

**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NORTH CAROLINA  
CHARLOTTE DIVISION  
3:21-cv-486-MOC**

**SYCURIO LIMITED, *formerly*** )  
***known as Semafone Limited, et al.,*** )  
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Plaintiff, )  
 )  
vs. )  
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**PCI PAL (U.S.) INC., et al.,** )  
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 )  
Defendants. )  
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**CLAIMS CONSTRUCTION ORDER**

**THIS MATTER** is before the Court on the parties’ respective motions and briefs (Doc. Nos. 65, 67, 69, 70, 72, 74) for the construction of certain claim language in U.S. Patent Nos. 8,750,471 (“471 patent”), 9,858,573 (“573 patent”), 10,402,826 (“826 patent”), and 11,049,108 (“108 patent”). Plaintiffs Sycurio, Inc. and Sycurio Limited (formerly Semafone, Inc. and Semafone Limited) accuse Defendant PCI Pal (U.S.) Inc. of infringing these four patents. The Court held a claim construction hearing on October 24, 2023. Having considered the briefing and arguments of counsel and reviewed the claims, specifications, and other relevant evidence, the Court now construes the disputed terms.

**I. Background**

**1. The Patented Technology**

The ‘471, ‘573, ‘826, and ‘108 patents (collectively “Semafone patents”) describe uses of dual-tone multi-frequency (DTMF) masking technology to protect consumers’ payment

information (e.g., credit or debit card data) from call center agents.<sup>1</sup> The patented methodologies enable customers to process secure payments over the phone in compliance with global payment security standards. The second figure in each of the Semafo patents illustrates an exemplary telephone processing system devised according to the invention:

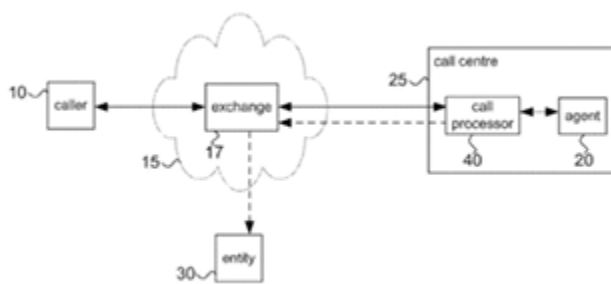


Figure 2

The invention works like this. A caller communicates via telephone network with an agent in a call center. That call is routed through a call processor located in the call center, which the agent cannot circumvent. Thus, the agent is prevented from interacting directly with the caller. The processor modifies characteristics of the call and routes data to the entity receiving payment, such that sensitive information from the caller cannot reach the agent, but the agent maintains the ability to assist the caller and facilitate their interaction with the receiving entity.

In an alternative embodiment, the call processor may be located within the telephone network (through which the call is placed) but external to the call center. According to this arrangement, calls are routed via the processor to the call center, such that call processing could be offered by a provider as a service to the call center. Further alternatives allow the call processor to be located with the caller as a part of or in addition to the caller's telephony equipment. The call processor can be placed at any point in the telephony network between caller and agent and can be made compatible with any traditional telephone network.

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<sup>1</sup> All patents are titled "Signal Detection and Blocking for Voice Processing Equipment."

The Semaphore Patents contemplate two modes of operation. Within each mode, signals are transmitted between two interfaces. In the first (“normal”) mode, both voice and data signals are transmitted from the first interface to the second. In the second (“safe”) mode, voice signals are received at the first interface and optionally transmitted to the second interface, but data signals are blocked from being transmitted to the second interface. The patented call processing method associates an identifier with first and second signal information to generate a request to an external entity—typically, to request payment from a third-party provider like a credit card issuer. Upon receipt of a return message from the third party regarding the success of the request, that message is matched with the identifier, and the first and second information signals are processed based on whether the request for payment authorization was successful.

*a. The ‘471 Patent*

In June 2014, the U.S. Patent and Trademark Office (“PTO”) issued the ‘471 patent, listing as assignee Sycurio Ltd. The patent describes a bimodal telephone call processor comprised of two telephone interfaces. In the first mode, the patented processor receives voice signals and data signals at the first interface and transmits them via the second interface. In the second mode, the patented processor receives voice and data signals at the first interface but blocks data signals from being transmitted via the second interface while permitting the optional transmission of voice signals via the second interface. (Doc. No. 1-1 at 2); (Doc. No. 1 at 7). Independent claim 1 of the ‘471 Patent is reproduced below:

A telephone call processor for processing telephone calls comprising voice signals and data signals, the call processor comprising a first telephone interface, a second telephone interface, and a data interface, the call processor being operable in a first mode and in a second mode, wherein:

in the first mode, the call processor is adapted to receive voice signals and data signals at the first telephone interface and to transmit voice signals and data signals to the second telephone interface; and

in the second mode, the call processor is adapted to  
receive voice signals and data signals at the first telephone interface,  
to block data signals from being transmitted to the second telephone interface,  
to transmit voice signals to the second telephone interface and to extract data from  
the data signals received at the first and/or second telephone interfaces, and  
to transmit data signals to and to receive data signals from an external entity via  
the data interface in dependence on the extracted data and on data signals received  
at the first and/or second telephone interfaces.

(Doc. No. 1 at 7).

*b. The '573 Patent*

The PTO issued the '573 patent in January 2018, this time listing Semafone Ltd.  
(Sycurio's predecessor) as assignee. Like the '471 patent, the '573 patent describes a bimodal  
call processor comprised of two telephone interfaces. (Doc. No. 1-2 at 2-3). As relevant here,  
independent claim 24 of the '573 patent describes a telephone call processor located external to  
the call center that is adapted:

to generate an identifier for the telephone call;  
to receive information signals encoded in the data signals;  
to associate the identifier with the information signals;  
to generate a request based on the information signals;  
to transmit via a data interface the request to an external entity;  
to receive via the data interface a message from the entity to identify success or  
failure of the request;  
to match the received message to the telephone call in dependence on the  
identifier; and  
to process the information signals in dependence on the success or failure of the  
request.

(Doc. No. 1 at 8).

*c. The '826 Patent*

In September 2019, the PTO issued the '826 patent, again listing Semafone Ltd. as assignee. Like the '471 and '573 patents, the '826 patent describes a bimodal call processor comprising two telephone interfaces. (Doc. No. 1-3 at 2). Pertinent here, independent claim 11 of the '826 patent describes

A method performed at a call processor of processing telephone calls comprising voice signals and data signals, the method comprising:

in a first mode, receiving voice signals and data signals at a first telephone interface and transmitting voice signals and data signals to a second telephone interface; and

in a second mode;

receiving voice signals and first information signals encoded in data signals at a first telephone interface;

blocking data signals from being transmitted to a second telephone interface and optionally to transmit voice signals to the second telephone interface;

receiving second information signals via a second interface;

associating an identifier with the first and second information signals;

generating a request based on the first and second information signals;

transmitting via a data interface the request to an external entity;

receiving via the data interface a message from the entity to identify success or failure of the request;

matching the received message to the telephone call in dependence on the identifier; and

processing the first and second information signals in dependence on the success or failure of the request

(Doc. No. 1 at 8–9).

*d. The '108 Patent*

The PTO issued the '108 patent in June 2021, identifying Semafone Ltd. as assignee. Like the '471, '573 and '826 patents, the '108 patent describes a bimodal call processor comprised of two telephone interfaces. (Doc. No. 1-4 at 2). Relevant to this case, independent claim 10 of the '108 patent teaches

A method of processing sensitive information, the sensitive information provided by a caller via a call processor assisted by an agent, the method comprising:

receiving data signals comprising sensitive information from the call processor;

extracting the sensitive information from the data signals;

transmitting the sensitive information to an application server adapted to conduct a transaction with an external entity using the sensitive information; and

indicating to the agent that the sensitive information has been received and/or transmitted without revealing the sensitive information to the agent.

(Doc. No. 1 at 9).

**2. The Alleged Infringing Product**

Sycurio alleges that PCI Pal has infringed the Semafone patents by selling and offering for sale in the United States secure payments solutions products and methods under the name “Agent Assist” (the “accused instrumentality”). Agent Assist utilizes DTMF masking technology to provide companies with a secure means of processing payment by telephone in compliance with global payment security standards. (Doc. No. 1 Ex. E). The accused instrumentality intercepts keypad tones and customer speech, obscuring them from the call center agent while permitting the customer and agent to maintain communication throughout the process. Thus, Agent Assist prevents the agent from obtaining the customer’s sensitive card data. The accused instrumentality additionally facilitates payment processing through an external provider. The success or failure of the customer’s payment request is determined and communicated to the

agent by that third party provider.

PCI Pal deploys the accused instrumentality to solve customer challenges and achieve compliance. In doing so, Sycurio alleges, PCI Pal has directly infringed the Semafone patents. Sycurio contends that services, software, databases, instructions, and documentation provided by PCI Pal and related to Agent Assist encourage third party partners, resellers, and customers to practice the Semafone patents.

Defendant PCI Pal denies that the accused instrumentality violates the Semafone patents. PCI Pal admits that it offers the Agent Assist service, which can work with external payment providers to process payments and receive responses from payment processors regarding the success or failure of payments. (Doc. No. 30 at 5–6). PCI Pal further admits that certain voice and data signals reach the call center agent during portions of the call, and that Agent Assist blocks both voice and credit card information during the payment session. (*Id.* at 6).

But PCI Pal raises several affirmative defenses against Sycurio’s infringement claims, some of which are relevant at this stage. In addition to non-infringement, PCI Pal argues that some asserted claims of the Semafone patents are invalid under 35 U.S.C. §§ 101–3, 112 and obviousness-type double patenting. (Doc. No. 30 at 10). PCI Pal further claims that Sycurio’s claims are estopped and disclaimed based on statements made during Sycurio’s prosecution of the Semafone patents before the PTO (i.e., prosecution history estoppel). Additionally, PCI Pal brings counterclaims against Sycurio, requesting declaratory judgment on the non-infringement and invalidity of the Semafone patents. (Doc. No. 30).

## **II. Legal Standards**

Patent infringement is the unauthorized production, use, sale, offer of sale, or importation of any patented invention during the term of the patent. 35 U.S.C. § 271(a). An infringement

analysis entails two steps. In the first step, the court determines the meaning and scope of the patent claims asserted to be infringed. In the second step, the trier of fact compares the properly construed claims to the device accused of infringing. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) aff'd, 517 U.S. 370 (1996). The purpose of claim construction is to determine the meaning and scope of the patent claims alleged to be infringed. O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd., 521 F.3d 1351, 1360 (Fed. Cir. 2008). “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.” Innova/Pure Water, Inc. v. Safari Water Filtration Sys., 381 F.3d 1111, 1115 (Fed. Cir. 2004).

Claim construction is a matter of law. Markman, 517 U.S. at 372. “It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citation omitted). While the Patent Office and patent examiners may give claims their broadest reasonable construction in reviewing patents and prospective patents, federal district courts are to give disputed claim terms their “ordinary and customary meaning,” or “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” Phillips v. AWH Corp., 415 F.3d 1303, 1312, 1313 (Fed. Cir. 2005); see also Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2143 (contrasting the patent office’s use of “the broadest reasonable construction standard” with the district court’s use of the “ordinary meaning standard”); Prima Tek II, L.L.C. v. Polypap, S.A.R.L., 318 F.3d 1143, 1148 (Fed. Cir. 2003) (holding that there is a “heavy



burden” in favor of using “the ordinary meaning of claim language as understood by one of ordinary skill in the art”); Thorner v. Sony Computer Entm’t Am. LLC, 669 F.3d 1362, 1365–67 (Fed. Cir. 2012) (holding that a claim’s words “are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history”).

However, the preference for applying ordinary meanings in the district court may be overcome either “(1) where the patentee has chosen to be his or her own lexicographer by clearly setting forth an explicit definition for a claim term; or (2) where the term chosen by the patentee so deprives the claim of clarity that there is no means by which the scope of the claim may be ascertained from the language used.” Prima Tek II, 318 F.3d at 1148 (citing Johnson Worldwide Assocs., Inc. v. Zebo Corp., 175 F.3d 985, 990 (Fed. Cir. 1999)). The inventor’s lexicography governs when the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess.” Allergan, Inc. v. Barr Labs., Inc., 501 F. App’x 965, 969–70 (Fed. Cir. 2013) (citations and quotations omitted). The patentee must “clearly express an intent” to redefine the term, Helmsderfer v. Bobrick Washroom Equip., Inc., 527 F.3d 1379, 1381 (Fed. Cir. 2008), and the standard for determining whether an inventor has provided such clear intent is “exacting.” Thorner, 669 F.3d at 1366; see also Ancora Techs., Inc. v. Apple, Inc., 744 F.3d 732 (Fed. Cir. 2014) (holding that “[p]assing references that do not amount to a redefinition or disclaimer” are insufficient to overcome ordinary meaning).

With the ordinary meaning standard established, “[t]he starting point for any claim construction must be the claims themselves.” Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999). “If the claim language is clear on its face, then . . . consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from

the clear language of the claims is specified.” Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001). That said, the rest of the intrinsic evidence always plays a key role in providing context for the ordinary meaning of the claims, as a person of ordinary skill in the art is deemed to read the claim terms not only in the context of the particular claims in which the disputed terms appear, but also in the context of the entire patent. Phillips, 415 F.3d at 1313; see also Eon Corp. IP Holdings v. Silver Spring Networks, 815 F.3d 1314, 1320 (Fed. Cir. 2016) (holding that a claim term’s ordinary meaning is not determined “in a vacuum” but “takes its definition from the context in which it was used by the inventor”) (citations and quotations omitted); Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (holding that the court “must look at the ordinary meaning in the context of the written description and the prosecution history”) (citations and quotations omitted).

Said context may be provided by the specification, as the specification of a patent “is always highly relevant to the claim construction analysis.” Vitronics, 90 F.3d at 1582. As such, the Federal Circuit has stated that it is “entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.” Phillips, 415 F.3d at 1317. In some cases, the inventor may provide within the specification a special definition of a claim term which differs from the term’s usual meaning; if so, “the inventor’s lexicography governs.” Id. at 1316. The inventor also may disclaim or disavow claim scope within the specification. Where “the inventor has dictated the correct claim scope . . . the inventor’s invention, as expressed in the specification, is regarded as dispositive.” Id. Specifications are also key if a claim element is recited in means-plus-function format, as such a claim’s specification “must contain sufficient descriptive text by which a person of skill in the field of the invention would know and understand what structure corresponds to the means

limitation.” Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1339 (Fed. Cir. 2016) (citations and quotations omitted).

However, while a district court may read patent claims in light of the specification, the court may not read limitations from the specification into the claim itself or read the specification to replace the claim. See United States v. Adams, 383 U.S. 39, 48–49 (1966) (“While the claims of a patent limit the invention, and specifications cannot be utilized to expand the patent monopoly, it is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.”) (internal citations omitted); see also Prima Tek II, 318 F.3d at 1148 (holding that “limitations may not be read into the claims from the written description”) (citation omitted); SanDisk Corp. v. Memorex Prod., Inc., 415 F.3d 1278, 1286 (Fed. Cir. 2005) (holding that “it is axiomatic that without more the court will not limit claim terms to a preferred embodiment described in the specification”); Tempo Lighting, Inc. v. Tivoli, LLC, 742 F.3d 973, 977 (Fed. Cir. 2014) (holding that “[i]n claim construction, this court gives primacy to the language of the claims, followed by the specification”). Even if every depicted embodiment of an invention shows a limitation, that alone is insufficient to overturn a claim’s plain meaning. See Unwired Planet, LLC v. Apple Inc., 829 F.3d 1353, 1359 (Fed. Cir. 2016) (holding that it is “not enough that the only embodiments, or all of the embodiments, contain a particular limitation to limit claims beyond their plain meaning”) (quotations and citations omitted). Admittedly, “there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification.” Comark Commc’ns, Inc. v. Harris Corp., 156 F.3d 1182, 1186 (Fed. Cir. 1988). But while the specification may be able to supply understanding of unclear terms, it can never override the clear meaning of the claim terms. See E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.,

849 F.2d 1430, 1433 (Fed. Cir. 1988).

In addition to the specification, the court also may examine the patent's prosecution history for context when construing claim terms. Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). "Like the specification, the prosecution history provides evidence of how the [Patent and Trademark Office] and the inventor understood the patent." Phillips, 415 F.3d at 1317; see also Tempo Lighting, Inc., 742 F.3d at 977 (holding that "the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction"). The prosecution history also may be helpful in determining whether the inventor disclaimed any particular interpretation during the prosecution of the patent. See Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (holding that the prosecution history's purpose "is to exclude any interpretation that was disclaimed during prosecution" in order to prevent a term from being construed one way in the application and a different way against an accused infringer); see also DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1323 (Fed. Cir. 2001) (holding that the prosecution history "is considered to determine whether or not there were any express representations made in obtaining the patent regarding the scope and meaning of the claims"). When determining whether a party has disclaimed a particular interpretation, the court inquires "whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter." PODS, Inc. v. Porta Stor, Inc., 484 F.3d 1359, 1368 (Fed. Cir. 2007). That said, while it can be helpful in that respect, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317. For example, while prior art may be cited as part of the prosecution history and thus qualify as intrinsic evidence, it merits little weight if "it was not created by the patentee in attempting to explain and obtain the patent."

Acumed LLC v. Stryker Corp., 483 F.3d 800, 809 (Fed. Cir. 2007) (quotations and citations omitted). Finally, the prosecution history also may not “enlarge, diminish, or vary” the claims themselves. Chimie, 402 F.3d at 1380–82 (quotation omitted).

In addition to examining the intrinsic evidence, the court may also consider certain extrinsic evidence, “including expert and inventory testimony, dictionaries, and learned treatises.” Markman, 52 F.3d at 980. While extrinsic evidence can shed light on claim meaning, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language” and “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” Phillips, 415 F.3d at 1317, 1319. Indeed, while dictionaries, treatises, and industry practice “are often important in interpreting claims,” they may not “contradict claim meaning that is unambiguous in light of the intrinsic evidence.” ArcelorMittal France v. AK Steel Corp., 700 F.3d 1314, 1320 (Fed. Cir. 2012) (citations and quotations omitted); see also Phillips, 415 F.3d at 1322–23 (holding that courts may “rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents”) (quoting Vitronics, 90 F.3d at 1584 n.6).

Additionally, expert testimony “can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” Phillips, 415 F.3d at 1318. However, “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.” Id. Further, the court must disregard any expert testimony “that is clearly at odds with . . . the

written record of the patent.” Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998).

Claims may also require analysis for indefiniteness, as indefiniteness is “inextricably intertwined with claim construction.” Energizer Holdings, Inc. v. International Trade Comm’n, 435 F.3d 1366, 1368 (Fed. Cir. 2006). “[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” Dow Chem. Co. v. Nova Chems. Corp. (Canada), 803 F.3d 620, 625 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 2452 (2016) (citing Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2124 (2014)); see also Interval Licensing, LLC v. AOL, Inc., 766 F.3d 1364, 1371–73 (Fed. Cir. 2014), cert. denied, 136 S. Ct. 59 (2015) (holding that a single example of the term “unobtrusive manner” in the specification did not outline the claims to a skilled artisan with reasonable certainty).

Definiteness requires the court to weigh “inherent limitations of language,” the fact that patents are addressed to people who are “skilled in the relevant art” instead of lawyers or the public, and “some modicum of uncertainty” against the precision required to “afford clear notice of what is claimed” and thereby allow the public to determine what inventions are still possible. Nautilus, 134 S. Ct. at 2128–29 (internal citations and quotations omitted). As such, the standard “mandates clarity, while recognizing that absolute precision is unattainable.” Id. at 2129; see also Minerals Separation, Ltd. v. Hyde, 242 U.S. 261, 270 (1916) (stating that “the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter”). Also, indefiniteness is often analyzed prior to construing claims, since “[i]f a claim is indefinite, the claim, by definition, cannot be construed.” Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1332 (Fed. Cir. 2010).

Finally, claims may be specifically analyzed for construction under the Patent Act as “means-plus-function” claims. Specifically, “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. Thus, patentees may “express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function,” subject to “specific constraints on how such a limitation is to be construed, namely, by restricting the scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1347 (Fed. Cir. 2015) (citing Northrop Grumman Corp. v. Intel Corp., 325 F.3d 1346, 1350 (Fed. Cir. 2003)).

Constructing a means-plus-function claim is a two-step process. “First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that performs that function.” Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1311 (Fed. Cir. 2012) (citing Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006)). Courts construct the function based on claim language. Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002). It is improper to narrow the scope of the function beyond what the claim language says, and equally improper to broaden the scope by ignoring clear limitations in the claim language. Id. (citation omitted). Ordinary claim construction principles govern interpreting the claim language used to describe the function. Id. When determining corresponding structures, a structure qualifies if the specification or prosecution history “clearly links or associates that structure to the function

recited in the claim.” B. Braun Med., Inc. v. Abbott Labs., 124 F.3d 1419, 1424 (Fed. Cir. 1997); see also Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1382 (Fed. Cir. 1999) (holding that “[a]ll one needs to do in order to obtain the benefit of [Section 112] is to recite some structure corresponding to the means in the specification . . . so that one can readily ascertain what the claim means and comply with the particularity requirement” of Section 112); Johnston v. IVAC Corp., 885 F.2d 1574, 1580 (Fed. Cir. 1989) (holding that Section 112 “operates to cut back on the types of means which could literally satisfy the claim language” and thereby “restricts the scope of the literal claim language” by requiring the structures to appear in the specification) (emphasis in original).

### **III. Disputed Terms**

Pursuant to the Local Patent Rules, the parties have identified the following terms for construction. Many of these terms appear in multiple Semafone patents, or multiple claims within the same patent. Rather than address claims construction patent-by-patent, the Court resolves the issue as presented by the parties: term-by-term.

#### **1. “In the Second Mode . . . Transmit Voice Signals”<sup>2</sup>**

This term generally refers to transmitting voice signals to the second interface (i.e., between call processor and agent) while in the second mode. Plaintiff argues this term “requires no construction beyond its plain and ordinary meaning” to a person of ordinary skill in the art (“POSITA”). (Doc. No. 65 at 7) (citing Phillips, 415 at 1312–13). More specifically, Plaintiff asserts that “in the second mode . . . transmit voice signals” refers to the call processor being adapted to send voice signals to the second interface to allow verbal communication between the caller and agent while in the second mode. Plaintiff claims that this term should be construed to

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<sup>2</sup> Claims 1, 20 and 32 of the ‘471 Patent and Claims 1, 9, 11 and 17 of the ‘826 Patent.



mean that the caller and agent “maintain a voice connection” or “remain in voice contact” such that “voice communication between the two entities remains unaffected.” (Doc. No. 65 at 8).

Defendant, by contrast, contends that according to the Semfone patents the transmission of voice signals in the second mode must be uninterrupted. (Doc. No. 67 at 7). “Contrary to Sycurio’s argument,” Defendant argues, “the Patents’ specification repeatedly teaches that in the second mode the voice signals received from the caller are not blocked or masked at all, and instead communications between the customer and agent remain ‘uninterrupted,’ ‘unaffected,’ or ‘as normal.’” (*Id.* at 8). According to Defendant’s proposed construction, the specifications require that voice signals continue uninterrupted “even when the confidential data signals (*i.e.*, the DTMF component of the call, such as credit card numbers) are being blocked or masked by the call processor.” (*Id.*). Defendant cites three Federal Circuit cases for the proposition that the Court should construe the patent language consistent with the specification. (*Id.* at 11–12) (citing SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001); Watts v. XL Sys., Inc., 232 F.3d 877, 882 (Fed. Cir. 2000) Wang Labs, Inc. v. America Online, Inc., 197 F.3d 1377, 1383 (Fed. Cir. 1999)).

Defendant further argues that during prosecution of the ‘471 Patent, Sycurio amended claims in a manner suggesting that in the second mode all voice signals from the caller are transmitted to the agent. Specifically, Defendant notes that Sycurio revised the language of its claim from “optionally to transmit” to “to transmit,” indicating that voice transmission during the second mode is not optional. (Doc. No. 67 at 10–11). What’s more, Sycurio revived the “optional” transmission language for claims 1 and 11 of the subsequent ‘826 Patent. Defendant alleges that Sycurio thus distinguished the ‘826 Patent’s claims from those of the ‘471 Patent, such that transmission of voice signals in the second mode cannot be optional under the latter.

(Id. at 11) (citing Kara Tech. Inc. v. Stamps.com Inc., 582 F.3d 1341, 1347 (Fed. Cir. 2009)).

Plaintiff responds that Defendant’s construction impermissibly imports the word “uninterrupted,” violating several canons of claim construction, and should be accordingly rejected. The Court agrees. The word “uninterrupted” is absent from the combined 117 claims of the Semafone patents. The Federal Circuit has repeatedly and in no uncertain terms rejected claim constructions that improperly import a limiting descriptor into a claim. See, e.g., Linear Tech. Corp. v. ITC, 566 F.3d 1049, 1059 (Fed. Cir. 2009); Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1326 (Fed. Cir. 2003); Evolution Concepts, Inc. v. HOC Events, Inc., 22 F.4th 1361, 1366 (Fed. Cir. 2022).

As to Defendant’s arguments from the specification, Plaintiff notes that “uninterrupted” refers not to voice signal transmission, but instead maintaining a continuous connection between customer and agent allowing for normal (but not necessarily uninterrupted) communication to occur while in the second mode. (Doc. No. 65 at 15); see (Doc. No. 65 Ex. 1, 35: 1–8).<sup>3</sup> Even accepting Defendant’s read of the specification, Plaintiff’s construction of the claim still prevails, because “[e]mbodiments in the specification . . . cannot limit the scope of the claims.” Apple Inc. v. Wi-LAN Inc., 25 F.4th 960, 967 (Fed. Cir. 2022). See, also, Hill-Rom Servs. v. Stryker Corp., 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“While we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the specification into the claims.”) (citing Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed. Cir. 2004)). Exceptions to this general rule require “clear and unmistakable disclaimer.” Thorner v. Sony

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<sup>3</sup> “[T]he phrase “uninterrupted” refers to avoiding terminating or altering the “connection between the user and the agent”, e.g., disconnecting the agent from the call and transferring the call to an IVR. It does not refer to avoiding momentary interruptions in the voice signals (audio) while a caller remains connected, as PCI Pal urges with its construction.” (Doc. No. 65 at 10) (citations omitted).

Comput. Entm't Am. LLC, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012). Defendant has shown none. All three cases cited by Defendant on this point are sharply distinguished by the presence of the requisite disclaimer. See SciMed, 242 F.3d at 1342; Wang Labs, 197 F.3d at 1383–84; Watts, 232 F.3d at 883.

Regarding Defendant's argument from the file history and '826 Patent, Plaintiff responds that even if the prosecution history constitutes a limiting disclaimer, that disclaimer pertains to whether the transmission of voice signals is "optional," as distinct from "uninterrupted."<sup>4</sup> The Court, again, agrees. Whether the transmission of voice signals is optional or required is different from whether transmission is interrupted or uninterrupted. Both parties agree that the call processor must be adapted to transmit voice signals and that this feature is not optional. The same argument defeats Defendant's claim differentiation argument from the '826 Patent: even if claim differentiation can be fairly applied, it is irrelevant because the parties do not dispute whether the transmission of voice signals is required under claim 1 of the '471 Patent.

Finally, Plaintiff maintains that "voice signals" should be construed according to its plain language, such that it refers to all voice signals instead of only those recited elsewhere in the claim. (Doc. No. 65 at 12). Defendant, on the other hand, argues that "voice signals" in the relevant claim language refers only to the voice signals received from the caller/customer, and that the Court's construction should "clarify" this point by importing an antecedent "the" before "voice signals." (Doc. No. 67 at 8). The Court rejects Defendant's attempt to import a limiting antecedent "the" to narrow the claim language for the same reason the Court rejected Defendant's attempt to import the word "uninterrupted" above. See Evolution Concepts, Inc. v.

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<sup>4</sup> In any case, the Court finds that the doctrine of prosecution disclaimer does not apply here, because Defendant has failed to show that the file history includes a "clear and unmistakable" disavowal of claim scope. See Avid Tech., Inc. v. Harmonic, Inc., 812 F.3d 1040, 1045–47 (Fed. Cir. 2016).

HOC Events, Inc., 22 F.4th 1361, 1366 (Fed. Cir. 2022) (stating that the use of antecedent-basis words like “said” or “the” operate to narrow a term).

For the foregoing reasons, the Court will find for Plaintiff and adopt its proposed construction for this series of claims.

## 2. “**Selectively Transmit**” and “**Selectively Block**”<sup>5</sup>

The “selectively” terms refer to the call processor’s determination regarding which signals should be transmitted and which should be blocked. Plaintiff first argues that these terms “require no construction beyond their plain and ordinary meaning to a POSITA.” (Doc. No. 65 at 18) (citing Phillips, 415 F.3d at 1312–13). But Plaintiff admits, and Defendant agrees, that if construed “the term requires that the call processor determine which signals received from a first entity should be sent to a second entity and which should be blocked.” (Doc. No. 65 at 18). The adverb “selectively” contemplates the processor’s transmission/blocking of some, but not all, signals. (Id.). The specification discloses an exemplary embodiment wherein the call processor is adapted to selectively transmit only signals representing non-sensitive information, and to selectively block signals representing sensitive information. (Id. at 18–19) (quoting Doc. No. 1-1 at 6:60–66).

Defendant only offers a construction argument in the alternative to its primary claim: that the “selectively” terms are invalid under 35 U.S.C. § 112. According to the parties’ agreed construction, the processor must “be capable of making some type of selective determination regarding which signals sent by the customer are confidential and not confidential.” (Doc. No. 67 at 12). But Defendant credibly contends that the Semafone patents fail to disclose how the call processor can make such selective determinations. In fact, Plaintiff’s expert appears to agree that,

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<sup>5</sup> Claims 17, 19 and 32 of the ‘471 Patent, Claim 8 of the ‘826 Patent, and Claim 15 of the ‘108 Patent.

at the time of the invention, no technology existed that would enable call processors to distinguish between confidential and non-confidential data signals. (Id. at 12–13) (citing Doc. No. 67-2 (Willis Dep.) at 120:11–121:5, 133:12–134:6). Thus, Defendant contends, claims containing the “selectively” term are indefinite and not sufficiently enabled in violation of Section 112. (Doc. No. 67 at 14) (citing Epistar Corp. v. Lowes Cos., Inc., No. LAcv17-03219, 2020 WL 771096, at \*7 (C.D. Cal. Feb. 11, 2020); Rivera v. International Trade Comm’n, 857 F.3d 1315, 1321 (Fed. Cir. 2017); Genentech, Inc. v. Novo Nordisk, A/S, 108 F.3d 1361, 1365–66 (Fed. Cir. 1997)).<sup>6</sup>

Plaintiff’s expert contends that the “selectively” term merely requires the call processor be adapted to toggle between the first (normal, transmitting) and second (safe, blocking) mode. (Doc. No. 67-2 at 123:6–12:6). But that’s not what the claim language says. For the call processor to act “selectively,” the processor must be adapted to itself determine which signals are confidential. Claim 3 of the ‘471 Patent acknowledges as much, distinguishing selective blocking and masking from a “mode-switching” signal causing the call processor to toggle between the first and second modes. Defendant thus argues that Plaintiff’s expert’s position “cannot stand under the doctrine of claim differentiation.” (Doc. No. 67 at 14) (citing Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 206 F.3d 1440, 1446 (Fed. Cir. 2000)). But claim differentiation typically applies only when two claims are “otherwise identical but for the references” to the terms in dispute. Andersen Corp. v. Fiber Composites, LLC, 474 F.3d 1361, 1370 (Fed. Cir. 2007). That is not the case here. (Doc. No. 79 at 16). Absent further evidence of similarity between the relevant claims, Defendant’s claim differentiation defense fails.

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<sup>6</sup> Plaintiff sharply distinguishes Genentech, noting that enablement was addressed after the claims construction stage and following a 12-day evidentiary hearing. 108 F.3d 1361, 1363 (Fed. Cir. 1997).

Plaintiff rebuts Defendant’s remaining invalidity arguments (enablement, indefiniteness) on procedural and substantive grounds. Procedurally, Plaintiff argues that Defendant’s enablement argument is improper at the claim construction stage. While indefiniteness objections are frequently addressed during claims construction proceedings, enablement issues are typically addressed after claims construction because they require additional record development. See McRO, Inc. v. Bandai Namco Games Am. Inc., 959 F.3d 1091, 1100–04 (Fed. Cir. 2020) (stating that “the enablement inquiry necessarily depends on an interpretation of the claims” and “a fuller set of fact-findings about what is within the scope of the claims is necessary to decide the enablement issue”) (internal quotes and citations omitted); AK Steel Corp. v. Sollac & Ugine, 344 F.3d 1234, 1241 (Fed. Cir. 2003) (“Because a patent specification must enable the full scope of a claimed invention, . . . an enablement inquiry typically begins with a construction of the claims.”); Indivior UK Ltd. v. Dr. Reddy’s Lab’ys S.A., 18 F.4th 1323, 1328 (Fed. Cir. 2021) (“What is needed to satisfy written description in patent law is highly fact-dependent”). This Court has historically declined to rule on enablement arguments at the claim construction stage. See Viva Healthcare Packaging (USA) v. CTL Packaging USA, Inc., Case No. 3:13-cv00569-MOC-DSC, 2015 WL 1346091, at \*\*6–7 (W.D.N.C. Mar. 24, 2015).

Substantively, Plaintiff maintains that the “selectively” terms are not invalid as indefinite because “a POSITA would have sufficiently understood the scope” of those terms ““with reasonable certainty.”” (Doc. No. 65 at 20) (quoting Nautilus, Inc., 572 U.S. at 913). With respect to Defendant’s enablement defense, Plaintiff correctly notes that Defendant bears the burden to prove invalidity by clear and convincing evidence. Vasudevan Software, Inc. v. MicroStrategy, Inc., 782 F.3d 671, 682 (Fed. Cir. 2015). Because Defendant ignores the enablement analysis’ “undue experimentation” inquiry, Plaintiff contends that Defendant cannot

carry this burden. (Doc. No. 69 at 14). Defendant has indeed declined to apply the Wands factors. See In re Wands, 858 F.2d 731, 737 (Fed. Cir. 1988). Defendant retorts that those factors are “illustrative, not mandatory.” (Doc. No. 70 n.5) (quoting Amgen, Inc. v. Chugai Pharm. Co., 927 F.2d 1200, 1213 (Fed. Cir. 1991)). Maybe so. But given Plaintiff’s apparently favorable application of those factors—which Defendant declined to refute—Defendant has failed to meet the high burden required for this Court to find invalidity based on enablement. See (Doc. No. 69 at 16–17).

The Court is unwilling to grant Defendant’s request to invalidate claims at this stage. Following its own example in Viva Healthcare, the Court declines to rule on indefiniteness or enablement at this juncture.<sup>7</sup>

Instead, the Court will adopt the parties’ agreed construction of the representative claim (i.e., Claim 17 of the ‘471 Patent). Plaintiff has apparently agreed to adopt Defendant’s proposed construction for all additionally disputed “selectively” terms with one exception: Claim 15 of the ‘108 Patent. Finding that (1) Defendant’s proposed construction will be easier for a jury to understand and (2) Defendant is entitled to their proposed construction of the related “receiving” and “extracting” terms based on the doctrine of prosecution disclaimer,<sup>8</sup> the Court accepts Defendant’s proposed construction of Claim 15 of the ‘108 Patent.

### 3. “In Dependence”<sup>9</sup>

“In dependence” is a stilted Britishism equivalent to the punchier American “based on.” (Doc. No. 89 at 85:19–23). The “in dependence” terms pertain to performing an action based on

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<sup>7</sup> The Court has concerns about the validity of the claims in question, particularly as pertains to enablement.

<sup>8</sup> See Section III.4 infra.

<sup>9</sup> Claim 32 of the ‘471 Patent, Claims 1, 15 and 24 of the ‘573 Patent, and Claims 1 and 11 of the ‘826 Patent.

signals received regarding the success or failure of a transaction-related request.

Plaintiff argues the “in dependence” terms “require no construction beyond their plain and ordinary meaning to a POSITA.” (Doc. No. 65 at 13) (citing Phillips, 415 F.3d at 1312–13). According to that plain meaning, the “in dependence” term contemplates that the call processor sends signals to and receives signals from the external payment entity based on signals received from the customer and/or agent. Put simply, whether data signals are “transmitted” or “received” depends on data and data signals extracted from the DTMF. Steps 19, 20, and 24 of the ‘471 Patent’s specification support this plain language construction: whether the method reaches step 24 (verification) depends on completing steps 19 (correction) and 20 (validation), which in turn depend on data signals received from the customer.

Defendant raises two objections to Plaintiff’s proposed construction. First, Defendant contends that the “in dependence” terms are invalid as indefinite under 35 U.S.C. § 112. In the alternative, Defendant proposes competing constructions for certain “in dependence” terms defining the term “processing” as “additional processing.”

Defendant declined to raise its indefiniteness objection in its claim construction briefings, but instead simply preserved its right to pursue a § 112 defense on summary judgment. (Doc. No. 67 n.9). Defendant further declined to raise its indefiniteness defense at the claim construction hearing. In consequence, the Court will not address Defendant’s indefiniteness objection at this time and turns to Defendant’s proposed construction of the “in dependence” terms.

Defendant’s construction requires that after receiving a message from the external payment entity, the processor subjects the transaction information signals to additional processing based on whether payment was approved or rejected. (Doc. No. 72 at 10–11). Defendant argues that interjecting the word “additional” simply confirms the plain language of



the claim. Defendant argues that Plaintiff’s proposed construction (which eschews the word “additional”) is nonsensical, because any processing that is based on whether payment was approved or rejected is necessarily “additional” to prior processing. “There is no other logical conclusion based on the claim’s plain language.” (Doc. No. 67 at 16).

Plaintiff responds that Defendant improperly “seeks to import limiting language not recited in the claim.” (Doc. No. 65 at 22). The Court agrees. See Linear Tech., 566 F.3d at 1059; Amgen Inc., 314 F.3d at 1326; Evolution Concepts, 22 F.4th at 1366. Consider two scenarios. In the first, any processing that follows receipt of information signals from the external payment entity necessarily builds upon earlier processing and is thus “additional.” In the second, there is some means—however implausible—by which the processor receives signals from the external payment entity without having processed them before. In this second scenario, processing is not “additional.” In the first scenario, Defendant’s argument holds up. It is impossible that the processing referenced in the claim is not “additional,” so importing that term is not “limiting.” But there is no reason to import the term because the plain language of the claim already implies that such processing is additional. In the second scenario, Defendant’s argument is off-base: because processing is not necessarily additional, importing that term improperly limits the scope of the claim. In either scenario, Defendant’s proposed construction fails—in the first because it is unnecessary, and in the second because it is impermissible.

For the foregoing reasons, the Court will find for Plaintiff and adopt their proposed construction for this series of claims.

#### 4. **“Receiving” and “Extracting”**<sup>10</sup>

The “receiving” and “extracting” terms appear in claims 10 and 15 of the ‘108 Patent.

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<sup>10</sup> Claims 10 and 15 of the ‘108 Patent.

These terms describe the call processor’s receipt of data signals, including sensitive information, and the extraction of sensitive information from those signals to shield it from call center agents.

Plaintiff contends, again, that these terms “require no construction beyond their plain and ordinary meaning to a POSITA.” (Doc. No. 65 at 21) (citing Phillips, 415 F.3d at 1312–13). More specifically, Plaintiff maintains that the “receiving” and “extracting” language requires only that “(i) data signals comprising sensitive information are received from the call processor, and (ii) sensitive information is extracted from the data signals.” (Doc. No. 65 at 21).

Defendant takes issue with Plaintiff’s use of the passive voice. Sure, data signals “are received” and sensitive information “is extracted,” but by whom or what? Defendant’s proposed construction would clarify that

[t]he call processor sends data signals including sensitive information to a dedicated application (e.g., middleware) installed on the agent’s computer, and the application extracts the sensitive information from the data signals.

(Doc. No. 60-8 at 1).

Defendant’s construction stipulates that a dedicated application installed on the call center agent’s computer is responsible for the “receiving” and “extracting” steps. To justify its proposed construction, Defendant looks to the ‘108 Patent’s prosecution history. Amended claims 20 and 24 of the ‘108 Patent—which became asserted claims 10 and 15, those at issue here—originally described a method of receiving data signals comprising sensitive information, extracting sensitive information from the data signals, and selectively transmitting only non-sensitive information. (Doc. No. 67, Ex. E at 1–3). The PTO rejected both claims, finding them unpatentable over the prior art. (Id. at 6). The Examiner’s rejection noted that the prior art did not describe an apparatus comprised of a call center agent computer running middleware adapted for the purpose of receiving and extracting sensitive information. (Id. at 10). Addressing allowed

claims of the '108 Patent, the Examiner noted that the prior art

discloses a system for processing sensitive information at a call handling system which prevents an agent from seeing or hearing the sensitive information, but does not teach or fairly suggest the claimed subject matter, in particular, the sensitive information being transmitted to and extracted by the agent computer.

(Id.) (emphasis added).

Plaintiff Sycurio responded to the PTO's rejection by filing amended claims with supporting argument. (Doc. No. 67, Ex. E at 12–22). Plaintiff's amended claims described an apparatus for receiving, extracting, and selectively transmitting information, comprising a call center agent's computer and an application server adapted to conduct a transaction with an external entity. (Id.). To distinguish their amended claims from the prior art, Sycurio explicitly claimed that the amendments claimed new functionality involving installation of an application on the agent's computer:

As the amended claims make clear, Applicant is seeking to claim an arrangement and functionality of the agent computer, e.g. as middleware installed on the agent computer, to allow for integration of a call processor with an existing transaction system, as embodied by the application server, with little or no modification required of the latter. (Id. at 19) (emphasis added).

(Id. at 19) (emphasis added). Sycurio further distinguished its claims by noting that unlike the amended '108 Patent, the prior art “does not disclose any sensitive data handling functionality at the agent computer which serves only as an interface for the agent.” (Id. at 20). Plaintiff expressly applied the foregoing arguments to all then-pending amended claims. (Id. at 21). Only on review of these arguments did the PTO allow the amended claims. (Id. at 23).

Plaintiff characterizes Defendant's proposed construction as improperly introducing the “new requirement” of a dedicated software application installed on the agent's computer. (Doc. No. 65 at 22). Plaintiff notes, correctly, that Defendant's “dedicated application” language is absent from claim 10. Plaintiff is also correct that courts generally decline to import additional

limitations not required by claim language. (Doc. No. 65 at 22) (citing Evolution, 22 F.4th at 1366). Finally, Plaintiff contends that the absence of “agent computer” language in claim 10—specifically required in claim 1—indicates that that there is no such “agent computer” requirement (and thus no dedicated application or middleware requirement) in claim 10. (Doc. No. 65 at 22–23) (citing Hologic, Inc. v. SenoRx, Inc., 639 F.3d 1329, 1336 (Fed. Cir. 2011)). Claim 10 does refer to “an application server adapted to conduct a transaction with an external entity using the sensitive information,” but Plaintiff maintains claim 10 does not necessarily contemplate that such server be connected to the agent’s computer via a dedicated software application. (Doc. No. 67-5 at 14).<sup>11</sup>

Plaintiff cannot have it both ways. The Court will hold Plaintiff to the bargain it made with the PTO to obtain the ‘108 Patent in the first place. (Doc. No. 67 at 22) (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he interested public has the right to rely on the inventor's statements made during prosecution.” Fenner Invs., Ltd. v. Cellco P’ship, 778 F.3d 1320, 1323 (Fed. Cir. 2015). True, the doctrine of prosecution disclaimer applies only where the file history includes “clear and unmistakable” renouncement or disavowal of claim scope. Avid Tech, 812 F.3d 1040 at 1045–47. But, here, the Court finds that Plaintiff did “unmistakably renounce” the scope of the ‘108 Patent by submitting the amended claims ultimately approved by the PTO. See CUPP Computing AS v. Trend Micro Inc., 53 F.4th 1376, 138283 (Fed. Cir. 2022). Plaintiff cannot now disclaim its prior disclaimer—without which the

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<sup>11</sup> The Court finds Plaintiff’s argument on this point unpersuasive. At the claim construction hearing, counsel for Plaintiff admitted that “[a]s a practicality . . . it’s very hard to believe that when we’re presenting evidence of infringement, there will not be software involved . . . . And the exemplary embodiments talk about software that handle it.” (Doc. No. 89 at 101:3–7). Moreover, Plaintiff’s current argument cannot be squared with its unequivocal representation to the PTO it was amending all then-pending claims to require functionality of the agent’s computer. (Doc. No. 67, Ex. E at 12–22); (Doc. No. 70 at 15 n.10).

PTO may not have granted the ‘108 Patent at all—and argue that its amended claims do not materially limit the patent’s scope.

To receive PTO approval for the ‘108 Patent, Plaintiff explicitly distinguished the prior art’s failure to disclose “any sensitive data handling functionality at the agent computer.” (Doc. No. 67, Ex. E at 20–21) (emphasis added). Plaintiff unambiguously argued to the PTO that its amended claims differed from the prior art precisely because they required the caller’s sensitive data to be provided to the agent’s computer:

“any such processing of the sensitive data in [the prior art] is done by . . . components of the call handling system . . . whereas in the amended claims this is done by an existing application server accessible throughout by the agent computer.”

(Id. at 21) (emphasis added). Plaintiff’s current position—that claim 10, one of the “amended claims” referred to above, does not require connection to an agent’s computer—cannot be reconciled with the file history. To the extent Plaintiff asserts that the ‘108 Patent is broad enough to encompass receiving and extracting methodologies not connected to the agent computer or relying on dedicated software, Plaintiff unmistakably disclaimed that aspect of the patent’s scope in the prosecution history. See Fenner Invs., 778 F.3d at 1323; Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1375–79 (Fed. Cir. 2008); Omega Eng’g, Inc. v. Raytek Corp., 334 F.3d 1314, 1327 (Fed. Cir. 2003); Advanced Fiber Techs. (AFT) Tr. v. J & L Fiber Servs., Inc., 674 F.3d 1365, 1376 (Fed. Cir. 2012); SpeedTrack, Inc. v. Amazon.com, 998 F.3d 1373, 1379–80 (Fed. Cir. 2021).

Relying on the doctrine of prosecution disclaimer, the Court will find for Defendant and adopt its proposed construction for this series of claims.

## 5. “First/Second Control Mode”<sup>12</sup>

The parties initially disputed the construction of the ‘471 Patent’s claim 15, describing and distinguishing the call processor’s first and second control modes. See (Doc. No. 1 at 23–24); (Doc. No. 65 at 24–25); (Doc. No. 72 at 14–15). But according to Defendant’s Responsive Claim Construction Brief, “the parties are [now] largely in agreement regarding the proposed constructions” of the first/second control mode terms. (Doc. No. 67 n.15). Defendant requests the Court “select the [construction] that it believes will be most easily understood by a jury.” (Id.).

The Court finds that the plain and ordinary meaning of the claim language would be most easily understood by a jury. The Court will thus find in favor of Plaintiff’s proposed construction of the first/second control mode term.

## 6. “Call Processor”<sup>13</sup>

The term “call processor” describes the components and software used to execute the relevant functions recited in the asserted claims of the Semafone patents. A call processor is comprised of two telephone interfaces and a data interface. (Doc. No. 65-3 at 36:65–65). “The parties proposed constructions are identical with one exception: Defendant’s additional requirement that all ‘call processor’ elements must be ‘separate from a public telephone network.’” (Doc. No. 74 at 1). By contrast, Plaintiff maintains that “nothing in the claim refers to or requires that the call processor’s interfaces or other elements reside either inside or outside a public telephone network.” (Id. at 2).

Plaintiff is correct: the claim language is largely “agnostic on this point.” (Doc. No. 74 at 2). And Courts generally refuse to import limitations—like that proposed by Defendant here—absent from the claim itself. Amgen Inc., 314 F.3d at 1326; Evolusion Concepts, 22 F.4th at

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<sup>12</sup> Claim 15 of the ‘471 Patent.

<sup>13</sup> ‘471, ‘573, ‘826 and ‘108 Patents.

1366. Plaintiff’s construction is further supported by their argument that Defendant’s proposal would exclude call processor embodiments described in the specification having interfaces located within the public exchange. See Immunex Corp. v. Sanofi-Aventis U.S. LLC, 977 F.3d 1212, 1220 (Fed. Cir. 2020) (rejecting proposed construction based on a “strong presumption against a claim construction that excludes a disclosed embodiment”) (internal quotations omitted); Kaufman v. Microsoft Corp., 34 F.4th 1360, 1372 (Fed. Cir. 2022)) (noting a proposed construction that “excludes a preferred embodiment is rarely, if ever correct . . .”) (internal quotations omitted). On Plaintiff’s read, the specification indicates that the call processor can be placed “at any point along the telephony network,” and that the processor’s interfaces may reside within the public telephone exchange. (Doc. No. 65-1 at 17:67–18:3, 32:52–64; 26:1–19). These embodiments fall outside Defendant’s proposed construction. (Doc. No. 74 at 5).

Plaintiff’s construction fails for two reasons. First, while the claim does not consider whether the call processor’s elements may be located within the network, Defendant’s proposed limitation (requiring the processor’s elements to be separate from the network) is more consistent with claim language. The claim describes a call processor. A “processor” is a “thing which performs a process or processes something”<sup>14</sup> or “one that processes.”<sup>15</sup> A processor is thus distinct from a “process,” defined as “a continuous action, or series of actions or events”<sup>16</sup> or “[a] series of actions, changes, or functions bringing about a result.”<sup>17</sup> If the call processor’s elements are located within the network, it is no processor at all—it is not a thing that performs a process, but a process unto itself. For the disputed term to make sense in the context of the claim—for a

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<sup>14</sup> Processor, (n.), OXFORD ENGLISH DICTIONARY (2023).

<sup>15</sup> Processor (n.), THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 5<sup>th</sup> Ed. (2022).

<sup>16</sup> Process, (n.), OXFORD ENGLISH DICTIONARY (2023).

<sup>17</sup> Process, (n. pl.), THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 5<sup>th</sup> Ed. (2022).

call processor to be a processor and not a process—Defendant’s construction must prevail.

Defendant’s proposed limitation, requiring that call processor elements be separate from a public telephone network, is not absent from the claim but in fact required to give the disputed term its appropriate meaning.

Second, Plaintiff’s argument that Defendant’s proposed construction would clash with the specification is off base. Relying heavily on Figure 16 of the ‘471 Patent, Plaintiff reads the specification to suggest that the call processor’s interfaces may reside within the public telephone exchange. But Defendant notes that the two telephone interfaces depicted in Figure 16 are integrated with the call processor, and thus not wholly within the public telephone network. (Doc. No. 89 at 80:14–23). Further, it is unclear whether Figure 16 applies to the claims of the ‘471 Patent disputed here and not other non-asserted claims. (Id. at 80:3–13). Finally, even if the Court adopted Plaintiff’s conclusion that Defendant’s proposed construction would exclude certain embodiments, Plaintiff would only be entitled to a “strong presumption” against Defendant’s claim construction. Defendant’s argument—that Plaintiff’s proposed construction would strip the word “processor” of its plain meaning—is more than sufficient to overcome that presumption.

For the reasons stated above, the Court will find in favor of Defendant’s proposed construction of the “call processor” term. According to the Court’s construction, the call processor may be located within a public telephone network so long as it has its own integrated call and data interfaces connected to and controlled by the processor.

#### **IV. Conclusion**

Based on the foregoing, the Court provides the following claim constructions:



**The ‘471 Patent**

<b>Disputed Term</b>	<b>Court’s Construction</b>
<p><b>Claim 1[b][i-iii]:</b> <u>in the second mode, the call processor is adapted [i] to receive voice signals and data signals at the first telephone interface, [ii] to block data signals from being transmitted to the second telephone interface, [iii] to transmit voice signals to the second telephone interface and to extract data from the data signals received at the first and/or second telephone interfaces,</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 20[b][i-iii]:</b> <u>in a second mode, [i] receiving voice signals and data signals at a first telephone interface, [ii] transmitting voice signals to a second interface and [iii] blocking data signals from being transmitted to a second telephone interface, and</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 32[a]:</b> <u>to receive voice signals and data signals at the first telephone interface and to transmit the voice signals and selectively transmit the data signals received at the first telephone interface via the second telephone interface wherein if said received signals include signals representing information relating to a transaction, said transaction information signals are blocked from transmission via said second interface;</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 17[a-b]:</b> <u>to receive signals at the first and/or second telephone interface from a first entity and to selectively transmit said signals to a second entity via the other of said first and second telephone interfaces: to selectively block said signals received at the first and/or second telephone interface from transmission via said second entity via the other of said first and second telephone interfaces;</u></p>	<p>Selectively Transmit: The call processor is adapted to determine which signals received from a first entity should be sent to a second entity, and only transmits those signals to a second entity.</p> <p>Selectively Block: The call processor is adapted to determine which signals received from a first entity should be blocked, and blocks those signals from transmission to a second entity.</p>
<p><b>Claim 19[b]:</b> <u>the processing module is adapted to control, via said interface for communication with said processing module, said receipt and transmission of voice and data signals by said telephony module such that: data signals received at said interface are selectively blocked from being transmitted to the second telephone interface.</u></p>	<p>The processing module determines which data signals received from the first interface should be blocked, and blocks those signals from being transmitted to the second interface.</p>

<p><b>Claim 32[a]:</b> to receive voice signals and data signals at the first telephone interface and to transmit the voice signals and <u>selectively transmit the data signals received at the first telephone interface via the second telephone interface wherein if said received signals include signals representing information relating to a transaction, said transaction information signals are blocked from transmission via said second interface;</u></p>	<p>The processor receives both voice and data signals from the consumer via the first telephone interface, transmits all of the voice signals uninterrupted to the agent via the second telephone interface, and transmits only data signals that do not relate to the transaction to the agent via the second telephone interface while blocking data signals that do relate to the transaction.</p>
<p><b>Claim 32[b-c]:</b> to generate a request based on said transaction information signals; to transmit said request to an external entity; <u>to receive a message via the data interface from the entity to identify success or failure of the request; and to process the transaction information signals in dependence on the success or failure of the request.</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 15[c-d]:</b> 15[c] <u>In the first control mode the processing module is adapted to control the receipt and transmission of voice and data signals by the telephony module</u></p> <p>15[d] <u>In the second control mode the processing module is adapted to control receipt and transmission of voice and data signals by a second telephony module of a second call processor</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 1:</b> <u>the call processor comprising a first telephone interface, a second telephone interface, and a data interface,</u></p>	<p>A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.</p>
<p><b>Claim 32:</b> A telephone <u>call processor</u> for processing telephone calls comprising voice signals and data signals, <u>the call processor comprising a first telephone interface, a second telephone interface,</u></p>	<p>A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.</p>

### The '573 Patent

<b>Disputed Term</b>	<b>Court's Construction</b>
<b>Claim 1[i]:</b> <u>processing the first and second information signals in dependence on the success or failure of the request.</u>	Plain and ordinary meaning.
<b>Claim 15[d][vii]:</b> <u>to process the first and second information signals in dependence on the success or failure of the request.</u>	Plain and ordinary meaning.
<b>Claim 24[h]:</b> <u>to process the information signals in dependence on the success or failure of the request.</u>	Plain and ordinary meaning.
<b>Claim 1:</b> A method performed in a <u>call processor</u> of processing a telephone call, the method comprising	A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.
<b>Claim 24:</b> An apparatus for processing a telephone call placed to a call centre, the apparatus comprising a telephone <u>call processor</u> located external to the call centre and adapted to receive via a first interface a telephone call comprising voice signals and data signals, the telephone call processor being further adapted:	A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.

### The '826 Patent

<b>Disputed Term</b>	<b>Court's Construction</b>
<b>Claim 1[b][ii]:</b> [in the second mode, the call processor is adapted to] . . . <u>block data signals from being transmitted to the second telephone interface and optionally to transmit voice signals to the second telephone interface;</u>	Plain and ordinary meaning.
<b>Claim 9:</b> The call processor of claim 1, wherein in the second mode, the call processor is adapted to: <u>block data signals from being transmitted to the second telephone interface; and transmit voice signals to the second telephone interface.</u>	Plain and ordinary meaning.
<b>Claim 11[b][i-ii]:</b> in a second mode, [i] <u>receiving voice signals and first information signals encoded in data signals at a first telephone interface;</u> [ii] <u>blocking data signals</u>	Plain and ordinary meaning.

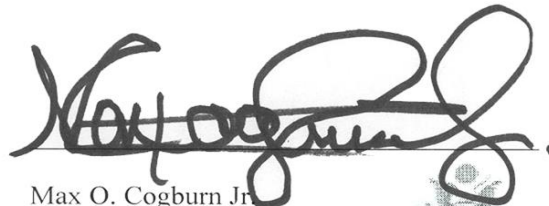
<p>from being transmitted to a second telephone interface and optionally to transmit voice signals to the second telephone interface;</p>	
<p><b>Claim 17:</b> The method of claim 11, wherein in the second mode, the method comprises: <u>blocking data signals from being transmitted to the second telephone interface; and transmitting voice signals to the second telephone interface.</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 8[e]:</b> is adapted to: [i] receive signals at the first and/or second telephone interface from a first entity and to <u>selectively transmit said signals to a second entity via the other of said first and second telephone interfaces.</u></p>	<p>The processor is adapted to determine which signals received from a first entity should be sent to a second entity, and only transmits those signals to a second entity.</p>
<p><b>Claim 8[e][ii]:</b> <u>selectively block</u> said signals received at the first and/or second telephone interface from transmission via said second entity via the other of said first and second telephone interfaces; and/or</p>	<p>Call processor being adapted to determine which signals received from a first entity should be blocked, and block those signals from transmission to a second entity.</p>
<p><b>Claim 8[g][ii]:</b> <u>the processing module is adapted to control, via said interface for communication with said processing module, said receipt and transmission of voice and data signals by said telephony module such that: data signals received at said first interface are selectively blocked from being transmitted to the second telephone interface.</u></p>	<p>The processing module is adapted to control the interface for communication with the processing module such that it blocks selectively chosen data signals received from the first telephone interface so that they are not transmitted to the second telephone interface.</p>
<p><b>Claim 1[b][ix]:</b> <u>process the first and second information signals in dependence on the success or failure of the request.</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 11[b][ix]:</b> <u>processing the first and second information signals in dependence on the success or failure of the request.</u></p>	<p>Plain and ordinary meaning.</p>
<p><b>Claim 1:</b> A telephone <u>call processor</u> for processing telephone calls comprising voice signals and data signals, <u>the call processor comprising a first telephone interface, a second telephone interface, and a data interface,</u> the call processor being operable in a first mode and in a second mode, wherein:</p>	<p>A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.</p>
<p><b>Claim 11:</b> A method performed at a <u>call processor</u> of processing telephone calls comprising voice signals and data signals, the method comprising:</p>	<p>A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.</p>

**The '108 Patent**

<b>Disputed Term</b>	<b>Court's Construction</b>
<b>Claim 15:</b> The method of claim 10, further comprising receiving from a caller voice signals and data signals and <u>selectively transmitting the voice signals and data signals such that data signals comprising sensitive information are transmitted to the apparatus and prevented from reaching the agent.</u>	The data signals received from the customer that contain sensitive information are sent to the application (e.g., middleware) installed on the agent's computer and prevented from reaching the agent.
<b>Claim 10:</b> <u>receiving data signals comprising sensitive information from the call processor; extracting the sensitive information from the data signals</u>	The call processor sends data signals including sensitive information to a dedicated application (e.g., middleware) installed on the agent's computer, and the application extracts the sensitive information from the data signals.
<b>Claim 15:</b> <u>selectively transmitting</u> the voice signals and data signals such that data signals comprising sensitive information are transmitted to <u>the apparatus</u> and prevented from reaching the agent.	the data signals received from the customer that contain sensitive information are sent to the application (e.g., middleware) installed on the agent's computer and prevented from reaching the agent
<b>Claim 10:</b> A method of processing sensitive information, the sensitive information provided via a <u>call processor</u> by a caller assisted by an agent, the method comprising:	A component or collection of components and/or software such as a computer adapted to process call signal data, having a first telephone interface, a second telephone interface, and a data interface that are separate from a public telephone network.

**IT IS SO ORDERED.**

**IT IS FURTHER ORDERED** that this case be referred to Magistrate Judge Rodriguez for the entry of an appropriate Utility Patent Pretrial Order and Case Management Plan.



Max O. Cogburn Jr.  
United States District Judge