that "the '558 patent disclose[s] a contact structure . . . that is capable of isolating line, load and user accessible connections"). Therefore, Hubbell fails to raise any genuine issue of material fact as to the invalidity of Claims 14, 23 and 26 due to anticipation by prior art. Summary judgment is granted in favor of P&S on these three claims.

2. Dependent Claims

The court may not simply rely on the invalidity of the independent claims to conclude that dependent claims are invalid, and must instead independently analyze each dependent claim at issue to determine whether they contain additional claim limitations that may distinguish them from the prior art and preserve their validity. See Clearwater Systems Corp. v. Evapco, Inc., 394 F. App'x 699, 705 (Fed. Cir. 2010) (holding that the district court's "fail[ure] to independently analyze the dependent claims to determine whether they are anticipated" was "clear error").

Here, the remaining analysis is straightforward. It is clear that none of the additional limitations adds material that is not anticipated. Hubbell did not argue otherwise in its memoranda or at oral argument. See Hubbell Opp. at 30-36 (contesting

invalidity based solely on the interpretation of “latching mechanism” in the independent clauses). Dependent claims 15-17 add limitations as follows:

- Claim 15 adds that the protective device of Claim 14 “includes a ground fault circuit interrupter (GFCI).”
- Claim 16 adds to Claim 14 that the “source terminals and load terminals are adapted to connect to a power source.”
- Claim 17 adds to Claim 16 that “when said latching mechanism is in said second state[,] said face terminals are isolated from said power source if said power source is connected to either said load terminals or said source terminals.”

None of these claims add any material that is not disclosed in the prior art. They merely limit Claim 14 by making explicit that the claimed protective device operates in the context of a GFCI that is connected or can be connected to a power source. These further limitations are all disclosed explicitly or obviously implied by the prior art. See supra at 28-30.

Claims 20-22 add limitations to Claim 14 as follows:

- Claim 20 adds to Claim 14 that “said first state comprises a closed condition and said second state comprises an open condition.”
- Claim 21adds that “said face terminals include contacts separate from said conductive path and said source and load terminals.”
- Claim 22 adds that the conductive path comprises “a neutral conductor, adapted to connect said source and load terminals; and a hot conductor, adapted to connect said source and load terminals.”

None of these claims distinguish the prior art. Describing the first and second states as "closed" and "open," respectively, merely restates the fact that they are states in which there is contact and in which contact is broken, respectively. The prior art patents all disclose devices in which the face terminals have contacts that are or can be separated from the conductive path, and they all disclose conductive paths consisting of a neutral conductor and a hot conductor between the source and load terminals. See supra at 28-30.

Dependent claims 24 and 25 add limitations to claim 23 as follows:

- Claim 24 claims the GFCI of Claim 23 "wherein said face terminals include contacts separate from said conductive path and said load terminals."
- Claim 25 adds that "said GECI [sic] is adapted to be powered at either said source terminals or said load terminals."

For the reasons just discussed, these claims are anticipated by the prior art patents. See supra at 28-30.

Dependent claims 27-29 add limitations to claim 26 as follows:

- Claim 27 adds that "said protective device comprises a ground fault circuit interrupter."
- Claim 28 adds that "said first state comprises a closed condition and said second state comprises an open condition."
- Claim 29 adds that the claimed method further comprises "connecting a power source to either said source terminals or said load terminals."

For the reasons discussed above in connection with Claims 15-17 and 20, these claims do not distinguish the prior art. See supra at 31.

P&S has submitted prior art disclosing each of the claim limitations in independent claims 14, 23 and 26 and dependent claims 15-17, 20-22, 23-25 and 27-29. Hubbell does not contest that the prior art shows these claims to be invalid given the court's construction of claims 14, 23 and 26. Therefore, summary judgment is granted in favor of P&S on the ground that each of these dependent claims is anticipated by the prior art.[5] Hubbell's Motion for Summary Judgment with respect to these claims is denied.

## VI. CLAIMS 30, 32, 33, 35, 36, 38, & 39 OF THE '994 PATENT

Only P&S has moved for summary judgment with respect to Claims 30, 32, 33, 35, 36, 38, and 39 of the Hubbell's '994 Patent. The parties dispute the proper claim construction of some, but not all, of these claims. There are no disputed facts regarding the design and operation of the accused P&S devices. However, Hubbell contends that a reasonable jury could find infringement based on those undisputed facts, whereas P&S argues that it could not.

### A. Claim Construction

#### 1. Claims 30, 32, & 33

The text of Claim 30, with the language at issue underlined, reads as follows:

> A protection device having line and load terminals, the device comprising:
>
> > A latching mechanism, adapted to move between a closed state which establishes electrical contact between said line and load terminals, and an open state which prevents electrical contact between said line and load terminals;

[5] Because the court's analysis assumes that the '994 Patent is entitled to the benefit of a May 9, 2002, provisional application, supra at 29, the court need not address P&S's argument that the '994 Patent is not entitled to such benefit.

> The latching mechanism including one or more of,
>
> > A first switch assembly . . . for selectively opening or closing a first conductive path;
> >
> > A second switch assembly . . . for selectively opening or closing a second conductive path; and
> >
> > An initial reset prevention mechanism operable to prevent closing of said first and second conductive paths, said initial reset prevention mechanism including a reset pin and said latching mechanism.

Nocily Decl., Exh. N (emphasis added). Claims 32 and 33 depend upon Claim 30. Each of those claims contains the limitations in dispute. Neither party contends that Claims 32 or 33 require independent construction or analysis.

As the emphasis indicates, the parties' arguments focus on the meaning of the "initial reset prevention mechanism" in Claim 30. An initial question is whether this claim limitation should be construed as a means-plus-function term in accordance with 35 U.S.C. section 112, ¶ 6. As discussed above, the presumption against means-plus-function can be overcome where "the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." MIT, 462 F.3d at 1353 (quotations omitted); see also Welker Bearing, 550 F.3d at 1096-97. In MIT, the Federal Circuit held that "the phrase 'colorant selection mechanism' should be construed as a means-plus-function limitation." MIT, 462 F.3d at 1354. In Welker Bearing, the Federal Circuit construed "mechanism for moving said finger" as a means-plus-function term, 550 F.3d at 1097, because the claim provided "no structural context for determining characteristics of the 'mechanism' other than to describe its function," id. at 1096.

In contrast to the "latching mechanism" discussed above, neither party contends

that the "initial reset prevention mechanism" described in Claim 30 would be understood by one skilled in the art to suggest any definite or specific structure. Indeed, P&S argues that "the terms 'reset prevention mechanism' and 'miswire prevention mechanism' are terms coined by Hubbell in the '994 patent and thus do not have any accepted meaning in the art. . . . Although a presumption against section 112, ¶ 6 applies to the terms 'reset prevention mechanism' and 'miswire prevention mechanism,' P&S explained that the presumption is overcome because these terms have no accepted structural meaning in the art." P&S Reply at 6. Hubbell does not oppose means-plus-function construction, and it argues entirely on the assumption that the term will be given such construction. See Hubbell Opp. at 24-27.

The court's own review of the claims, the specification, and the parties' submissions does not reveal any evidence that the term would be understood by those skilled in the art, and unlike the term "latching mechanism," the phrase "initial reset prevention mechanism" does not refer to any familiar structure.[6] In the absence of any

[6] Although it is not raised by the parties, the court notes that Claim 30 states that the initial reset prevention mechanism "includes" a "reset pin" and a "latching mechanism." This language does not prevent a means-plus-function construction. Based on a fair reading of the claim and the specification as a whole, it would be more accurate to say that the reset pin and the latching mechanism are two parts upon which the initial reset prevention mechanism acts, rather than that they are parts of the initial reset prevention mechanism itself. As the specification and the figures show, and as Hubbell argues, the initial reset prevention mechanism serves to prevent the reset pin from causing the latching mechanism to return to a closed state after it has opened. Hubbell Opp. at 25-26; '269 Patent, cols. 10-11 and figs. 17A, 17B, 18A, & 18B. In addition, the claim as a whole states not only that the initial reset prevention mechanism "includes" the latching mechanism, but also that the latching mechanism may "include" the initial reset prevention mechanism. It follows that "includes" or "including" cannot be taken to indicate a strict part-whole relationship. Furthermore, the specification and figures show that the disclosed embodiments of the initial reset prevention mechanism involve a number of components other than the reset pin and latching mechanism. See Toro Co. v. White Consol. Indus., Inc., 199 F.3d 1295, 1301 (Fed. Cir. 1999) ("The claim word 'including' is not construed in a lexicographic vacuum, but in the context of the specification and drawings."); Hewlett-Packard Co. v. Repeat-O-Type Stecil Mfg. Corp., 123 F.3d 1445, 1451 (Fed. Cri. 1997) ("The claim term 'including' is synonymous with 'comprising,' thereby permitting the inclusion of unnamed components."). Therefore, reference to the reset pin and the latching mechanism does not disclose the structure of the reset prevention mechanism.

showing that the term would be understood by one skilled in the art to indicate a particular type of structure, the court finds that this aspect of the claim does not disclose a "sufficiently definite structure" and that it should be given a means-plus-function construction.

Means-plus-function construction requires the court to identify the claimed function. Lockheed Martin Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1319 (Fed. Cir. 2003). The claim discloses that the specific function of the initial reset prevention mechanism is "to prevent closing of said first and second conductive paths" while the device is miswired. The name given to the mechanism indicates that the function of the mechanism could also be described as preventing the GFCI from being reset. The two functions are consistent, as preventing closing of the conductive paths is a way of preventing reset.

The next step in construing a means-plus-function element is to identify the structures, as disclosed in the patent specification, that perform the claimed function. Id. P&S contends, and Hubbell agreed, that, in columns 10 and 11 and in Figures 17A, 17B, 18A, and 18B, the '994 Patent discloses two structures for performing the function of the "initial reset prevention mechanism" in Claim 30. For purposes of this Ruling, it is sufficient to note that, as the parties agree, both of the disclosed structures involve the use of physical objects or parts to prevent another part from being moved into the position that closes the normal electrical connection and reset the device. In other words, when the device is miswired, the disclosed structures prevent the device from

being reset by physically preventing movement that would close the circuit.[7]

**2. Claims 35, 36, 38, and 39**

The text of Claim 35, with the language at issue underlined, reads as follows:

> A protection device having line and load terminals, the device comprising:
>
> a sensor electrically coupled to the line and load terminals via a plurality of current paths, said sensor being configurable to detect a difference in current flowing in the current paths and generate a current difference signal;
>
> a fault detector electrically coupled to such sensor and operable to generate a fault signal based on the current difference signal;
>
> a latching mechanism configured to electrically couple the line terminals and the load terminals in a reset state; and
>
> a miswire prevention mechanism operable to prevent said latching mechanism from maintaining the reset state when AC power is supplied to the load terminals,
>
> wherein said latching mechanism is prevented from maintaining the reset state as a result of said fault detector generating the fault signal.

Nocilly Decl., Exh. N. Claims 36, 38, and 39 depend upon Claim 35. Each of those claims contains the limitations in dispute. Neither party contends that Claims 36, 38, or 39 require independent construction or analysis.

[7] Hubbell does object to P&S's use of the term "blocking structure" to describe the disclosed structures. However, Hubbell admits, as it must, that the disclosed structures do rely on the use of a physical object to prevent movement that would reset the device: "As best understood, the 'initial reset prevention mechanism' described in the '269 patent [sic, '994 Patent] moves the latching plate to a trip position until the device is properly wired causing a switch device to open, which enables the latching plate to move to a position allowing the device to be reset." Hubbell Opp. at 25 (emphasis added). In other words, as long as the device is miswired, the latching plate is not free to move to a position in which the device can be reset.

The parties' arguments focus on the construction of the "miswire prevention mechanism." P&S contends that this term was coined by Hubbell, that it has no recognized meaning in the art, and that it should be given a means-plus-function construction. P&S Reply at 6. Moreover, P&S contends that this term is synonymous with the "initial reset prevention mechanism" of Claim 30. P&S Mem. at 29. In support, P&S cites testimony of Hubbell's Rule 30(b)(6) witness stating that both terms refer to the same structure in the patent specification. Nocilly Decl., Ex. G (Transcript of Deposition of Bonilla) at 151-52. Hubbell argues that treating the two terms as synonymous would violate "one of the most basic cannons of claim construction – claim differentiation." Hubbell Opp. at 28. On that basis, Hubbell appears to favor a non-means-plus-function construction of the "miswire prevention mechanism" in Claim 35. See id. at 28-29. Yet, Hubbell does not propose any specific construction. Nor does Hubbell provide any basis for concluding that one skilled in the art would understand the claim language to disclose "sufficiently definite structure."

As with the term "initial reset prevention mechanism," there is no indication that the term "miswire prevention mechanism" conveys any definite structure. The parties have submitted no evidence that it has an established meaning in the art, and the court is not aware of any particular structure associated with the term. Therefore, a means-plus-function construction is called for.

Claim 35 indicates that the immediate function of the "miswire prevention mechanism" is "to prevent said latching mechanism from maintaining the reset state when AC power is supplied to the load terminals." This function might also be described as preventing the device from being reset, at least for any substantial period

of time, while miswired. The use of the word “maintaining” suggests that the device might permit reset to be accomplished fleetingly, but not maintained. The name of the mechanism indicates a second function—preventing miswire—but the court finds this to be a less direct function. The patent as a whole makes clear that this device would help prevent miswiring indirectly because preventing successful reset would alert users that there was a wiring problem.

Having identified the function of the miswire prevention mechanism in this manner, it is clear that the canon supporting claim differentiation provides no argument against a means-plus-function construction of Claim 35. The difference in the wording of Claims 30 and 35 is adequately reflected in the different functions claimed for the “initial reset prevention mechanism” and the “miswire prevention mechanism.” As stated above, the function of the former is “to prevent closing of said first and second conductive paths” as long as the device is miswired, while the function of the latter is “to prevent said latching mechanism from maintaining the reset state” when the device is miswired. Although it may appear subtle at first, the parties’ arguments make clear that there is a substantial difference between “closing” the conductive paths and “maintaining” the reset state. The parties’ arguments on infringement show that, in a GFCI, the connective paths can be moved into a closed position, putting the device into a reset state, but this does not necessarily mean that the reset state will be maintained. As explained in greater detail below, the parties agree that, when the accused P&S devices are miswired, the conductive paths can be closed momentarily, but a reset state is not “maintained” because they will immediately reopen. Thus, the function of the “initial reset prevention mechanism” is to prevent closing of the circuit, whereas the

function of the “miswire prevention mechanism” is the somewhat broader function of preventing the device from maintaining a closed state (whether by preventing it from closing or by preventing it from staying closed).

This difference in function does not mean that the two claims are entirely different. The next step in construing a means-plus-function element is to identify the structures, as disclosed in the patent specification, that perform the claimed function. Here, the patent specification shows that the same structures perform both of the claimed functions. As noted above, it is uncontested that, in columns 10 and 11 and in Figures 17A, 17B, 18A, and 18B, the ‘994 Patent discloses two structures for performing the function of the “initial reset prevention mechanism” in Claim 30. Hubbell’s representative, Nelson Bonilla, testified that those same structures perform the function of the “miswire prevention mechanism” in Claim 35.

> Q: Is the structure for accomplishing the miswire prevention in this claim term [i.e., Claim 35] the same as the structure that you just got done describing for the initial reset prevention mechanism in claim 30? Or is it something different?
>
> A: Could you please repeat the question.
>
> (Requested portion of record read.)
>
> A: I would say that’s correct.
>
> Q: Okay. So the structure that you just got done describing for me with respect to the initial reset prevention mechanism is the same structure that’s associated with this element in claim 35 that says ‘a miswire prevention mechanism’?
>
> A: Yes. This claim terminology describes the structure that I had mentioned earlier.

Nocilly Decl., Ex. G (Bonilla Tr.) at 151-52. The parties identify no other structure disclosed in the ‘994 Patent that could correspond to the “miswire prevention

mechanism," and the court can find none. Therefore, the court finds that the same structures correspond to both terms.

**B. Infringement**

P&S contends that the accused G5 devices do not infringe any of the claims—30, 32, 33, 35, 36, 37, or 38 – because they rely on a substantially different structure than the structures disclosed in the '994 Patent. Hubbell does not dispute that there is a difference in structure, but Hubble characterizes that difference as "subtle." Hubbell Opp. at 26. Hubbell contends that a reasonable jury could find that "these two very similar structures are structural equivalents." Id. Because Claim 30 and Claim 35 involve means-plus-function elements that claim the same structures in the specification, and because the parties' arguments focus on whether or not the accused devices rely on an equivalent structure, the same infringement analysis applies to both of these claims.

"Literal infringement" of a means-plus-function claim "requires that the relevant structure in the accused device [1] perform the identical function recited in the claim and [2] be identical or equivalent to the corresponding structure in the specification. Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1267 (Fed. Cir. 1999). "Whether an accused device infringes a § 112, ¶ 6 claim as an equivalent is a question of fact." Id. at 1268. However, "[w]here the evidence is such that no reasonable jury could determine two elements to be equivalent, district courts are obliged to grant partial or complete summary judgment." Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 38 n.8 (1997). The Federal Circuit has made clear that a reasonable jury cannot find equivalence without "particularized evidence and linking arguments as to the

'insubstantiality of the differences' between the claimed invention and the accused device . . . ." PC Connector Solutions, LLC v. Smartdisk Corp., 406 F.3d 1359, 1364 (Fed. Cir. 2005); see also Amgen Inc. v. F. Hoffman-LA Roche Ltd., 580 F.3d 1340, 1382 (Fed. Cir. 2009) ("Generalized testimony as to the overall similarity between the claims and the accused infringer's product or process will not suffice.") (quoting Texas Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1567 (Fed. Cir. 1996)). Therefore, if P&S carries its initial burden of showing that its devices rely on a significantly different structure to perform the claimed function, Hubbell must respond with more than "conclusory statements regarding equivalence" in order to show that there is a genuine issue of material fact. PC Connector Solutions, 406 F.3d at 1364.

There is no significant dispute about the nature of the structures disclosed in the '994 Patent or the structure used in the accused P&S devices. As noted above, the structures for both the initial reset prevention mechanism of Claim 30 and the miswire prevention mechanism of Claim 35 are disclosed in Figures 17A, 17B, 18A, and 18B and in columns 10 and 11 of the '994 Patent. As the parties agree, those disclosed structures prevent reset when the GFCI is miswired by physically preventing the movement needed to close the circuit. It is also uncontested that P&S's devices do not prevent reset by obstructing the movement of a part that would close the connection. Instead, if an accused P&S devices is miswired, the open connection can be moved into a closed or reset position, but reset cannot be maintained because a current imbalance simulates a ground fault, immediately causing the device to trip again and move back into an open position. As Hubbell puts it, "[i]n the P&S accused devices the latching plate returns to the reset position . . . but each time reset is attempted, the solenoid fires

. . . and the device instantly trips." Hubbell Opp. at 26; see also id. at 24 ("[T]he parties do not dispute the construction or operation of the accused G5 devices."); P&S Local Rule 56(a) Statement ¶ 19; Hubbell Local Rule 56(a) Statement ¶ 19; Nocilly Decl., Exh. A (Expert Report of Dr. Mark Horenstein) ¶ 27. Rather than preventing movement, P&S's devices permit the connection to close but rely on electrical current to trip the device again and cause the connection to reopen.

Although conceding this difference between the disclosed structures and the P&S devices, Hubbell contends that a jury could reasonably find that the two accomplish the function of preventing reset by equivalent means. However, Hubbell cites neither evidence, nor expert opinion to support that claim. Hubbell relies only on generalized attorney argument characterizing the structures as "similar" and the differences as "subtle." Hubbell Opp. at 26. In light of the conceded differences between the two devices, which the court views as substantial, Hubbell's conclusory statements are inadequate to sustain its burden of presenting "particularized evidence" as to the "insubstantiality of the differences." PC Connector, 406 F.3d at 1364. P&S has met its initial burden of proof, and Hubbell has not shown that there is a genuine issue of material fact as to the identity or equivalence of structure between the two devices.[8] Therefore, summary judgment should be granted in favor of P&S with respect to Claims 30, 32, 33, 35, 36, 38, and 39.

[8] There is no need for separate analysis under the doctrine of equivalents. See Hubbell Opp. at 26. In light of the fact that Hubbell has not shown the existence a genuine issue of material fact as to equivalence of structure under § 112, ¶ 6, Hubbell also has not shown that there is an issue of material fact as to infringement under the doctrine of equivalents. Under either § 112, ¶ 6, or the doctrine of equivalents, plaintiff is required to establish equivalence of structure under the same "insubstantial difference" standard. Ishida Co. v. Taylor, 221 F.3d 1310, 1317 (Fed. Cir. 2000). Under either theory, Hubbell was required to provide more than "conclusory statements" in order to show that there is an issue of fact as to the insubstantiality of difference. PC Connector, 406 F.3d at 1364.

## VI. CONCLUSION

For the foregoing reasons, P&S has established that there is no genuine issue of material fact and it is entitled to judgment as a matter of law with respect to the non-infringement of Claim 2 of the '269 Patent and Claims 30, 32, 33, 35, 36, 38, & 39 of the '994 Patent and with respect to the invalidity of Claims 14-17, 20-22, and 26-29 of the '994 Patent. Therefore, P&S's Motion for Summary Judgment [Doc. No. 65] is **GRANTED**. Hubbell's Motion for Summary Judgment [Doc. No. 75] is **DENIED**. Hubbell's Motion for Partial Summary Judgment [Doc. No. 51] with respect to Priority and Invalidity of the '994 Patent is **DENIED AS MOOT**.

**SO ORDERED.**

Dated at Bridgeport, Connecticut, this 17th day of March, 2011.

_/s/ Janet C. Hall_____
Janet C. Hall
United States District Judge