

United States District Court,  
S.D. California.

**PULSE ENGINEERING, INC., a Delaware corporation,**  
Plaintiff.

v.

**MASCON, INC. dba ATW Security, a Massachusetts corporation,**  
Defendant.

No. 08cv0595 JM (AJB)

**March 9, 2009.**

David E. Sipiora, Kristopher L. Reed, Townsend and Townsend and Crew LLP, Denver, CO, Iris Sockel Mitrakos, Townsend and Townsend and Crew, San Diego, CA, for Plaintiff.

Martin J. O'Donnell, Michael Eric Attaya, Thomas C. O'Konski, Cesari and McKenna LLP, Boston, MA, Nelson P. Lovins, Lovins & Metcalf, Woburn, MA, Thomas W. Ferrell, Higgs, Fletcher & Mack LLP, San Diego, CA, for Defendant.

**CLAIM CONSTRUCTION ORDER FOR UNITED STATES PATENT NUMBERS 6,404,347 and  
6,472,992**

**JEFFREY T. MILLER, District Judge.**

Pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), on February 23, 2009, the court conducted a *Markman* hearing in the above-captioned patent infringement action. At issue was construction of disputed claim terms for U.S. Patent Nos. 6,404,347 (the '347 patent) and 6,472,992 (the '992 patent). Prior to the *Markman* hearing, the parties presented a tutorial to the court on the relevant technology.

***I. Background***

Plaintiff Pulse Engineering, Inc. ("Pulse") brought this patent infringement action against Defendant Mascon, Inc. ("Mascon") alleging infringement of two patents assigned to Pulse. The patents-in-suit relate to electronic filter circuits which prevent digital subscriber line (DSL) signals from interfering with a security system alarm unit located at a subscriber's home. In its Answer, Mascon counter-claimed for declaratory judgments of non-infringement and patent invalidity.

The disputed terms are summarized herein and in the attached joint claim construction worksheet, which is hereby incorporated by reference.

***II. Principles of Claim Construction***

Patent infringement analysis involves two discrete steps. In the first step, claim construction, the court determines the meaning and scope of the asserted claims. *Markman*, 52 F.3d 967, 976-77 (Fed.Cir.1995) (en banc), *aff'd* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577(1996). Claim construction is a question of law for the court to decide. *Id.* at 977-78. In the second step, the properly construed claims are compared to the allegedly infringing product. *Id.* at 976.

## ***A. Claim Construction Principles***

### ***1. Evidence Reviewed During Claim Construction***

Claim terms are generally given their ordinary and customary meaning. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc). The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art at the time of the invention." *Id.* at 1313. Where such a meaning is readily apparent, claim construction may involve simply applying the widely accepted meaning of the commonly understood words. *Id.* at 1314. In this case, the parties agree a person of ordinary skill in the art would have an undergraduate degree in electrical engineering and 2-3 years' relevant experience.

In construing a patent, the court *must* consider intrinsic evidence and *may* consider extrinsic evidence when appropriate. Intrinsic evidence includes the specification, FN1 the claims, FN2 and the prosecution history. The claims, including their context, are examined first, as they "provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314. Claim terms are interpreted in context subject to traditional interpretation canons. For example, a claim term should be interpreted in light of the specification as a whole, and a term appearing in multiple claims should be construed consistently. *Inverness Medical Switzerland GmbH v. Princeton Biomeditech Corp.*, 309 F.3d 1365, 1371 (Fed.Cir.2002). Finally, if a claim is susceptible to two different constructions, one of which renders the claim valid and the other which renders the claim invalid, courts generally adopt the construction which validates the claim. *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed.Cir.2004).

FN1. The specification is the "written description" of the invention which enables one skilled in the art to make and use the invention and discloses the best mode of carrying out the invention. 35 U.S.C. s. 112.

FN2. The specification concludes with the claims which "particularly point[ ] out and distinctly claim[ ] the subject matter which the applicant regards as his invention." 35 U.S.C. s. 112.

The specification is "always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Further, the specification "may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. Another relevant rule of construction is that limitations from the specification (including the drawings or Figures) should not be read into the claims. As the Federal Circuit recognized, there is a "distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim...." *Id.* at 1323 (citations omitted). To avoid this problem, the court must focus "on understanding how a person of ordinary skill in the art would understand the claim terms." *Id.* The Federal Circuit has "expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that

embodiment." *Id.* Thus, although the specification will describe a particular embodiment, that embodiment must not be read into the claim language itself.

Finally, the prosecution history, or written record of proceedings before the Patent & Trademark Office ("PTO"), must also be considered. In this case, there was no relevant prosecution history, so the claims and specification will serve as the landscape of intrinsic evidence.

Extrinsic evidence includes outside sources such as dictionaries, expert testimony, and learned treatises. Extrinsic evidence "may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319. In addition, "extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence" and therefore the court must "keep in mind the flaws inherent" in extrinsic evidence. *Id.* at 1318. Nevertheless, extrinsic evidence "can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand the claim terms to mean[.]" *Id.* at 1319. However, where the intrinsic evidence alone is sufficient to resolve any ambiguity in a disputed claim term, "it is improper to rely on extrinsic evidence." *Vitronics*, 90 F.3d at 1583.

In sum, the court must first interpret the claim terms in light of intrinsic evidence-specification, claims, and prosecution history-and then exercise discretion in deciding whether to consider extrinsic evidence. Pulse argues most of the claims are susceptible to application of their ordinary and customary meanings, and otherwise, the intrinsic evidence is sufficient to construct the claims. Contrarily, Mascon alleges several terms are indefinite, and relies primarily on extrinsic evidence from an expert witness for any proposed constructions.

## ***2. When Are Claim Terms Indefinite?***

As mentioned above, Mascon argues several claim terms are indefinite under 35 U.S.C. s. 112, second paragraph. Claim terms are considered invalid for indefiniteness "only if reasonable efforts at claim construction prove futile." *Exxon Research and Eng'g Co. v. U.S.*, 265 F.3d 1371, 1375 (Fed.Cir.2001). This high standard reflects the statutory presumption of patent validity.

## ***3. Correction of Errors in a Patent by a District Court***

In a couple of instances, elaborated below, Pulse asks the court to correct what it characterizes as typographical errors in the patent claims. "[C]ertain obvious errors in the patent can be corrected by the district court in construing the patent." *Novo Industries, L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1355 (Fed.Cir.2003). A district court may correct such "minor, unintentional errors ... only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." *Id.* at 1357.

## ***III. Construction of Disputed Claim Terms***

With the above principles in mind, the court turns to the construction of the disputed terms. Where the disputed terms appear across claims and in both patents, the court's constructions apply to all instances of those terms unless otherwise indicated.

### ***A. Asserted Claims***

Pulse asserts claims 1-12 of the '347 patent and claims 1-9 of the '992 patent. The claims which introduce the disputed terms are set forth below (with disputed terms highlighted in bold).

'347 Patent *Claim 1:*

1. An alarm filter circuit used in telecommunication systems for interconnecting between incoming telephone lines and an alarm unit located at a subscriber's premises so as to block DSL data signals to and from the alarm unit for preventing interference, said alarm filter circuit comprising:  
a **second-order low-pass filter section formed of** a first inductor, a second inductor, and a first capacitor;

the first inductor having a first end and a second end;

the second inductor having a first end and a second end;

the first capacitor having a first end **connected to** said first end of said first inductor and to a first **output terminal pin** and having a second end **connected to** said first end of said second inductor and to a second **output terminal pin**;

a first-**order** high-pass filter section **formed of** second capacitor and a third capacitor;

the second capacitor having a first end **connected to** said second end of said first inductor and to a first **input terminal pin** and having a second end **connected to** a second **input terminal pin**;

the third capacitor having its first end **connected to** said second end of said second inductor and to a third **input terminal pin** and having its second end **connected to** a fourth **output terminal pin**;

a **first-order low-pass filter section formed of** third inductor and a fourth inductor;

the third inductor having a first end **connected also to** said second end of said second capacitor and having a second end **connected to** a third **output terminal pin**; and

the fourth inductor having a first end **connected also to** said second end of said third capacitor and having a second end **connected to** a fourth **output terminal pin**.

'992 Patent *Claim 1:*

1. An alarm filter circuit used in telecommunication systems for interconnecting between incoming telephone lines and an alarm unit located at a subscriber's premises so as to block DSL data signals to and from the alarm unit for preventing interference, said alarm filter circuit comprising:  
a **second-order low-pass filter section formed of** a first inductor, a second inductor, and a first capacitor;

the first inductor having a first end and a second end;

the second inductor having a first end and a second end;

the first capacitor having a first end **connected to** said first end of said first inductor and to a first **output terminal pin** and having a second end **connected to** said first end of said second inductor and to a second

**output terminal pin;**

a first-**order** high-pass filter section **formed of** second capacitor and a third capacitor;

the second capacitor having a first end **connected to** said second end of said first inductor and to a first **input terminal pin** and having a second end **connected to** a second **input terminal pin**;

the third capacitor having its first end **connected to** said second end of said second inductor and to a third **input terminal pin** and having its second end **connected to** a fourth **input terminal pin**;

a **second-order low-pass filter section formed of** third inductor, a fourth inductor and a fourth capacitor;

the third inductor having a first end **connected also to** said second end of said second capacitor and having a second end **connected to** one end of the fourth capacitor and a third **output terminal pin**; and

the fourth inductor having a first end **connected also to** said second end of said third capacitor and having a second end **connected to** the other end of the fourth capacitor and a fourth **output terminal pin**.

'347 Patent *Claim 4*:

4. An alarm filter circuit as claimed in claim 3, wherein said **third** capacitor has a value on the order of 22 nf.

'347 Patent *Claim 9*:

9. An alarm filter circuit as claimed in claim 1, wherein said first through fourth inductors and first through third capacitors are housed in a **modular type adaptor design** having plug means on its one end for connection to the incoming telephone lines and having jack means on its other end for connection to said alarm unit.

'347 Patent *Claim 12*:

12. An alarm filter circuit as claimed in claim 11, wherein said adaptor design is capable of **self-installation by a subscriber or customer**.

'992 Patent *Claim 9*:

9. An alarm filter circuit as claimed in claim 1, further comprising **surge protection means** interconnected between the incoming telephone lines and said alarm unit for protecting said alarm unit from being damaged by transients occurring on the incoming telephone lines.

### ***B. Proposed Claim Constructions and Recommendations***

#### ***1. " \_\_\_\_\_-order"***

Pulse argues no construction of "-order" is necessary apart from that for the "\_\_\_\_-order (low/high)-pass filter section" term, noting the term is never used apart from the entire filter section phrasing. Pulse therefore argues the term has no independent significance. Alternatively, Pulse proposes that "\_\_\_\_-order" "identifies the specific components as disclosed in the respective claim."

Unlike Pulse, Mascon parses out this term for a separate construction and alleges the term is indefinite under 35 U.S.C. s. 112, second paragraph. In the alternative, Mascon submits the term means "the largest

exponent of the transfer function relating the magnitude of the output of a filter in response to an electrical signal applied to the input of the filter" or "the highest exponent of the frequency term in the denominator of the filter's transfer function." FN3

FN3. Contrary to the Patent Local Rules, Mascon offered the latter construction for the first time in its Opening Claim Construction Brief.

When read in the context of the claims and specification, the term "\_\_\_\_\_-order" is not indefinite but rather serves to identify the components of the various filter sections. Mascon's proposed constructions have no basis in the patent claims or specifications. While Mascon explained the technical underpinnings of its proposed constructions during the tutorial and oral arguments, employing either one would go beyond the intrinsic evidence. A construction which relies on additional terms, unmentioned in the specification or claims, would merely create potential for confusion for the jury. In addition, construing this term separately "will add no further clarity" as to how one skilled in the art would understand it as used.

***The court therefore concludes the term "\_\_\_\_\_-order" has no independent significance and does not require specific construction by the court.***

## ***2. "formed of"***

Mascon alleges the term "formed of" is indefinite. However, the court cannot conclude the term is "insolubly ambiguous," particularly as the parties have articulated several possible constructions. Pulse offers the term should be given its customary and ordinary meaning, making construction by the court unnecessary, or, in the alternative, the term should be construed to mean "made up of the essential or basic elements of." FN4 Mascon suggests "formed of" is the equivalent of "consisting of," which the court recognizes as a term of art signifying restriction and exclusion of *any other* components or elements. In a second recommendation, Mascon construes "formed of" to mean "including only the named elements and no others," basically synonymous with "consisting of."

FN4. This proposed construction comes from Pulse's dictionary reference, a form of extrinsic evidence.

Mascon relies in part on a 1913 district court case from Illinois in which the court construed "formed of" to mean "consisting of." *Hoskins Mfg. Co. v. Gen. Electric Co.*, 212 F. 422, 428 (N.D.Ill.1913), *aff'd* 224 F. 464 (7th Cir.1915). However, in *Hoskins*, the court construed the term in light of narrowing amendments in the prosecution history which precluded a broader interpretation. Mascon also looks to *In re Bertsch*, 30 C.C.P.A. 813, 132 F.2d 1014, 1019-20 (CCPA 1942), which quotes **Hoskins** for the proposition that "composed of" and "formed of" both mean "consisting of." However, the *Bertsch* court also acknowledged that "the words 'composed of' may under certain circumstances be given, in patent law, a broader meaning than 'consisting of' ...." *Id.* at 820, 132 F.2d 1014. The case law does not foreclose a partially open construction of this term. Mascon also offered extrinsic evidence in the form of testimony by its expert, Dr. Acampora, in support of its proposed constructions. However, in light of the intrinsic evidence, the court gives the expert testimony limited weight.

Pulse emphasizes that Mascon's constructions are overly restrictive, as any alarm filter circuit "would include not only the named inductors and capacitor [s], but also a variety of complementary and/or

supplementary components such as wire, solder, leads, encapsulant, PCB, etc." (Doc. No. 34 at 12.) The court agrees one skilled in the art would understand materials beyond the expressly listed core elements would be required to make a filter section function as such. Indeed, one skilled in the art would recognize this fact from a straight-forward reading of the term "formed of" in the context of the specification and claims. The intrinsic evidence supports this conclusion; the specification refers, in detail, to the intended functionality of the alarm circuit as a whole and the preamble to claim 1 in each patent defines the intended use of the alarm filter circuit. One skilled in the art would understand these other materials would be necessary to build an operative device. The court agrees that Mascon's construction is too narrow because it would rule out the use of these necessary materials.

On the other hand, the nomenclature used for each section ( e.g., first-order low-pass filter section) have specific *functional* meanings to one skilled in the art, and would limit the components to those listed for each type of section or their equivalents.FN5 Mascon alleges that "connecting an additional reactive element to those that form a particular filter can, and often does, change" the function of the filter.FN6 (Doc. No. 33 at 12.) From that standpoint, then, Pulse's proposed construction may be overly expansive. A more restrictive approach is supported by the choice of transitional phrases in the claims. Claim 1 in each patent defines an alarm circuit "comprising" three filter sections. "Comprising" is an "open" signal, indicating the claim encompasses all elements listed, but may also include additional, unnamed elements. The claim language then uses the transition "formed of" to describe the particular components for each section. If the inventor intended to maintain an "open" claim form for the filter sections themselves, he could have continued using "comprising" rather than changing to a more "closed" signal.

FN5. The specifications contemplate embodiments beyond the preferred ones described in detail. For example, the '347 patent states, "it will be understood by those skilled in the art that various changes and modifications may be made, and equivalents may be substituted for elements thereof without departing from the true scope of the invention." ('347 Patent, Col. 6, ll. 56-59.)

FN6. The court notes inductors and capacitors are generally considered "passive" components rather than "reactive" ones, so Mascon's characterization may be somewhat imprecise. Nevertheless, the court understands adding additional components to a circuit could change its functionality.

In light of the intrinsic evidence, the ordinary and customary meaning of a claim term is, in fact, "the meaning that the term would have to a person of ordinary skill in the art at the time of the invention." Phillips, 415 F.3d at 1313. This conclusion is especially appropriate given the court's construction of the term, "connected to," below.

Accordingly, *the court gives the term "formed of" its plain and ordinary meaning and finds no specific construction of this term is required.*

### 3. "connected to"

As before, Pulse urges "connected to" is a commonly understood term and has an apparent meaning that can be readily applied such that no construction is needed. As an alternative, Pulse offers that "connected to" means "joined together via something intervening." Mascon suggests that since claim 1 of the '347 patent appears to mimic Figure 2 (with a line between components), the court should construe a "direct" connection

between the components as drawn. Specifically, Mascon asks that "connected to" be construed to mean "in direct contact, through a zero impedance electrical conductor, with" or "in direct contact, through an electrical conductor whose impedance is independent of frequency," or a construction that combines both of these, "in direct contact with, through a zero impedance electrical conductor or an electrical conductor whose impedance is independent of frequency." FN7

FN7. Only the first of these three options was included in the parties' Joint Claim Construction Worksheet; the others were offered in Mascon's Opening Claim Construction Brief.

Defining "connected to" in its ordinary sense or as meaning "joined together via something intervening" expands the claim scope beyond what is contemplated in the specifications and claims. Pulse cites to the intrinsic evidence, arguing the instances where "connected to" is used with "via" something "intervening" show that "connected to," even without a specified intermediary, necessarily includes "something intervening." However, throughout the specifications and claims, where "connected to" is used without an intervening object, one skilled in the art would recognize the contemplated connection would utilize standard electrical conductors such as wire or solder and not additional electrical components such as inductors or capacitors. ( *See, e.g.*, '347 Patent, Col. 4, ll. 51-63.) Even where "connected to" is used with an intervening object, that object is generally wiring, pins, or a plug, not a circuit component. Pulse admits as much, stating "one of ordinary skill in the art would understand that any such connection requires 'something intervening' in order to join the two components (e.g., wire, solder, PCB traces, etc.);" (Doc. No. 34 at 14.) This observation is supported by the fact that a "first-order low-pass filter section," formed by two inductors, becomes a "second-order low-pass filter section" by adding a single component (a capacitor). ( *Compare* '347 patent, Fig. 2, with '992 patent, Fig. 5.)

At the opposite end of the spectrum, Mascon's interpretations are more narrow than what is contemplated by the intrinsic evidence and do not account for real-world aspects of building a circuit. As noted during the parties' oral arguments, any wiring or other suitable connector would have an inherent degree of impedance or frequency dependence. In addition, as before, Mascon's constructions add technical terminology, unsupported by the specification, that may not serve to enlighten the jury or clarify the scope of the claims.

For these reasons, the court adopts the following construction: "***connected to***" ***means connected without interposition of additional circuit elements, such as inductors, capacitors, or resistors.***

#### ***4. "input terminal pin" and "output terminal pin"***

These terms are used in the claims to define the termini of the filter circuit. Pulse offers that these terms do not require specific construction by the court because they are readily understood by one of ordinary skill in the art in the context of the patents at issue. Mascon argues these terms are indefinite because the "claim fails to identify the intended external connections" to the pins and signals would flow through the circuit in a direction opposite to that implied by the claims' nomenclature ( *e.g.*, signals actually flow in at the pins called "output" and out the pins called "input").

Analyzing the term in light of the intrinsic evidence, the court concludes these terms would be clear to one skilled in the art. First, signals across the circuit flow in both directions, and the labels merely describe the pins' positions in the circuit. For example, the "input terminal pins" are the eight on the left in Figure 2 of the '347 patent which connect to the "incoming telephone line wires." ( *See also*, '347 patent, Col. 4, ll. 51-



57; '992 patent, Col. 5, ll. 35-41 and Col. 7, ll. 49-51.) The "output terminal pins" are on the right side of the drawings and connect to the alarm panel. Even if these terms had been used in an unusual way, a specification "may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." Phillips, 415 F.3d at 1316. Both parties readily identified the discrete terminal pins as described.

The court therefore finds these terms are not "insolubly ambiguous," and thus, *they are not indefinite and they do not require specific construction by the court.*

**5. "first-order low-pass filter section" ('347 patent, claim 1) and "second-order low-pass filter section" ('992 patent, claim 1)**

Pulse offers that these disputed terms do not require specific construction because the required elements are expressly defined in the claims. In contrast, Mascon argues they cannot be construed because they are indefinite. The court notes any potential open-ended interpretation of these terms to include additional electrical components is mitigated by its construction of the modifiers "formed of" and "connected to."

Mascon's first supporting argument refers to Pulse's Infringement Contentions. (Doc. No. 33 at 21.) The court may not properly consider the alleged infringing device during a *Markman* analysis. *See* Ferguson Beauregard/Logic Controls. Div. of Dover Res., Inc. v. Mega Sys., LLC, 350 F.3d 1327, 1340 (Fed.Cir.2003) (finding the district court erred in claim construction "because it was influenced by the structure and function of the alleged infringing device"). In its second argument, Mascon contends "first-order low-pass filter section," as used in claim 1 of the '347 patent, is indefinite because the connection of the "fourth inductor" to the "fourth output pin" and the "third capacitor," also connected to the "fourth output pin," creates a short across the inductor. This issue is addressed in section 6, *supra*, and the court finds it does not render the claim term indefinite.

These terms are not "insolubly ambiguous," and thus, *the court finds they are not indefinite and they do not require specific construction by the court.*

**6. "output" and "third" (specific instances)**

Pulse argues there are two "clear errors" in the '347 patent claims which warrant correction by the court. Mascon offers these are not "clear errors" but instead render the respective claims indefinite because the claimed invention as written would be inoperable. Mascon argues correction is inappropriate because Pulse made no effort to correct these alleged errors through the Patent Office under 35 U.S.C. s.s. 254 and 255 and because there is at least a "reasonable debate" as to whether the original claim language is correct. (Doc. No. 33 at 22-23.). The court notes s. 254 is inapplicable as it refers only to errors made by the Patent Office. Further, Mascon has cited no case law to show Pulse should be precluded from securing a correction by the district court because it chose not to avail itself of the s. 255 correction mechanism. The primary issue, then, is whether there are "clear errors" in the claim language.

As to the first claimed error, claim 1 of the '347 patent reads, in relevant part:

the third capacitor having its first end **connected to** said second end of said second inductor and to a third **input terminal pin** and having its second end **connected to** a fourth **output terminal pin**;

Pulse asks the court to change the underlined "output" to "input." As mentioned above, preparing the circuit

according to the current claim language would create a short across the "fourth inductor" because of its connection to "a fourth output terminal pin."

Looking to the claim language, the court finds Pulse's position is well-supported. Although there are "first" and "second" output terminal pins referred to in claim 1, there is no "third" output terminal pin to provide an antecedent to a fourth. In contrast, there are "first," "second," and "third" *input* terminal pins mentioned prior to this proposed fourth one. Further, the "fourth output terminal pin" at issue is preceded by the article "a" rather than "the," an indication by the drafter that this is the first instance of the term in the claim. Finally, in Figure 2, the third capacitor (labeled C2) is connected on one end to the second inductor (L2) and to an input terminal pin (pin 5 on the right), and on the other end to another input terminal pin (pin 8 on the right). The court is also influenced by the construction standard encouraging it to construe claims in a manner upholding validity ( *e.g.*, construing the claims in a way which supports the invention's operability). The correction of this error in the '992 patent, which issued as a continuation-in-part of the '347 patent, provides extrinsic evidence consistent with the court's conclusion.

As to the second alleged error, claim 4 of the '347 patent reads:

4. An alarm filter circuit as claimed in claim 3, wherein said *first* capacitor has a value on the order of 22 nf.

Pulse requests the court correct this "obvious error" by changing "first" to "third." In Figure 2, the capacitor referred to as the "third" one is designated as C1 (making a typographical error quite plausible), and the drawing clearly shows the C3 capacitor has a 22 nf value assigned to it. ( *See also*, '347 patent, Col. 5, ll. 53.)

The court finds there is ample evidence to show these are "clear errors" warranting correction by the court. *The court therefore construes the relevant section of claim 1 of the '347 patent to read, "the third capacitor having its first end connected to said second end of said second inductor and to a third input terminal pin and having its second end connected to a fourth input terminal pin ..." and claim 4 of the '347 patent to read, "An alarm filter circuit as claimed in claim 3, wherein said first capacitor has a value on the order of 22 nf."*

#### 7. "modular type adaptor design"

The '347 patent, claim 9, refers to "an alarm filter circuit as claimed in claim 1 ... housed in a **modular type adaptor design....**" Pulse contends this term is clear on its face according to its common meaning and therefore does not require specific construction by the court. Mascon counters the term is indefinite and cannot be construed, relying on the somewhat conclusory allegation that the term can "mean anything or nothing." (Doc. No. 33 at 22.) Pulse, on the other hand, demonstrates the specification fleshes out the scope of this term. For example, the claim language defines the design as "having plug means on its one end for connection to the incoming telephone lines and having jack means on its other end for connection to said alarm unit." ('347 patent, claim 9.) The specification elaborates, describing the design as one which "facilitate[s] quick and easy connections between incoming telephone lines and an alarm unit." ('347 patent, Col. 1, ll. 42-45.) Further, one end "has a RJ31X jack ... formed integrally therewith for connection to the alarm unit," and the other end "has a RJ-45 plug ... formed integrally therewith which is connectible to both the incoming telephone line wiring..and the house wiring." ('347 patent, Col. 4, ll. 40-47.) The adaptor is depicted in Figure 2 (labeled **60**) as encompassing the entire filter unit. ('347 patent, Fig. 2.) With this information, the term "modular type adaptor design" would have a particular meaning to one skilled in the

art.

For the reasons above, *the court gives the term "modular type adaptor design" its plain and ordinary meaning and finds no specific construction of this term is required.*

**8. "self-installation by a subscriber or customer"**

In claim 12 of the '347 Patent, the modular type adaptor design housing the alarm filter circuit is capable of "self-installation by a subscriber or customer." Pulse suggests this term is clear on its face using its common meaning and therefore does not require specific construction by the court. Mascon argues the term is indefinite and cannot be construed. In support of this term, the specification recites only that such a design would "allow the subscriber or customer to perform his own connection, thereby avoiding the time and cost for a trained technician to be sent to a subscriber's (sic) premises to perform the installation." ('347 patent, Col. 1, 11. 37-40.) "Self-installation by a subscriber or customer" is further described as a situation that avoids "having a trained technician visit the premises and perform the installation ." ('347 patent at Col. 4:32-34.) This term is unbounded by application of its ordinary meaning to one skilled in the art. The specification provides no source of limiting language the court might rely on in adopting a narrowing construction. Thus, *the court finds the term "self-installation by a subscriber or customer" is indefinite under 35 U.S.C. s. 112, second paragraph.*

**9. "surge protection means"**

Claim 9 of the '992 patent refers to "surge protection means" used to protect the alarm unit from disturbances in the telephone lines. Construction of a "means-plus-function" claim term is governed by 35 U.S.C. s. 112, sixth paragraph, under which "such a claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." The parties agree the corresponding structure is shown as elements F1, F2, and D1 in Figure 5 and described at Col.7, 11.54-65 of the '992 patent specification.FN8 The court adopts the parties' construction of this term.

FN8. Pulse somewhat obliquely asks the court to "find that no other claim terms in the asserted claims are 'means-plus-function' claim terms. (Doc. No. 34 at 24.) Mascon objects and the court agrees. While no other "means-plus-function" terms are disputed, the claims use means-plus-function language in other places. The court declines to make the finding Pulse requests.

**IV. Conclusion**

The court hereby construes the claims as set forth in this order and in the attached claim construction worksheet.

**IT IS SO ORDERED.**

S.D.Cal.,2009.

Pulse Engineering, Inc. v. Mascon, Inc.

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