

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

| | | |
|-----------------------------------|---|--------------|
| CSB-SYSTEM INTERNATIONAL INC. | : | |
| | : | CIVIL ACTION |
| Plaintiff/Counterclaim Defendant, | : | |
| | : | |
| v. | : | |
| | : | NO. 10-2156 |
| SAP AMERICA, INC., | : | |
| | : | |
| Defendant/Counterclaim Plaintiff. | : | |

MEMORANDUM

BUCKWALTER, S. J.

July 27, 2011

Currently pending before the Court is a patent claim construction pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). For the following reasons, the disputed claim terms are construed as indicated in this Memorandum and the accompanying Order.

I. BACKGROUND

A. The Patent

The present patent involved is U.S. Patent No. 5,631,953 (“the ‘953 Patent”). Although there are eight Claims within the ‘953 Patent, Claims 1, 2, 4, and 6 contain all the disputed terms at issue. Claim 1 recites (with disputed terms in bold):

A circuit arrangement for integration of **EDP systems** in utilization of telephone systems connected to a public ISDN or Euro ISDN telephone network,

the circuit arrangement comprising a plurality of **telephone extensions which are directly connectable to a telephone network selected from the group consisting of a public ISDN telephone network and Euro ISDN telephone network;**

a first line;

an **intelligent telephone system** arranged so that said telephone extensions are connectable with said at least one telephone network through said first line and said intelligent telephone system;

a plurality of **personal computers**;

an **integration element** arranged between said **intelligent telephone system** and said **personal computers**,

said **integration element** receiving signals via at least one **connection element selected from the group consisting of an SDLC connection element** and an **ISDN connection element** via a second line from said at least one telephone network via said **intelligent telephone system** and sending back signals to said at least one telephone network,

said **integration element** also sending a **data record** assigned **an appropriate information** via a third line, via a LAN connected to a LAN **server** by a fourth line and via a fifth line to said **personal computers** again;

a computing system; and

a software layer arranged so that conversion of the signals into a **data record** and vice versa is carried by said **integration element**, by said computing system by said software layer and by said at least one **connection element** with an internal software.

(‘953 Patent, col. 5 line 52-col. 6 line 12 (emphasis added).)

In addition Claim 2 states:

A circuit arrangement as defined in claim 1, wherein said personal computers are provided with keyboards so that a speech or data communication between a caller via said at least one telephone network and a competent party on one of said telephone extensions with a respectively assigned one of said personal computers is sent to another competent party and back after the respective competent party has sent a data record assigned the appropriate information to said integration element by operating said keyboard of the respectively assigned one of said personal computers, and **a necessary signal** leaving said integration element is applied at said intelligent telephone system and a connection to at least one another telephone extension is established, so that a connection to every telephone extension simultaneously provides an immediate integration of said personal

computer assigned to said telephone extension in the established speech and data communication.

(Id. col. 6 lines 13-29 (emphasis added).) Claim 4 recites:

A circuit arrangement as defined in claim 2, wherein said integration element **is formed so that it is possible** to hold **an applied speech and data communication** in conference **where required** together with at least one further competent party.

(Id. col 6 lines 47-51 (emphasis added).) Finally, Claim 6 states:

A circuit arrangement as defined in claim 1, wherein said integration element is formed so that data are transferable when a speech and data has been established by every competent part even during a conference and by all competent parties both to and from a caller to every participating competent party and between the competent parties with and without a caller.

(Id. col. 6 lines 56-62 (emphasis added).)

B. General Description of Technology at Issue

In the simplest of terms, the technology to be construed in this case concerns circuit arrangements of hardware and software that allow the integration of speech (telephone systems) with data systems. These systems permit agents in customer service call centers to obtain information from their personal computer about the person calling for assistance at the same time he or she takes the call. As explained by the parties' experts at the Markman hearing, when a person calls a customer service center, the technology inputs the caller's telephone number into a computer system which converts it into a computer-readable request. The server then processes the request, obtains information about the customer calling, and creates a "screen pop," wherein the various information about that particular customer will automatically appear on the screen of the agent's personal computer at the same time the agent answers the call. (N.T. June 7, 2011, 18:21-24- 24:25, 59:12-63:24.) The agent may then use his or her personal computer to make

requests from a centrally shared server – which stores all the data about the clients – to obtain additional information, transfer the customer to another agent, or conference in another agent. (N.T. June 7, 2011, 26:5-28:8, 58:9-59:10.) Both parties have agreed that the technology runs on what is called a client/server architecture, wherein the agent’s personal computer (“the client”) runs the customer service application and the database server answers requests from the client to get data. (N.T. June 7, 2011, 24:14-20.) This is distinct from the host/terminal architecture, wherein the host runs and controls the application and holds all the data, and the agent’s terminal is simply an input and output device. (N.T. June 7, 2011, 21:8-23:12.)

C. Procedural History

Plaintiff CSB-System International, Inc. (“CSB”) brought the present patent action against Defendant SAP America, Inc. (“SAP”) in this Court on May 11, 2010 alleging that one of Defendant’s products infringed on the ‘953 Patent held by Plaintiff. Following several conferences, the parties failed to reach complete agreement as to the proper construction of several claim terms. The parties submitted extensive briefing on the issue and proceeded to a one-day Markman hearing on June 7, 2011, at which time each side offered a short tutorial and the testimony of an expert witness. Thereafter, the parties had the opportunity to submit short post-Markman briefs, as well as stipulations regarding additional agreed-upon terms and any modified proposals for construction of still-disputed terms. Presently before the Court are two sets of disputed terms: (1) those on which the parties have conflicting definitions and (2) those which Defendant claims are too indefinite to be construed. Having considered the entirety of the existing record, the Court addresses each set of these disputed terms individually.

II. CLAIM CONSTRUCTION

A. Standard of Review for Claim Construction

The first step in a patent infringement analysis is to define the meaning and scope of the claims of the patent. Markman, 52 F.3d at 976. Claim construction, which serves this purpose, is a matter of law exclusively for the court. Id. at 979. Specifically, the focus of a court’s analysis must begin and remain on the language of the claims, “for it is that language that the patentee chose to use to ‘particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.’” Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112, ¶ 2).

The terms used in the claims bear a “heavy presumption” that they mean what they say and have their ordinary and customary meaning. Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002). That ordinary meaning “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). To determine the ordinary meaning of a term, the court should review “the same resources as would” the person of ordinary skill in the art. Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998). As such, the ordinary meaning may be derived from a variety of sources including intrinsic evidence, such as the claim language, the written description, drawings, and the prosecution history; as well as extrinsic evidence, such as dictionaries, treatises, or expert testimony. Dow Chem. Co. v. Sumitomo Chem. Co., Ltd., 257 F.3d 1364, 1373 (Fed. Cir. 2001).

Generally, a person of ordinary skill in the art would not understand the ordinary and customary meaning of a claim term in isolation. Where ambiguity in the meaning of the term

exists, the “most significant source” of authority is “the intrinsic evidence of record, i.e., the patent itself, including the claims, the patent specification¹ and, if in evidence, the prosecution history.” Vitronics Corp. v. Conceptoronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); see also Phillips, 415 F.3d at 1313 (holding that a person of ordinary skill in the art is deemed to read the claim terms in the context of the entire patent, including the specification). The specification “is the single best guide to the meaning of a disputed term.” Vitronics, 90 F.3d at 1587. Indeed, the patent specification is usually dispositive as to the meaning of words. Phillips, 415 F.3d at 1316. However, it is improper to import limitations from the specification to the claims. Id. at 1323; Resonate Inc. v. Alteon Websystems, Inc., 338 F.3d 1360, 1364-65 (Fed. Cir. 2003); see also Renishaw PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (“(a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part”). On occasion, “the specification may reveal a special definition given to a claim term . . . that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” Phillips, 415 F.3d at 1316 (citing CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002)). The specification may also “reveal an intentional disclaimer, or disavowal, of claim scope by the inventor . . . [, which] is regarded as dispositive.” Id. (citing SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1343-44 (Fed. Cir. 2001)).

“[T]he claims themselves [also] provide substantial guidance as to the meaning of

¹ The specification is “that part of a patent application which precedes the claim and in which the inventor specifies, describes, and discloses the invention in detail.” MCCARTHY’S DESK ENCYCLOPEDIA OF INTELLECTUAL PROPERTY 408 (2d ed. 1995).

particular claim terms.” Phillips, 415 F.3d at 1314. Both “the context in which a term is used in the asserted claim” and the “[o]ther claims of the patent in question” are useful for understanding the ordinary meaning. Id. Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” Renishaw, 158 F.3d at 1250.

The court “should also consider the patent’s prosecution history, if it is in evidence.” Markman, 52 F.3d at 980. This consists of “the complete record of proceedings before the Patent Office and includes the prior art cited during examination.” Phillips, 415 F.3d at 1317. “Like the specification, the prosecution history provides evidence of how the [Patent and Trademark Office] and the inventor understood the patent.” Id. at 1317 (citing Lemelson v. Gen. Mills, Inc., 968 F.2d 1202, 1206 (Fed. Cir. 1992)). Nonetheless, it is the least probative form of intrinsic evidence because it “represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation.” Id.

If ambiguity still exists after considering all the intrinsic evidence, the court may rely on extrinsic evidence, which is “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Markman, 52 F.3d at 980. Notably, extrinsic evidence is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004) (quoting Vanderlande Indus. Nederland BV v. Int’l Trade Comm’n, 366 F.3d 1311, 1318 (Fed. Cir. 2004)). However, “dictionaries, and especially technical dictionaries, . . . have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology.” Phillips, 415 F.3d at 1318

(citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002)).

Additionally, expert testimony can provide background on the technology at issue, explain how it works, speak to what a person of ordinary skill in the art would understand, and establish that a particular term has a particular meaning in the pertinent field. Id.

Ultimately, during claim construction, “[t]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.”

Id.

B. Discussion of Claim Terms

Originally, the parties proposed constructions for each term that reflected significant differences in their respective understandings of this Patent. For its part, Plaintiff generally offered unwieldy definitions, which closely narrowed the scope of the terms and which included limitations and additions found nowhere with the patent language. Defendant, on the other hand, generally provided the broadest possible definition of the claim terms, seemingly disregarding their meaning within the context of the patent and relying on either plain dictionary definitions or simple spelling out of acronyms.² The Court found none of these proposals particularly

² For example, with respect to the term “personal computer,” CSB provided the following definition:

A desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, internal fixed disk or solid-state storage, and optionally, connections to printers and external storage. PC’s are designed primarily to give independent computing power to a single user and can be used as a client. PCs can be connected to LAN or other networks by standard protocols such as IEEE 802 (for LANs) and/or TCP/IP for communication across a network or network of networks.

This is opposed to one or more “dumb” terminals, such as an IBM 3270-

convincing, especially given the patent language and the expert testimony offered at the Markman hearing.

Apparently, the parties themselves concurred with this assessment, as they have now provided the Court with modified proposals that, notably, are substantially close in meaning. It is these modifications that the Court uses as a starting point for the analysis and which are set forth below.³

| Claim Term | CSB's Modified Proposal | SAP's Modified Proposal |
|-------------------|---|--|
| EDP Systems | Electronic Data Processing system consists of computers and software for the processing of data, including a shared database. | A computing system that receives, stores, operates on, records, or outputs data. |

series display station or control unit, that are connected to a HOST computer via a protocol designed to support only limited types of transactions (as defined by the 3270 data stream) between the Host and the terminals.

By contrast, SAP's definition for "personal computer" was "Also called a PC. A computer for personal single use."

³ At the Markman hearing, the parties maintained a dispute over the terms "Intelligent telephone system," "SDLC," "Connection Element," and "Selected from the group consisting of." Following the hearing, the parties met as directed by the Court and managed to agree on constructions for each of these terms. The Court adopts such constructions and shall include them in the accompanying Order. In addition, the parties had previously agreed to the construction of the term "ISDN," which the Court will likewise include in the accompanying Order.

| | | |
|---|---|--|
| <p>Telephone extensions which are directly connectable to a telephone network selected from the group consisting of a public ISDN telephone network and Euro ISDN telephone network</p> | <p>Telephones and/or other devices such as fax devices of the type that can be directly connected to either the public "ISDN" or Euro "ISDN" telephone network.</p> | <p>Telephone extensions of the type that can be directly connected to either the public ISDN or Euro ISDN telephone network. This is a close ended Markush group.</p> |
| <p>Personal Computers</p> | <p>A desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, one or more diskette drives, internal fixed storage, and an optional printer. A PC is designed primarily to give independent computing power to a single user and is used as a client.</p> | <p>A desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, one or more diskette drives, internal fixed storage, and an optional printer. A PC is designed primarily to give independent computing power to a single user and are inexpensively priced for purchase by individuals or small businesses.</p> |
| <p>Integration Element</p> | <p>A component that converts signals into data records and vice versa.</p> | <p>A component that converts signals into data records, and vice versa, and sends the data record to the personal computer so that the personal computer can use the data record to make a request to the server to retrieve corresponding customer information.</p> |
| <p>Server</p> | <p>A functional unit that provides shared services to PCs/workstations over a network in response to queries from clients.</p> | <p>A shared computer on the Local Area Network (LAN) that responds to requests from telephone software installed on the personal computer.</p> |

| | | |
|-------------|---|---|
| Data Record | A set of data used to electronically send information from one device to another, including querying information from a database. | An electronic file containing data, the electronic file being processed by local software on a personal computer. |
|-------------|---|---|

The Court now turns to a construction of each of these disputed claim terms.

1. EDP Systems

As set forth above, Plaintiff argues that an Electronic Data Processing or “EDP” system “consists of computers and software for the processing of data, including a shared database.” Defendant, on the other hand, defines the term as, “[a] computing system that receives, stores, operates on, records, or outputs data.” The sole substantive difference between these two definitions is whether EDP includes a shared database.

For several reasons, this Court adopts Plaintiff CSB’s definition. First, turning to the intrinsic evidence, Figure 1 of the specification reveals that the EDP system contains multiple computers running software all connected to a LAN server, which houses data shared among the various computers. (See ‘953 Patent, Fig. 1.) Moreover, the specification discloses that the LAN server operates as a shared database, which is a crucial part of the EDP system. In particular, when describing what occurs when a customer call arrives at the call center, the specification states:

[W]hen a call is connected to a telephone extension 2 a signal is immediately sent on line b by the intelligent telephone system 3 to the integration element 5, which assigned the appropriate information in a data record by the integration element 5, is passed via the LAN 9 to the associated personal computer 4. Here it is possible to pass the caller data and information directly from the LAN server 10 *and its database* at the same time as the call arrives.

(‘953 patent, col. 4 lines 48-55 (emphasis added).) The specification goes on to state that when a call needs to be transferred to another customer service agent, the EDP uses a shared database to transmit the needed information to the new agent:

Here too, all the necessary data are displayed immediately after the connection has been made on his personal computer 12, released by signals of the intelligent telephone system 3 which is converted into a data record in the integration element 5 and *was sent via LAN 9 with inclusion of the database of the LAN server 10 and the associated lines c; d; e to the personal computer 12* and the necessary communication can take place immediately.

(Id. col. 4 line 63-col. 5 line 3 (emphasis added).)

In addition, although not as probative, Plaintiff’s expert, Dr. Mark Gaynor,⁴ concluded that a person of ordinary skill in the art (“POSITA”) would recognize that the EDP, as used in the ‘953 Patent, includes a shared database. Citing to the specification, he noted that “the specification makes clear that the server has a database from which it serves database records.” (Decl. of Mark Gaynor, ¶ 33, Mar. 29, 2011 (“Gaynor Decl.”).) He went on to remark that a POSITA would recognize the shared database as a key element of the EDP as used in the ‘953 Patent. (Id. ¶ 37.)

Defendant’s contrary evidence is unconvincing. First, it argues that the preamble to Claim 1 reveals that it is the claimed “circuit arrangement” and not the EDP systems – which are merely components of that arrangement – that comprises the common database. (Def. SAP’s

⁴ At the Markman hearing, Defendant challenged the expert qualification of Dr. Gaynor – a challenge rejected by the Court. In its post-hearing brief, Defendant re-raises its opposition to Dr. Gaynor’s testimony in the form of a credibility challenge. The Court finds that no general ruling on Dr. Gaynor’s credibility is appropriate at this juncture. Rather, to the extent the Court finds Dr. Gaynor’s testimony credible and supported by the intrinsic evidence, this memorandum shall so opine. To the extent the Court deems it not credible or not supported by the extrinsic evidence, it shall not be cited as support for the accepted claim construction.

Opp. Claim Constr. Br. 18.) That language states, “[w]hat is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims. . . . [a] circuit arrangement for integration of EDP systems in utilization of telephone systems connected to a public ISDN or Euro ISDN telephone network.” (‘953 Patent, col. 5 lines 49-54.) While the Court acknowledges the ambiguous phrasing of this sentence, a broader reading of it in the context of the entire specification clarifies that the EDP itself contains the common database, which is then integrated into claimed architecture.

Moreover, SAP cites to Newton’s Telecom Dictionary, which defines “EDP” as “Electronic Data Processing. Also DP, as in Data Processing. Basically, a machine (also called a computer) that receives stores, operates on, records, and outputs data. . . .” NEWTON’S TELECOM DICTIONARY 376 (8th ed. 1994). As set forth above, however, such extrinsic evidence is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” C.R. Bard, Inc. v. U.S. Surgical Co., 388 F.3d 858, 862 (Fed. Cir. 2004) (quotation omitted). It is also settled that, “the specification may reveal a special definition given to a claim term . . . that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” Phillips, 415 F.3d at 1316. In this case, the dictionary definition is clearly at odds with the terms of the Patent. First, where the dictionary describes a single “machine” or “computer,” both parties concede that the EDP in the present case involves a system of computers. Moreover, the language of the ‘953 Patent clearly encompasses a shared database as part of the EDP. Faced with such discrepancies, the language of the specification must control.

Third, although SAP often relies on its own expert, Suresh Gursehaney, it is notable that

Mr. Gursahaney effectively conceded that the '953 Patent's use of EDP meant to include a shared database. In his Declaration, he stated that "the construction of EDP System proposed by CSB and Gaynor is *generally understandable*" and took issue only with the use of the term "common" as a descriptor for database since it was unclear whether the word meant "shared" or "ordinary" and thus "lack[ed] clarity and actually add[ed] ambiguity" to the proposed construction.⁵ (Decl. of Suresh Gursahaney, ¶ 23, Apr. 29, 2011 ("Gursahaney Decl.") (emphasis added).) Mr. Gursahaney never inferred that the "EDP" in the '953 Patent does not include a database at all. CSB has now corrected such purported ambiguity by using the term "shared" in place of "common" in its proposed definition,⁶ making it reasonable to assume that Mr. Gursahaney would accept CSB's definition in full.

In short, the Court defines the term "EDP" as "Electronic Data Processing system consists of computers and software for the processing of data, including a shared database." As explained above, the inclusion of a shared database is clearly disclosed by the specification. Moreover, the Court adopts the term "processing of data" in lieu of SAP's proposal that the system "receives, stores, operates on, records, or outputs data," absent any explained substantive difference between the two definitions.

⁵ During the Markman hearing, Mr. Gursahaney also conceded that the server described in the '953 Patent as part of the EDP was a "shared server." (N.T. June 7, 2011, 156:11-25.)

⁶ Indeed, at the hearing, counsel for SAP stated that the main problem with CSB's definition was use of the word "common." Counsel went on to note that "today I heard Doctor Gaynor say that it means shared. So I think that helps to bring closure on that issue." (N.T. June 7, 2011, 184:7-14.)

2. **Telephone Extensions Which Are Directly Connectable to a Telephone Network Selected from the Group Consisting of a Public ISDN Telephone Network and EURO ISDN Telephone Network**

The next term requiring construction is “[t]elephone extensions which are directly connectable to a telephone network selected from the group consisting of a public ISDN telephone network and Euro ISDN telephone network.” Both parties now agree that the language of “selected from the group consisting of” denotes a closed Markush group⁷ limited to either the public ISDN or Euro ISDN. The main dispute arises in whether the term “telephone extensions” refers to simply “telephone extensions” – as proposed by SAP – or should be expanded to include “telephones and/or other devices such as fax devices” – as proposed by CSB.

The Court struggles slightly with this claim construction. As noted by SAP, the abstract portion of the specification expressly states that “telephone sets” are directly connected to the public ISDN or Euro ISDN telephone system, with no mention of any other devices such as fax devices. (‘953 Patent, Abstract.). Moreover, in the prosecution history, the Examiner’s Statement of Reasons for Allowance note, when distinguishing the prior art, that “none of the art of record suggest nor teach a circuit arrangement as claimed in independent claim 6⁸ comprising *telephone sets* directly connected to the public ISDN or Euro-ISDN.” (Def. SAP’s Opening

⁷ A “Markush group” is “a listing of specified alternatives of a group in a patent claim, typically expressed in the form ‘a member selected from the group consisting of A, B, and C.’” Abbott Labs. v. Baxter Pharm., 334 F.3d 1274, 1280-81 (Fed. Cir. 2003). In other words, a “Markush group” is “a form of drafting a claim term that is approved by the PTO to serve a particular purpose when used in a claim to limit the claim to a list of specified alternatives.” Teva Pharms USA, Inc. v. Amgen Inc., No. CIV.A.09-5675, 2010 WL 3620203, at *7 n.3 (E.D. Pa. Sep. 10, 2010) (citing Gillete Co. v. Energizer Holdings, Inc., 405 F.3d 1367, 1372 (Fed. Cir. 2005)).

⁸ When quoting this portion of the prosecution history, SAP’s brief oddly changes “claim 6” to “claim 1,” with the appropriate brackets. The Court is not clear on the purpose of this alteration.

Claim Constr. Br., Ex. J, 2 (emphasis added).)

Nevertheless, the Court finds CSB's definition significantly more convincing. First, it is notable that the above language does not clearly *exclude* fax devices from being directly connectable to the public telephone network in the Patent. Although the Abstract portion of the specification describes "telephone sets," the remainder of the specification repeatedly makes the broader reference to "telephone extensions." Further, to the extent the cited prosecution history discusses only "telephone sets," the claim examiner was looking solely at "independent claim 6," which clearly describes only the setting up of conference calls through the system, and does not involve any fax communications.

Second and more importantly, the specification and claim language appear to explicitly contemplate the integration element functioning as a fax device for all the connected PCs. After describing the basic architecture and the various functions possible, as set forth in Claims 1-6, the specification states as follows:

Parallel to the above mentioned voice and data communication it is possible for every competent party to send the caller a fax.

This simultaneous and parallel fax transmissions next to the ongoing speech and data communication via the connection of the respective personal computer 4, 12 or 14 is made simultaneously via the line e with the LAN 9 with inclusion of the LAN server 10 via the line d, via the line c with the integration element 5 comprising the computing system 6, the software 7 and the SDLC or ISDN connection element 8 with an internal software ***and via the line b with the intelligent telephone system 3 to the public ISDN or Euro ISDN telephone network*** and thus to the caller by operating the keyboard of the personal computer 4; 12 or 14.

('953 Patent, col. 5 lines 18-31 (emphasis added).) Such language suggests that by simple operation of the personal computer, the customer service agent can direct that a fax be sent

parallel to speech and data via a line directly connectable to a public telephone system through the intelligent telephone system. Claims 7 and 8 of the '953 then specifically claim the ability to send a fax. Indeed, Claim 8 discloses:

A circuit arrangement as defined in claim 1, wherein said integration element is formed so that *in addition to the speech and data communication, a fax transmission is made parallel between the respective competent party and the caller using the keyboard of a respective one of said personal computers by using the connection of the respective personal computer with said at least one telephone network* via said fixed line with the LAN with inclusion of the LAN server via said fourth line, via said third line with the integration element comprising said computing system, said software, said at least one connection element with the internal software, and via said second line with the intelligent telephone system.

(Id. col. 7 line 9-col. 8 line 10.)

While the language of these latter Claims is somewhat obtuse – as conceded by both parties – Dr. Gaynor provided helpful guidance in his Opposition Declaration. He noted that Claim 8 expressly requires that the fax transmission be made on the same lines as the speech and data, meaning that the '953 patent teaches that other devices must be directly connectable to a telephone network. (Opposition Decl. of Mark Gaynor, ¶ 43, Apr. 29, 2011 (“Gaynor Opp. Decl.”).) Dr. Gaynor went on to opine that a POSITA would view CSB’s proposed definition as more complete and precise as it takes into account the disclosures of Claims 7 and 8. (Id. ¶ 45.)

SAP’s sole response argument is that this language does not show the telephone extension transmitting the fax. Rather, according to SAP, “a customer service agent uses the keyboard of the personal computer to transmit the fax without the telephone extension . . . the customer service agent transmits the fax to the integration element (telephony server), which then converts the fax into a signal that is understood by the intelligent telephone system (telephone

switch) and transmitted to the caller.” (Def. SAP’s Opening Claim Constr. Br. 14 n. 9.) Dr. Gaynor clarified, however, that “SAP confuses the initiation and control of a fax transmission with the device for fax transmissions.” (Gaynor Opp. Decl. ¶ 44.) He went on to note that “[w]hile the PC’s control the initiation of sending a fax, the integration element itself has the additional ability to act as central fax device for all those PC’s. By this way the integration element represents also a special telephone device connected to the telephone network that could control a fax transmission.” (Id.)

Given the foregoing discussion, and SAP’s lack of any supporting extrinsic evidence for its proposed construction, the Court must concur with CSB. Accordingly, the phrase “telephone extensions which are directly connectable to a telephone network selected from the group consisting of a public ISDN telephone network and Euro ISDN telephone network,” shall be construed to mean “telephones and/or other devices such as fax devices of the type that can be directly connected to either the public ISDN or Euro ISDN telephone network.” Further, the phrase shall be deemed to encompass a closed Markush group.

3. Personal Computer

The next term at issue is the seemingly innocuous phrase “personal computer.” As noted above, the parties’ initial proposed constructions could not have been more divergent from one another. Presently, however, the parties are in almost complete accord on this term, both agreeing that the definition should be taken in substantial part from the IEEE Standard Computer Dictionary, as follows:

A desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, one or more diskette drives, internal fixed storage, and an optional printer. A PC is designed to give independent

computing power to a single user . . .

(Pl. CSB’s Opening Claim Constr. Br., Ex. 8, IBM DICTIONARY OF COMPUTING, 507 (10th ed. 1993)). The sole variance exists in how this definition should end. SAP advocates for using the entirety of the definition in the IBM Dictionary of Computing, which concludes with the phrase “and are inexpensively priced for purchase by individuals or small businesses.” CSB, however, eschews this phrase and seeks the alternate ending “and is used as a client.”

Unfortunately, because the parties’ current proposals are new, neither party briefed the bases for their constructions, argued them during the Markman hearing, or presented any expert testimony on them. To the extent that the parties jointly adopt the well-phrased definition from the IBM Dictionary of Computing, the Court sees no reason to construe the term otherwise. The remaining question is whether to expand the definition past the point to which the parties already agreed and, if so, which party’s addition to adopt. SAP’s proposal – “and are inexpensively price for purchase by individuals or small businesses” – is taken directly from the IBM dictionary definition. Notably, however, dictionary definitions “focus[] the inquiry on the abstract meaning of the words rather than on the meaning of the claim terms within the context of the patent.” Phillips, 415 F.3d at 1321. For that reason, “there may be a disconnect between the patentee’s responsibility to describe and claim his invention, and the dictionary editors’ objective of aggregating all possible definitions for particular words.” Id. SAP’s proposal is clearly representative of such a disconnect, as it fails to explain how the general pricing of personal computers has any bearing or impact on the construction of the ‘953 Patent as a whole. Nor has SAP shown that a person of ordinary skill in the art at the time of the ‘953 Patent would view the term “personal computer” as being an item that must be inexpensively priced for purchase by an

individual or small business. (See N.T. June 7, 2011, 89:11-18 (testimony from Gaynor that “inexpensively priced” is not relevant).) Indeed, both parties’ expert tutorials agreed that the technology at issue is frequently used in high-volume call centers for large companies, suggesting that the inexpensive pricing of personal computers has no bearing on why they are included in the ‘953 Patent. See Roche Diagnostics Corp. v. Selfcare Inc., 186 F. Supp. 2d 914, 918 (S.D. Ind. 2002) (“A claim term will not be given a common dictionary meaning . . . if such a reading would be nonsensical in light of the patent disclosure, or specification.”). Accordingly, the Court declines to adopt this limitation.

CSB’s proposed addition suffers the same fate. CSB points to nothing in the patent specification or claim language that creates a limitation on the use of personal computers as clients. While, as conceded by both parties, the ‘953 Patent generally appears to disclose a client/server architecture, CSB’s addition describes not what the term “personal computer” means, but rather what the personal computer does within that architecture. CSB fails to point to any intrinsic or extrinsic evidence to support such a definition. As such, giving the term “personal computer” its ordinary meaning, the Court cannot find that its construction should include any such description of its use.

In light of the foregoing, the Court constructs the term “personal computer” to mean “[a] desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, one or more diskette drives, internal fixed storage, and an optional printer. A PC is designed to give independent computing power to a single user.”

4. Integration Element

With respect to the next term – “integration element” – the parties have again substantially changed their stances on the appropriate construction. In the initial claim construction briefs, CSB offered a lengthy definition involving a “combination of hardware and software that translates intelligent telephone system signals into computer-readable data and vice-versa, such as conversion of digital commands from computers and connection elements into content and control signals understood by intelligent telephone systems.” SAP, on the other hand, presented a cursory definition that simply described the term as “[a] component that converts signals into data.” At the Markman hearing, the parties then identified the key difference in their proposals as the absence of bi-directionality in SAP’s definition. Specifically, CSB contended that the integration element had the ability to both convert signals into data and data into signals – an ability not disclosed by SAP. CSB also took issue with SAP’s failure to acknowledge that the integration element included both hardware and software and failure to provide context as to how the integration element is used.

Following the Markman hearing, however, the parties agreed on the bi-directionality of the integration element, yet still have not come to an agreement on the appropriate construction of the term. CSB now presents the shorter of the two proposals, as follows: “A component that converts signals into data and vice versa.” SAP, on the other hand, describes it as “[a] component that converts signals into data records, and vice versa, and sends the data record to the personal computer so that the personal computer can use the data record to make a request to the server to retrieve corresponding customer information.”

Given these new positions, the Court is left with a somewhat bare record to explain either definition. Accordingly, we turn to the intrinsic evidence for guidance. The specification clearly discloses that the integration element is bi-directional:

[A]n integration element [is] arranged between the intelligent telephone system and the personal computers, the integration element *receiving signals* via at least one connection element selected from the group consisting of an SDLC connection element and an ISDN connection element via a second line from the at least one telephone network via the intelligent system and sending back signals to the at least one telephone network, the integration element *also sending a data record* assigned an appropriate information via a third line, via a LAN connected to a LAN server by a fourth line and via a fifth line to the personal computers and receiving a data record from the personal computers again, a computing system, and a software layer arranged so that *a conversion of the signals into a data record and vice versa is carried by the integration element*, by the computing system, by the software layer and by the at least one connection element with an internal software.

(‘953 Patent, col. 2 lines 48-64 (emphasis added).) Further, the Abstract plainly notes that “[t]he conversion of the signals into the set of data and vice versa is performed by the integration component.” (‘953 Patent, Abstract.) Such clear language requires that the Court adopt the entirety of CSB’s definition, which also mirrors the first phrase of SAP’s definition.

The remaining question is whether the proper construction requires inclusion of SAP’s proposed phrase “and sends the data record to the personal computer so that the personal computer can use the data record to make a request to the server to retrieve corresponding customer information.” The specification language expressly discloses that the integration element “send[s] a data record . . . via a LAN connected to a LAN server . . . to the personal computers.” Such a function is also found in Figure 1 of the patent showing the integration element connected through the LAN server to the personal computers. However, the remainder

of SAP's phrase – “so that the personal computer can use the data record to make a request to the server to retrieve the corresponding customer information” – goes beyond the scope of an “integration element”'s ordinary meaning to a POSITA to include an explanation of what happens to the data records after the integration element is no longer involved. This results in language that is confusingly redundant of other claim limitations.

More importantly, SAP's definition, as is, fails to explain that the integration element also receives data records from the personal computers, which it then converts into signals readable by the intelligent telephone system. Such an omission pays short shrift to the bi-directionality that – as admitted by both parties – is key to the functioning of the integration element.

As such, the Court adopts the following construction: “[a] component that converts signals from the intelligent telephone system into data records, which it sends to the personal computer, and receives data records from the personal computer, which it can then convert into signals sent to the intelligent telephone system.” Such a construction both reflects the bi-directionality of the integration element and establishes a context for how the integration element is used within the '953 patent.

5. Server

The parties further dispute the proper construction of the term “server.” CSB's current proposal suggests that it is “[a] functional unit that provides shared services to PCs/workstations over a network in response to queries from clients.” SAP's current proposal, however, defines “server” as “[a] shared computer on the Local Area Network (“LAN”) that responds to requests from telephone software installed on the personal computer.” For the most part, the parties appear

to be in concurrence that a server provides shared services to personal computers over a network and responds to requests from clients. Despite this relative symmetry, several areas of dispute remain. First, the parties disagree as to whether a server should be defined as “a functional unit” or a “computer.” Second, the parties differ on to whether the network should be defined as simply a “network” or the “Local Area Network.” Third, the proposed constructions differ on whether the server responds to “queries from clients” or responds to “requests from telephone software installed on the personal computer.” The Court discusses each issue individually.

As to the first discrepancy, the specification repeatedly references the server and includes it as number 10 in Figure 1. Nothing in the patent language, however, provides any guidance as to whether the “server” is a “computer” or a “functional unit.” Accordingly, the Court turns to extrinsic evidence of record. Newton’s Telecom Dictionary, cited by SAP, offers a lengthy definition, which states in part:

A server is a *shared computer* on the local area network that can be as simple as a regular PC set aside to handle print requests to a single printer. Or more usually, it is the fastest and brawniest PC around. It may be used as a repository and distributor of oodles of data.

NEWTON’S TELECOM DICTIONARY 920 (8th ed. 1994) (emphasis added). By contrast the IBM Dictionary of Computing, cited by CSB, defines “server,” in part, as “[a] *functional unit* that provides shared services to workstations over a network; for example, a file server, a print server, a mail server.” (Pl.’s Opening Claim Constr. Br., Ex. 8, IBM DICTIONARY OF COMPUTING, 612 (10th ed. 1993) (emphasis added).) Given these seemingly conflicting definitions, the Court looks to other dictionaries in order to glean the term’s ordinary and customary meaning. The American Heritage Science Dictionary states that a “server” is “[a] *computer* that manages centralized data

storage or network communications resources. A server provides and organizes access to these resources for other computers linked to it.” AMERICAN HERITAGE SCIENCE DICTIONARY (2010) (emphasis added). Finally, the Microsoft Computer Dictionary defines “server” as “[o]n a local area network, *a computer* running administrative software that controls access to all or part of the network and its resources (such as disk drives or printers). A computer acting as a server makes resources available to computers acting as workstations on the network.” MICROSOFT COMPUTER DICTIONARY (4th ed. 1994) (emphasis added). Although such definitions are not dispositive, they shed light on the ordinary and customary meaning of “server” in the context of the claim language.⁹

The Court is further swayed by the relative ambiguity in the proposed phrase “functional unit.” That term does not provide any description of precisely what a server is. By contrast, the use of the term “computer” to describe a “server” is not only consistent with its common, well-known meaning within the computer field, as represented by the multiple dictionaries, but appears to be the type of unit contemplated by the ‘953 patent. Indeed, the specification repeatedly references the LAN server “and its database,” which can only be understood if the server is deemed to be a computer, which typically has an accompanying database. Accordingly, the Court uses SAP’s proposal of “computer” as opposed to CSB’s proposal of “a functional unit.”

The second issue is whether the server should be described as a shared computer on the

⁹ A dictionary “has the value of being an unbiased source, ‘accessible to the public in advance of litigation.’” Phillips, 415 F.3d at 1322 (quotation omitted). Thus, district courts “are free to consult such resources at any time in order to better understand the underlying technology and may also 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.” Vitronics, 90 F.3d at 1584 n.6.

Local Area Network (“LAN”) or a computer providing shared services on a network. Both the specification and the claim language itself repeatedly indicate that the LAN server is connected to the LAN or local area network. (‘953 Patent, col. 6 line 5.) Accordingly, the Court includes this phrase within the construction of the term.

Finally, the Court must determine whether the “server” responds to “queries from clients” or responds to “requests from telephone software installed on the personal computer.” Upon reviewing the specification language, the Court finds that these features are not entirely distinct from one another in the context of the ‘953 Patent. The specification states that when a caller dials the call center, the incoming call is identified and various data about the caller is displayed on the personal computer:

This is realized by the integration element 5 in such a way that when a call is connected to telephone extension 2 *a signal is immediately sent on line b by the intelligent telephone system 3 to the integration element 5*, which assigned the appropriate information in a data record by the integration element 5, is passed via the LAN 9 *to the associated personal computer 4*. Here it is possible to pass the caller data and information *directly from the LAN server 10* and its database at the same time as the call arrives.

(‘953 Patent, col. 4 lines 47-55 (emphasis added).) Such language discloses that a server responds to “requests from telephone software.” In addition, the specification recognizes that:

the personal computers are provided with keyboards so that a speech or data communication between a caller via the at least one telephone network and a competent party on one of the telephone extensions with a respectively assigned one of the personal computers is sent to another competent party and back after *the respective competent party has sent a data record assigned the appropriate information to the integration element by operating the keyboard of the respectively assigned one of the personal computers, and a necessary signal leaving the integration element is applied at the intelligent telephone system* and a connection to at least one another or every telephone extension is established, so that a connection to every telephone extension simultaneously provides an

immediate integration of the personal computer assigned to the telephone extension in the established speech and data communication.

(Id. at col. 2 line 65-col. 3 line 14 (emphasis added).) This language acknowledges that a client using a personal computer can make specific requests via the integration element to which the LAN server – shown in Figure 1 as connected to the integration element – will respond.

In light of the foregoing, the Court adopts the following construction of the term “server” that embodies the main features identified by the parties: “a computer on the Local Area Network (LAN) that responds to requests from telephone software and provides shared services to the personal computers/workstations in response to queries from clients.”

6. Data Record

The final disputed claim requiring the Court’s construction is “data record.” As again set forth above, CSB’s current proposal significantly trims its previous definition, and seeks to define the term as “[a] set of data used to electronically send information from one device to another, including querying information from a database.” By contrast, SAP expands its previously short definition and suggests the following construction: “[a]n electronic file containing data, the electronic file being processed by local software on a personal computer.”

As the parties’ proposed definitions have changed since the initial hearing and Markman hearing, it is not entirely clear what obstacle has prevented agreement. As such, the Court takes each individual difference in their proposals step by step. First, SAP begins its definition by referring to a “data record” as “an electronic file containing data,” while CSB bases its definition off of the phrase “[a] set of data.” The latter phrase finds support in both the intrinsic and

extrinsic evidence of record. The specification interchangeably refers to “data record,” “necessary data,” or simply “data” without ever referencing any kind of associated file in which this information is stored. Indeed, in the Abstract, the specification discloses that the integration element transmits “a set of data” and receives the “set of data back from the personal computers, (‘953 Patent, Abstract), while the Summary of the Invention likewise describes the integration element sending a “data record” to the personal computers and receiving a “data record” from the personal computers. (Id. Summary of Invention.) Moreover, at the Markman hearing, Plaintiff’s expert, Dr. Gaynor, testified that nothing in the patent talks about an electronic file and records used in a file. (N.T. June 7, 2011, 92:10-12.) Rather, he opined that, “[i]n the context of the 953 patent, data record is used as kind of the envelope to send information across a network.” (Id. at 92:12-14.) Finally, in its Opposition Claim Construction Brief and at the Markman hearing, SAP agreed that the first four words (“a set of data”) would be appropriate within the construction. (Def. SAP’s Opp. Claim Constr. Br. 17; N.T. June 7, 2011, 195:19-21 (“Now are we married to the words “file”? No, we could use “a set of data.”).) Thus, the Court adopts the phrase “[a] set of data” as the starting point for the construction of this term.

The Court must next construe the term so as to accurately describe what is done with this “set of data.” On this point, the Court finds neither party’s proposal convincing. As to CSB’s definition, the ‘953 Patent repeatedly describes the “data record” as being acted upon, not actively performing any particular function such as “electronically send[ing] information” or “querying information from a database.” Indeed, throughout the specification, the integration element and personal computers are identified as the devices used to electronically send information, including querying information from a databases. The information being sent is what is included in the data

record. Thus, to define the term “data record” in an active tense does not ascribe to it its plain and ordinary meaning in the context of the Patent.

SAP’s definition, on the other hand, fails to include the full scope of the data record’s use. While the data records are, at some point, “processed by a personal computer,” their main function is being sent between the integration element to the personal computer, and then back to the integration element, which then converts them to signals readable by the intelligent telephone system. To be clear, the specification states:

the integration element receiving signals . . . from the at least one telephone network via the intelligent telephone system and sending back signals to the at least one telephone network, *the integration element also sending a data record assigned an appropriate information . . . to the personal computers and receiving a data record from the personal computers again*, a computing system, and a software layer arranged so that a conversion of the signals into a data record and vice versa.

(‘953 Patent, col. 2 lines 49-62 (emphasis added).)

To that end, a middle ground between the parties is appropriate. The Court construes “data record” to mean “a set of data by which information is electronically sent from the integration element to the personal computer and back, and by which information is queried from a database by a client using a personal computer.”

III. INDEFINITE TERMS

The next set of disputes between the parties focuses on a series of terms, which Defendant SAP claims are indefinite. Specifically, SAP argues that the following terms are incapable of being construed: “an appropriate information”; “a necessary signal”; “where required”; “an

applied speech and data communication”; and Claim 6 in its entirety.¹⁰

A. Standard of Review for Indefiniteness

“Indefiniteness is a question of law.” Amgen Inc. v. F. Hoffman-LA Roche Ltd., 580 F.3d 1340, 1371 (Fed. Cir. 2009) (citing Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1319 (Fed. Cir. 2008)). That is, “[a] determination that a patent claim is invalid for failure to meet the definiteness requirement of 35 U.S.C. § 112 [¶ 2]¹¹ is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims [.]” Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 949 (Fed. Cir. 2007) (quotation omitted). As explained by the Federal Circuit,

[t]he primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, e.g., competitors of the patent owner, can determine whether or not they infringe.

All Dental Prodx, LLC v. Advantage Dental Prods., Inc., 309 F.3d 774, 779–80 (Fed. Cir. 2002) (citing Warner–Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 28–29 (1997)). In other words,

[a] patent holder should know what he owns, and the public should know what he does not. For this reason, the patent laws require inventors to describe their work in “full, clear, concise, and exact terms,” 35 U.S.C. § 112, as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise

¹⁰ Prior to the Markman hearing, Defendant challenged the definiteness of the term “parallel between.” Given the parties’ most recent submissions, the Court presumes that this term is no longer an issue.

¹¹ Section 112 requires that a patent “shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112, ¶ 2.

of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002).

In order to determine whether the definiteness requirement has been met, the court must construct the claims “according to the familiar canons of claim construction.” All Dental Prods., 309 F.3d at 780. As with other construction issues, the focus of indefiniteness rests on the meaning that claim terms would have to one of ordinary skill in the art. Id. at 1249. Thus, a claim is deemed sufficiently definite, only if “one skilled in the art would understand the bounds of the claim when read in light of the specification.” Exxon Research & Eng'g Co. v. U.S., 265 F.3d 1371, 1375 (Fed. Cir. 2001). Even if a claim term's definition can be reduced to words, it “is still indefinite if a person of ordinary skill in the art cannot translate the definition into meaningfully precise claim scope.” Halliburton Energy Servs., Inc. v. M-I LLC, 514 F.3d 1244, 1251 (Fed. Cir. 2008). Claims that are “not amenable to construction” or are “insolubly ambiguous” are indefinite. Id. at 1250 (quoting Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005)). Stated differently, a claim term is indefinite if the patent does not provide an “objective anchor” or “yardstick against which potential infringers may measure their activities.” Automated Transactions LLC v. IYG Holding Co., No. CIV.A.06-043, 2011 WL 810237, at *8 (D. Del. Mar. 4, 2011) (quoting Girafa.com, Inc. v. IAC Search & Media, Inc., No. CIV.A.07-787, 2009 WL 30747121, at *2 (D. Del. Sep. 25, 2009)).

Several well-settled principles, however, tend to discourage rulings on indefiniteness at the Markman stage. First, there is a high burden of proof on a party challenging the patent based on

indefiniteness, which is difficult to meet at the early stages of litigation. Proof of indefiniteness must meet an exacting standard. Haemonetics Corp. v. Baxter Healthcare Corp., 607 F.3d 776, 783 (Fed. Cir. 2010). A patentee need not define his invention with mathematical precision in order to comply with the definiteness requirement. Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1367 (Fed. Cir. 2010). Moreover, a claim is not indefinite simply because the parties disagree concerning construction. Id. In this regard an issued patent is entitled to a statutory presumption of validity. As explained by the Federal Circuit,

In determining whether that standard is met, i.e., whether “the claims at issue [are] sufficiently precise to permit a potential competitor to determine whether or not he is infringing,” . . . we have not held that a claim is indefinite merely because it poses a difficult issue of claim construction. We engage in claim construction every day, and cases frequently present close questions of claim construction on which expert witnesses, trial courts, and even the judges of this court may disagree. Under a broad concept of indefiniteness, all but the clearest claim construction issues could be regarded as giving rise to invalidating indefiniteness in the claims at issue. But we have not adopted that approach to the law of indefiniteness. We have not insisted that claims be plain on their face in order to avoid condemnation for indefiniteness; rather, what we have asked is that the claims be amenable to construction, however difficult that task may be. If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite. If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds.

Exxon Research, 265 F.3d at 1375. By finding claims indefinite only if reasonable efforts at claim construction prove futile, “we accord respect to the statutory presumption of validity and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal.” Datamize, 417 F.3d at 1347-48 (finding, on summary judgment, that the claim term “aesthetically pleasing” failed as indefinite) (internal citations omitted).

Moreover, unlike a Markman proceeding that gives meaning to patent claims, indefiniteness invalidates the claims entirely. Exxon Research, 265 F.3d at 1375. As such, this dispositive effect is more appropriately tackled at summary judgment and numerous courts have elected to defer indefiniteness until that time. See, e.g., Waddington N. Am., Inc. v. Sabert Corp., No. CIV.A.09-4883, 2010 WL 4363137, at *2 (D.N.J. Oct. 27, 2010); Intergraph Hardware Techs. Co. v. Toshiba Corp., 508 F. Supp. 2d 752, 773 n.3 (N.D. Cal. 2007) (“[The] indefiniteness argument is inappropriate at the claim construction stage.”); Pharmastem Therapeutics, Inc. v. Viacell Inc., No. CIV.A.02-148, 2003 WL 124149, at *1 n.1 (D. Del. Jan. 13, 2003) (“[T]he court will not address the defendants’ indefiniteness argument at [the Markman stage]. . . . At present, the Court is merely holding that the claim is sufficiently definite to survive claim construction.”). While “[i]t may be true that determining the indefiniteness of claim language is a question of law ‘that is drawn from the court’s performance of its duty as the construer of patent claims,’ which is the same duty that gives rise to the Markman hearing. . . . this does not outweigh the previous practical considerations that militate against determining indefiniteness prior to the end of fact or expert discovery.” Waddington, 2010 WL 4363137, at *3 (quoting Exxon Research, 265 F.3d at 1373).

In the present case, the Court faces a conundrum. Given the aforementioned jurisprudence, the current issues of indefiniteness are premature at such an early stage of the litigation. Defendant, however, raises an indefiniteness argument as to multiple claim terms without either (a) offering an alternative proposed construction for such terms or (b) moving for

summary judgment on invalidity grounds.¹² The only proposed definitions are those offered by Plaintiff. This scenario creates somewhat of a quandary since the terms are clearly disputed and require a construction upon which the parties may proceed throughout the remainder of this litigation.

Against this backdrop, the Court gives preliminary consideration to Defendant's claims of indefiniteness in order to determine only whether such claims are amenable to construction and, if so, what construction is appropriate for the claimed ambiguous terms in light of the present intrinsic and extrinsic evidence provided. Any such construction of these terms, however, is done without prejudice to Defendant's ability to challenge the validity of these terms for indefiniteness at the summary judgment stage. See, e.g., Int'l Dev. LLC v. Richmond, No. CIV.A.09-2445, 2010 WL 4703779, at *9 (D.N.J. Nov. 12, 2010) (construing disputed claims without prejudice to party's right to re-raise claims of indefiniteness at summary judgment stage); Veritas Operating Corp. v. Microsoft Corp., No. CIV.A.06-703, 2007 WL 6872747, at *49 (W.D. Wash. May 29, 2007) (recommending that asserted claims be deemed not insolubly ambiguous and given a construction without prejudice to raising indefiniteness "on a more complete record"); Donaldson Co., Inc. v. Baldwin Filters, Inc., No. CIV.A.09-1049, 2011 WL 2183179, at *10 (D. Minn. June 6, 2011) (holding that to the extent defendant's claim construction argument with respect to indefiniteness can be construed as a motion for summary judgment of invalidity based on

¹² Our sister court in the District of Delaware took a party to task for a similar tactic, noting that "[t]he defendants have not, however, filed a motion seeking to invalidate the patents on indefiniteness grounds. Rather, they simply assert their arguments in their opposition claim construction brief. Such an approach is clearly an attempt at an end-run around the court's scheduling order regarding the filing of dispositive motions, and will not be sanctioned." Pharmastem, 2003 WL 124149, at *1 n.1.

indefiniteness, the motion is denied without prejudice and the claims are given a reasonable construction); Pharmastem, 2003 WL 124149, at *1 n.1 (declining to adjudicate indefiniteness and simply holding claims to be sufficient to survive claim construction).

B. Discussion of Alleged Indefinite Terms

1. An Appropriate Information

At the outset, Defendant SAP asserts that the term “an appropriate information” is too indefinite for any reasonable claim construction. This term is found within Claim 1, which states that the integration element receives signals via the connection element from the intelligent telephone system, at which time the “integration element also send[s] a data record assigned an appropriate information . . . via a LAN connected to a LAN server . . . to said personal computers and receiv[es] a data record form the personal computers again.” (‘953 Patent, col. 5 line 62-col. 6 line 7.) Plaintiff CSB has offered a modified proposal for interpretation of this term as, “[t]he information useful for caller identification and other application purposes.” SAP, however, declines to yield on its position.

Having reviewed the entirety of the record, the Court does not find that SAP has offered clear and convincing evidence that a person of ordinary skill in the art could not “translate the definition into meaningfully precise claim scope.” Halliburton, 514 F.3d at 1251. In its opening brief, Defendant cursorily argued that the term was indefinite because it was unclear when the information was appropriate. Via its opposition brief, it questioned the use of the word “an” and again asserted that the word “appropriate” was entirely subjective and required defined standards – not provided by the claim or the specification – as to what is and is not appropriate. This term

then received short shrift by Defendant at the Markman hearing, with Mr. Gursahaney offering little opinion,¹³ except to say that it was unclear what a data record “containing some appropriate information” means.¹⁴ (N.T. June 7, 2011, 163:9-20.) Counsel for SAP then argued that

The word ‘appropriate’ is subjective and requires evaluation. And there’s nothing in the specification that would tell of ordinary skill in the art at the time how to make that subjective evaluation and decide what is ‘appropriate’ information, as opposed to just the more all-encompassing ‘information.’ The few times that it’s

¹³ The Court recognizes that Plaintiff interposed an objection to certain areas of Mr. Gursahaney’s testimony, including his discussion of this phrase, as such subject areas were not included in his prior Declaration provided to Plaintiff. Defendant responded that Plaintiff had the opportunity to depose Mr. Gursahaney on these subject areas. Because the Court does not find that any of the claim terms fail for indefiniteness at this stage of the proceedings, it is unnecessary to address the merits of Plaintiff’s objection. Instead, and for purposes of completeness, the Court simply considers the full scope of Mr. Gursahaney’s Markman hearing testimony as part of the entire record.

¹⁴ At his deposition of May 17, 2011, Mr. Gursahaney offered a similar opinion:

A. So paragraph 101, I don’t agree with Dr. Gaynor’s assessment that the question is, When is the information inappropriate? By contrast the question is, When is the information appropriate? There is no clarification within the patent of what’s considered appropriate information. It’s left to the reader to assume what it is. And, in fact, appropriate information could be several things: it could be caller identification information, it could be the target extension information. It could be virtually anything. So it’s very hard from the reading of the patent to determine what appropriate information is. My opinion is, if they meant caller identification information, they should have said “caller identification information” and not left it vague as “appropriate information.” Because “appropriate” is an unclear definition.

Q. Okay.

A. And I don’t agree with paragraph 102, that the ‘953 Patent makes it clear that appropriate information is the information gathered from the incoming call from the customer, such as caller identification. It is not clear. As a matter of fact, when I read it I was questioning what information was being referred to.

(Pl. CSB’s Markman Hearings Exhibits, Ex. 12, Dep. of Suresh Gursahaney, 203:20-205:7, May 17, 2011 (“Gursahaney Dep.”).)

mentioned in the specification, it's typically used in basically the identical way with no further explanation or fleshing out. So there is just no way to figure out what – which of several possible definitions.¹⁵

(N.T. June 7, 2011, 200:19-201:7.)

In response, CSB has proffered multiple bases for its proposed construction of this term.

First, the specification offers some guidance as to the meaning of the word “appropriate,” as follows:

With this connection every dialling function is established, the incoming call is identified and all the necessary data are displayed on the personal computer 4. This is realized by the integration element 5 in such a way that when a call is connected to telephone extension 2 a signal is immediately sent on line b by the intelligent telephone system 3 to the integration element 5, which, assigned the ***appropriate information*** in a data record by the integration element 5, is passed via the LAN 9 to the associated personal computer 4. Here it is possible to pass the ***caller data and information*** directly from the LAN server and its database at the same time as the call arrives . . .

(‘953 Patent, col. 4 lines 44-55 (emphasis added).) Plain reading of this language suggests that “appropriate information” references the caller data and information. In fact, the specification interchangeably uses the terms “suitable information” or “necessary data” about the incoming call in place of “appropriate information.” (Id. Abstract & col. 4 lines 46, 63.) Second, during the Markman hearing, Dr. Gaynor testified that this term has a “common English meaning that seem[s] to fit with the context of the 953 patent.” (N.T. June 7, 2011, 92:21-22.) He further indicated that he believed a POSITA could easily understand what is meant by “appropriate

¹⁵ In its post-Markman brief, SAP contends that there was “explicit testimony” as to “appropriate information” at pages 204-05 of the June 7, 2011 transcript. (Def. SAP’s post-Markman Br. 3-4.) Notably, that entire section of the transcript consists of attorney argument and is not “testimony” which the Court may consider as evidence.

information” and noted that “[i]t’s most of the time used to connote incoming number of the caller, but also is used to denote information from the personal computer that’s going to control the switch. So it could be appropriate information, i.e. the command to do the transfer and the number – the extension number that you need to transfer the call to also is used to denote information from the personal computer.” (*Id.* at 93:9-15.) Finally, even Defendant’s expert, on direct examination, intimated his understanding of what was meant by “appropriate information.” He described the patent as “the use of PCs to essentially receive the, *as described, appropriate information, but caller ID or the telephone number of the caller, to be used to retrieve information from a LAN server – customer profile information* from the LAN server, so that is an accurate description of a client server architecture.” (N.T. June 7, 2011, 145:15-23 (emphasis added).)

In short, the Court finds that Defendant has not met its burden of proving indefiniteness.¹⁶

¹⁶ The cases upon which Defendant relies to assert that the word “appropriate” is subjective are inapposite. First, in *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342 (Fed. Cir. 2005), the court, considering a summary judgment motion, found that the term “aesthetically pleasing” in the claim language was indefinite. *Id.* at 1353. The court noted that even the plaintiff’s expert “could not determine whether the look and feel of particular interface screens are ‘aesthetically pleasing’ using the parameters he specified, instead testifying that whether an interface screen is ‘aesthetically pleasing’ is a ‘multidimensional question’ that is ‘not amenable to a single-word answer.’” *Id.* at 1354. Ultimately, it concluded that “[b]y arguing that ‘aesthetically pleasing’ does not depend on any standard of aesthetics other than a purely subjective standard held by any person who steps into the role of the system creator, the prosecuting attorney would eliminate any objective meaning for the phrase ‘aesthetically pleasing.’” *Id.* at 1353.

Similarly, in *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244 (Fed. Cir. 2008), the court, again on review of a summary judgment motion, determined that the term “fragile gel,” which was the key limitation to distinguish the invention from the prior art, was too indefinite to be construed. *Id.* at 1251. The court noted that even though the expert was able to reduce the claim term’s definition to words, the claim was still indefinite since a person of ordinary skill in the art would be unable to translate the definition into a meaningfully precise claim scope. *Id.*

The present case is distinguishable in two respects. First, this case is far from the

While the precedent use of the term “an” in Claim 1 is grammatically awkward, the Court recognizes that that term can be interchanged with the word “the” as used throughout the rest of the specification and within the other claims. Otherwise, both intrinsic and extrinsic evidence suggest that the term “an appropriate information” denotes, as described by CSB, “the information useful for caller identification and other application purposes.” Accordingly, the Court adopts this construction.

2. A Necessary Signal

The next dispute between the parties concerns the term “a necessary signal,” which arises within the context of Claims 2 and 3 of the Patent. For example, Claim 2 states

A circuit arrangement as defined in claim 1, wherein said personal computers are provided with keyboards so that a speech or data communication between a caller via said at least one telephone network and a competent party on one of said telephone extensions with a respectively assigned one of said personal computers is sent to another competent party and back after the respective competent party has sent a data record assigned the appropriate information to said integration element by operating said keyboard of the respectively assigned one of said personal computers, and *a necessary signal* leaving said integration element is applied at said intelligent telephone system and a connection to at least one another telephone extension is established, so that a connection to every telephone extension simultaneously provides an immediate integration of said personal computer assigned to said telephone extension in the established speech and data communication.

summary judgment stage. As set forth above, the weight of the jurisprudence disfavors indefiniteness determinations at the Markman stage of patent litigation. Second, unlike the above terms, the phrase “appropriate information” defines a limited range of possible information that would be needed to identify the incoming caller and for the customer service agent to carry out the tasks required. As such, the precise dimensions of the term can be easily obtained with little to no subjective discretion. See BillingNetwork Patent, Inc. v. Cerner Physician Practice, Inc., No. CIV.A.04-1515, 2006 WL 263601, at *16 (M.D. Fla. Feb. 2, 2006) (finding that the term “appropriate application software” was not subject to a “purely subjective definition” as a person of ordinary skill would understand it in light of the claim language and specification, and thus was not invalid for indefiniteness).

(‘953 Patent, col. 6 lines 13-29.) In its compromise construction, CSB contends that this claim must be construed to mean “[t]he signal that is sent from the integration element to the Intelligent Telephone System to control the desired function.” SAP, however, maintains its position that this term is too indefinite to be construed, suggesting that it is unclear when a signal would be unnecessary.

With respect to this particular term, Defendant dedicated a substantial portion of its expert evidence and Markman presentation in an effort to prove its invalidity. Mr. Gursahaney averred, in his Declaration, that, as a person of ordinary skill in the art in the relevant field, he could not determine what was meant by the word “necessary” that would distinguish what is being claimed from a similar claim that does not use the word “necessary” when describing the signal.

(Gursahaney Decl. ¶ 29.) It is this confusion, he asserted, that renders the term indefinite.

Thereafter, at the Markman presentation, Mr. Gursahaney testified as follows:

- Q. And have you tried to come to an understanding of what the term necessary signal means?
- A. Yes, as I was reading this, it’s hard to identify what the difference between necessary signal and just signal is, so it was unclear. And as I mentioned in my tutorial, CTI data could encompass many pieces of information. One could be the telephone number of the caller the other could be the telephone number they dialed. It was unclear from this description as to which one they were referring to; which signal they were referring to specifically.
- Q. Did you find anything in the patent, when you read the patent that elucidated what necessary signal means?
- A. No, I couldn’t find anything in the patent that explained any further other than what’s termed as necessary signal.

(N.T. June 7, 2011, 148:9-22.) Ultimately, SAP framed its dispute with this claim as follows:

And again, we’re in a position where we’re dealing with a subjective term, “necessary.” What makes something necessary? What does “necessary” add to

this term? Every term in a claim is supposed to add meaning to the claim, and if you took out “necessary,” would this – would the meaning change? And Mr. Gursahaney, in his declaration, and I believe also in his deposition, testified that he couldn’t figure out what that word added, that it must have been put there for a reason, but he couldn’t figure out what the reason was. And so in that context, it should be found indefinite.

(N.T. June 7, 2011, 203:3-13.)

Again, however, CSB has convincingly responded with evidence to elucidate the meaning of this term. First, looking to intrinsic evidence, CSB points to the specification, which states that:

It is another feature of the present invention that the personal computers are provided with keyboards so that a speech or data communication between a caller via the at least one telephone network and a competent party on one of the telephone extensions with a respectively assigned one of the personal computers is sent to another competent party and back after the respective competent party has sent a data record assigned the appropriate information to the integration element by operating the keyboard of the respectively assigned one of the personal computers, ***and a necessary signal leaving the integration element is applied to the intelligent telephone system*** and a connection to at least one another or every telephone extension is established, ***so that a connection to every telephone extension simultaneously provides an immediate integration of the personal computer assigned to the telephone extension in the established speech and data communication.***

(‘953 Patent, col. 2 line 65-col. 3 line 14 (emphasis added).) This Court’s own reading of this language suggests that when a call needs to be transferred, the agent makes the appropriate request on his or her personal computer thus causing the “necessary signal” to be sent to the integration element and then to the intelligent telephone system, which in turn makes the connection to the other telephone line and provides the customer information on the transferee’s personal computer. The signal is “necessary” because without it, the desired function cannot occur.

The requirement for the word “necessary” in this claim language – as opposed to just using the word “signal” – is further clarified by Dr. Gaynor’s Markman hearing testimony:

- Q. Now, SAP has alleged that certain claim terms and claim 6 are indefinite. Do you believe that a person of ordinary skill in the art would be able to understand the meaning and scope of these claim – claim and claim terms?
- A. Yeah, I really do. Most – you know, I think we’re talking about things like appropriate information and necessary signal. Those, to me, have just common English meanings that seem to fit within the context of the ‘953 patent. I think I showed in my tutorial, for example, appropriate information could be the number of the incoming call. A necessary signal is a signal that’s required in order to make the phone system perform and function.
- Q. Now, if that function was a transfer from one agent to another, would a signal have to go from the integration element to the intelligent telephone system in order for that transfer to occur?
- A. Yeah, because basically what happens is the PC would send a data record with the appropriate information to the IE. The IE then takes that information, converts it into what they call a signal that the PBX would understand. That signal is necessary in order to perform the function, and it sends it to the PBX and it’ll base the signal.
- Q. *And if the signal did not get from the integration element to the intelligent telephone system, would the desired function that the first agent wanted to occur, whether transfer or a conference, happen?*
- A. *No. It would not.*
- Q. And what happens if the signal from the integration element to the intelligent telephone system was not a complete signal for that function, would the function occur?
- A. No, *because the signal is necessary in order for the function to happen.*
- Q. And if an agent wanted to do a transfer that went from the integration element to the intelligent telephone system was a conference call signal, would the transfer occur?
- A. Well, with the conference – no, because again, the signal is required in order for the function to happen.

(N.T. June 7, 2011, 92:14-94:2 (emphasis added).) On cross-examination, Dr. Gaynor maintained this position:

- Q. Is it the case that in the patent, in the operation of the system claimed in the patent, that a necessary signal is determined by what the system is being requested to do?
- A. So if I want to transfer a call, then a necessary signal is a signal that initiates the transfer.
- Q. All right.
- A. I don't really see how to describe it any different way.
- Q. *So it's the case, then, that one determines how or whether a signal and what signal is necessary by what operation the system is performing?*
- A. *If you want a PBX, a phone system to transfer a call from one extension to another, you need to send it the necessary signal. For example, I can't send it the signal to hang up the phone because that's the wrong signal, it's not the correct signal; it won't get the action that I want done.*
- ...
- Q. Is it the case that what's a necessary signal, what is right, the right signal as you determine it, as you phrased it, is determined by what the system is doing or asked to do at the time?
- A. So if I'm an agent, for example, and I am asked by the customer a question that I don't know, then I as the agent determine that I am not able to answer this question, but my colleague is, so at that point, I would indicate on my system that the necessary signal be sent to transfer that call. So yes, the agent at the – running the application is making that decision, and then the computer is determining what the appropriate signal is, i.e. needs to send the signal to do the call transfer.
- Q. Right, so it was determined at the time by the agent?
- A. The agent needs to determine that they don't have the necessary skill. The call doesn't just transfer itself because it wanted to.

(N.T. June 7, 2011, 96:14-99:23 (emphasis added).)

Even Mr. Gursahaney, despite his repeated efforts to obfuscate and discuss the meaning of the term outside the context of the '953 Patent, ultimately agreed with this definition:

- Q. . . . But in order for a transfer to occur that's of claim 2, does a signal have to be sent from the integration element to the intelligent telephone system?
- A. Hold on for one minute, let me just read it carefully. Okay, there's -- on line 20 of column 6, it refers to a respective competent party has sent a data

record assigning the appropriate information, which I'm not sure what that appropriate information is, to said integration element by operating said keyboard of the respectively assigned one of said personal computers. So it's saying some sort of data record containing some appropriate information, which is unclear, is being sent by the PC to the integration element.

Q. Okay, and *if that -- if that signal doesn't get from the integration element to the I -- to the intelligent telephone system, will the desired function occur?*

A. *As far as it's described in the patent, I don't believe so.*

...

Q. But a signal has to get from the integration element to the intelligent telephone system, isn't that correct?

A. *According to the patent, yes, a signal has to go from the integration -- from the personal computer to the integration element.*

Q. *And --*

A. *And not a signal, by the way. It says a data record.*

Q. *No, I'm talking about the integration element to the intelligent telephone system.*

A. *It says a necessary signal leaving said integration element is applied at said intelligent telephone system. So it's saying a necessary signal.*

Q. And if that signal does not get from the integration element to the Intelligent telephone system, the function that's desired will not occur, correct?

A. I would assume so. It's hard to say, based on what is written here, whether -

...

A. -- "Some signal has to reach the Intelligent telephone system, is that correct?" And I said, "Right. If you were to initiate a transfer from the workstation, a signal would have to go from the application running on the PC to the intelligent telephone system as referred to in this patent."

Q. So --

A. If you were initiating it from the workstation, correct.

Q. And that's -- and that's how it's done in 953 patent, it's initiated from the workstation, is that correct?

A. It's indicating that something is being initiated from the workstation, it doesn't indicate what.

- Q. Now, in a CTI solution that you showed this morning, there has to be a match between some kind of data from the telephone call to data about a customer in the database, isn't that correct?
- A. That's one way you could do a screen pop. You can do it based on the telephone number that they dialed as well.
- Q. And you said that information that can go from the intelligent telephone system to an integration element could include ANI data, DNIS data, and possibly extension of an agent that's free, is that correct?
- A. That's correct, that's – at a minimum, that's the data. There's other data that can also flow.
- Q. And some data is sent about the incoming call to a database to make a match of that customer's profile, isn't that correct?
- A. That's possibly one way of doing a screen pop, yes.
- Q. Okay.
- A. There are others as well.
- ...
- Q. ***Okay, if the PC does not send information such as ANI data to the database, will a screen pop occur with that customer's profile?***
- A. ***Within the context of a CTI solution?***
- Q. ***Within the context of the CTI solution.***
- A. ***CTI solution where the customer profile information is in a database on a LAN server, yes, that is correct, within that context.***

(N.T. June 7, 2011, 163:5-168:17.)

While the Court is cognizant of some difficulty in construing this claim, that fact does not translate into a finding that the claim is either “not amenable to construction” or “insolubly ambiguous.” This is particularly true in light of a patent’s presumption of validity, set forth in 35 U.S.C. § 282. The Federal Circuit has explicitly advised that the Court must first construe the term, if possible, before engaging in a validity analysis of the claim, as the validity analysis is not a regular component of claims construction. Phillips, 415 F.3d at 1327.

To that end, Plaintiff asks that the Court adopt its proposed construction, in light of any

contrary proposal by Defendant. The Court, however, finds that even Plaintiff's modified proposal fails to fully encompass the meaning of "necessary signal," particularly in light of the aforementioned testimony. The necessary signal does not "control the desired function" as proposed by Plaintiff, but rather requests that the intelligent telephone system make the desired function occur. (See generally N.T. June 7, 2011, 130:4-10 ("Basically, it's just the signal that's sent in the intelligent integration element to the intelligent telephone system that establishes a connection that it desired, such as to transfer a conference call or not. And if that signal does not get from the integration element to the intelligent telephone system, the derived function that you want will not occur.")) In an effort to give effect to the intended meaning of this term, the Court construes it as "the signal that is sent from the integration element to the intelligent telephone system to obtain the function desired by the client making the request."

3. Is Formed So That It Is Possible

The next disputed phrase, "is formed so that it is possible," appears in Claims 4 and 5 of the '953 Patent:

4. A circuit arrangement as defined in claim 2, wherein said integration element *is formed so that it is possible* to hold an applied speech and data communication in conference where required together with at least one further competent party.
5. A circuit arrangement as defined in claim 2, wherein said integration element *is formed so that it is possible* to hold the speech and data communication in conference with all parties of said telephone extensions.

('953 Patent, col. 6 lines 47-55 (emphasis added).) CSB, on the one hand, claims that it should be defined as follows: "[t]he integration element software is configured so as to make it possible to use the connections and data sharing of Claim 2 so as to hold a conference among the connected

telephone extensions.” SAP, on the other hand, argues that this term is too indefinite for construction. Specifically, SAP cryptically contends, with no further elucidation in any brief, that, “[c]laims must recite structure, not possibilities; possibilities do not serve the notice function of a claim.” (Def. SAP’s Opening Claim Constr. Br. 29.)

During the Markman presentation, Defendant did little to clarify its difficulty with this term. The only discussion of the term came from Mr. Gursahaney, who stated:

- Q. And in reading the patent, did you attempt to come to an understanding of what that term [“is formed so that it is possible”] meant?
- ...
- A. Yeah, again, this is a phrase that I can’t interpret as being a person of ordinary skill in the art. It – I’m not sure what they’re trying to say is formed so that; it’s hard to figure out what they’re trying to imply here.
- Q. Let me ask it this way.
- A. Okay.
- Q. Is it your understanding that claims 4 and – both claims 4 and 5 are directed to a circuit arrangement?
- A. Yes. It clearly says a circuit arrangement.
- Q. And the integration element referred to in both those claims is a component of that circuit arrangement?
- A. Yes.
- Q. Within the circuit arrangement. Now as someone of ordinary skill in the art, can you tell, based on anything in the patent, what the structure of the integration element is as opposed to what it does from the phrase “is formed so that”?
- A. The answer is no. I mean, the integration element is described earlier on in the patent as consisting of several components, a software layer, a connection element, et cetera, so it’s hard to understand based on this terminology as to how it’s reformed or changed in any way for it to perform this function of the claim.¹⁷

¹⁷ In addition, at his deposition Mr. Gursahaney stated:

- A. “Is Formed So that It Is Possible.” To be honest, as a technical expert I’m

(N.T. June 7, 2011, 153:11-154:16.)

Mr. Gursahaney's testimony, however, effectively amounts to an unsupported statement of, "I don't understand." While the Court again recognizes that these Claims are inartfully phrased,¹⁸ the term "is formed so that it is possible" has not been proven, by clear and convincing evidence, to be insolubly ambiguous. Plaintiff's proposed definition – "the integration element software is configured so as to make it possible to use the connections and data sharing of Claim 2 so as to hold a conference among the connected telephone extensions" – is discernible from the claim language itself. See Phillips, 415 F.3d at 1314 ("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely

not sure what that phrase means. I don't think those words put together are very clear. Are they saying created? Is that what they're saying? I don't know. I don't understand that as a person of ordinary skill in the art.

Q. Okay.

A. So while Dr. Gaynor's interpretation may or may not be a reasonable explanation, what I typically do is take the definition and try to replace it with the word to see if the sentence makes sense. And in this case when I did that, initially I couldn't make any more sense out of the sentence than if I had used his form. So that is possible.

(Gursahaney Dep. 206:17-207:13.)

¹⁸ Even Plaintiff's counsel admitted the awkwardness of the language:

And is formed so that it's possible, this is – it's – it's just basically saying it has to be configured so that a certain feature can happen. It's probably not the most articulate English in the world coming from – as it is from a German translation, but you're looking at the intrinsic evidence which is what the standard a person of ordinary skill in the art at the time of the invention would know that the integration element has to be configured so as to carry out what is required – what is desired from claims 4 or 5.

(N.T. June 7, 2011, 131:6-14.)

accepted meaning of commonly understood words.”). Simply put, Claims 4 and 5 suggest, albeit in awkward terms, that the integration element must be placed within the architecture of the system to allow agents to have conference calls regarding the caller, while each agent has access to the same customer data.

Moreover, the specification itself discloses that the software layer of the integration element must be configured so as to allow the conference among several agents:

It is also a feature of the present invention that the integration element is formed so that it is possible to hold an applied speech and data communication in conference where required together with at least one further competent party or all parties of the telephone extensions.

(‘953 Patent, col. 3 lines 15-19.) The specification then clarifies how this conferencing works through the integration element:

If the party dialled by the caller with the telephone extension 2 is not the competent party then the caller can call the competent party, e.g. extension 11 by operating the keyboard of his personal computer 4 and by switching a data record via line e, the LAN 9 via line c to the integration element 5, via line b to the intelligent telephone system 3 and from there via the line a. Here too, all the necessary data are displayed immediately after the connection has been made on his personal computer 12, released by signals of the intelligent telephone system 3 which is converted into a data record in the integration element 5 and was sent via LAN 9 with inclusion of the database of the LAN server 10 and the associated lines c; d; e to the personal computer 12 and the necessary communication can take place immediately. If the called or switched competent party, e.g. at extension 11, requires the inclusion of another competent party or several competent parties to clarify questions and data of the caller, he can include these competent parties in a conference by operating the keyboard of his own personal computer 12 and by transferring a data record in the same way as described above via the intelligent telephone system 3 by establishing the connection so that all telephone extensions 2; 11; 13 and personal computers 4; 12; 14 are connected. Whereby all those participating in the conference can transfer data and information to the caller and from the caller to all other participants in the conference.

(Id. at col. 4 line 55-col. 5 line 14.)

Finally, turning to the extrinsic evidence, CSB offers Dr. Gaynor, who, after citing to the specification, opined that “[t]hose of ordinary skill in the art reading these claims would easily see that the integration element has to be made and configured to allow the functions and features that follow ‘integration element is formed so that it is possible.’” (Gaynor Decl. ¶ 89.)

As Defendant SAP has failed to meet its burden of proving the indefiniteness of this claim, a proper construction is necessary. Finding no error in CSB’s proposal, the Court construes the claim to mean, “[t]he integration element software is configured so as to make it possible to use the connections and data sharing of Claim 2 so as to hold a conference among the connected telephone extensions.”

4. Where Required

The next term – “where required” – is found within Claim 4 of the ‘953 Patent, which states, “[a] circuit arrangement as defined in claim 2, wherein said integration element is formed so that it is possible to hold an applied speech and data communication in conference *where required* together with at least one further competent party.” (‘953 Patent, col. 6 lines 47-51.)

CSB’s proposed definition indicates, as follows: “Claim 4 states that when a conference is required with at least one other party, then it is possible to establish such a conference.”

SAP, however, argues that the word “required” causes a fatal ambiguity since it is impossible for one of ordinary skill to determine when a conference is, or is not, required, leaving the reader to wonder what falls within the scope of claim. SAP’s sole evidence in support of its indefiniteness contention is the testimony of Mr. Gursahaney, who broadly proclaimed:

Again, as I was reading this – the claim language, it was unclear as to what the determination was for where required. It wasn't clarified in the patent, and given that I was asked to review this with a critical eye to understand what they were trying to describe in the patent, I identified that where required phrase as being inconclusive, basically, in determining how to interpret the patent.

(N.T. June 7, 2011, 152:23-153:4.) During his previous deposition, Mr. Gursahaney explained further:

Again, I agree that this is indefinite. “Where required” implies that I’m supposed to make a determination of where it’s required or not. And I may make an assumption where others may make a different assumption. Whether I’m a person of skill in the art or not, “where required” is subjective and ambiguous, especially as it relates to how it was used in the patent or claim language. It wasn’t clear, in my opinion, when something is required or not required, as it was described in the patents. So therefore, I agree that it is indefinite.

(Gursahaney Dep. 208:6-21.)

The Court finds Defendant’s effort to convert Mr. Gursahaney’s confusion into a legal determination of indefiniteness to be flatly undermined by the language of the specification. In particular, the specification states that “[i]f the called or switched competent party . . . **requires the inclusion of another competent party or several competent parties to clarify questions and data of the caller**, he can include these competent parties in a conference . . .” (‘953 Patent, col. 5 lines 3-7 (emphasis added).) In simpler terms, where the agent who took the call cannot answer the questions of the caller or resolve the caller’s problem, he is required to include another party in the call. “The Court is . . . unaware of any principle in patent law that all operative claim terms must be measurable by some objective standard.” Intertrust Techs. Corp. v. Microsoft Corp., 275 F. Supp. 2d 1031, 1046 (N.D. Cal. 2003). Rather, when the court is “faced with a purely subjective phrase . . . [it] must determine whether the patent’s specification supplies some

standard for measuring the scope of the phrase.” Datamize, 417 F.3d at 1351. While the term at issue here involves some degree of subjectivity, sufficient standards are present to allow a POSITA to determine whether inclusion of other competent parties is “required” within the context that the term is used.

Absent any additional evidence clearly proving this claim to be incapable of construction, the Court rejects SAP’s indefiniteness argument at this juncture. Nevertheless, the Court deems CSB’s proposed definition to be overly circular as it simply repeats the “when the conference is required” language. In an effort to align this claim construction with the language of the specification, the Court defines the term “where required” to mean “where a competent party needs to clarify questions and data of the caller.” Such a definition gives the term its plain and ordinary meaning within the context of the ‘953 Patent.

5. An Applied Speech and Data Communication

The next term “an applied speech and data communication” similarly finds its roots in Claim 4 of the Patent, which references “an applied speech and data communication in conference where required together with at least one further competent party.” CSB asserts that “[i]n Claim 4, ‘applied’ means the current application of the speech and data communication, referred to in Claim 2 as ‘established.’” For its part, SAP again claims indefiniteness, asserting that it is unclear what is a “current application” of a “communication.” SAP goes on to note that the patent specification says absolutely nothing about this term or how it should be interpreted as a claim limitation.

The parties dedicated little time to this issue in their pre-hearing briefing, expert

declarations, Markman presentations, and post-hearing briefing. In his deposition, Mr. Gursahaney opined that, “[i]f [the Patent] referred to a speech and data communication, I would understand it. I don’t understand what the word ‘applied’ implies here. The fact that they used the word ‘applied’ makes me believe that there was a specific meaning associated with it, which is unclear.” (Gursahaney Dep. 209:6-14.) Dr. Gaynor similarly offered a cursory opinion in his Declaration, claiming that CSB’s proposed definition is disclosed by the same portion of the specification cited with respect to the last term. (Gaynor Decl. ¶ 97.) At the hearing, no further expert testimony on this point was offered.

Such presentations by the parties give this Court little guidance upon which to work. The Court does not find that the term is clearly explained by the portion of the specification referenced by CSB. In addition, the language used in this term is both awkward and unwieldy, with CSB’s proposed definition offering little clarification. Nonetheless, the Court does not find that SAP has proven, by clear and convincing evidence, that the claim is indefinite, such that it cannot be given a construction consistent with its ordinary meaning within the context of the patent. Exxon Research, 265 F.3d at 1375 (noting that if the meaning of the claim is discernible, “even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree,” the claim is sufficiently clear to avoid invalidity on indefiniteness grounds). Giving the term its plain interpretation, the Court determines that it means that the telephone and data communication originally set up by the technology between the original caller and the original agent is expanded or “applied” to include one or more additional agents in a conference call.

At this juncture, absent any further guidance by the parties, the Court generally adopts CSB’s construction, but modifies the definition of “applied speech and data communication” to

mean “the telephone and data communication originally established in Claim 2 between the caller and the agent/client as now including one or more additional agents/clients.”

6. Claim 6

The last of the terms that Defendant argues is indefinite is the entirety of Claim 6, which states:

A circuit arrangement as defined in claim 1, wherein said integration element is formed so that data are transferable when a speech and data communication has been established by every competent part[y]¹⁹ even during a conference and by all competent parties both to and from a caller to every participating competent party and between the competent parties with and without a caller.

(‘953 Patent, col. 6 lines 56-62.)

Defendant’s argument and evidence, however, are wholly unsatisfactory to attain the high burden of establishing indefiniteness. In its pre-hearing opposition brief, SAP merely argued:

The drafter of claim 6 simply failed to write an intelligible claim. It provides far more questions than answers. For example, how is “a communication. . . established”? How is such a communication “established by every competent part” and particularly “established by every competent part even during a teleconference.” Because there is no way to understand what is being claimed – and, thus, no way to determine whether or not one falls within the scope of the claim, claim 6 is indefinite as a whole.

(Def. SAP’s Opp. Claim Constr. Br. 13.) At the Markman hearing, Mr. Gursahaney did not testify

¹⁹ The claim actually uses the word “part.” As noted by Plaintiff and indicated by the language, the word should actually have read “party.” A district court has limited authority to rewrite a claim or “fix” mistakes in a patent. See Group One, Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297, 1302-03 (Fed. Cir. 2005). A district court may only correct a patent 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.” Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1357 (Fed. Cir. 2003).

regarding this claim, but Defendant introduced his deposition testimony, wherein he stated:

Section G, Claim 6, I have the same comments. Claim 6 I consider completely incomprehensible. I cannot figure out what they're trying to say. Again, I'm willing to take Dr. Gaynor's explanation as possibly one interpretation of Claim 6, but certainly not the only interpretation of Claim 6.

(Gursahaney Dep. 210:3-11.)²⁰

CSB, however, again offers sufficient contrary evidence to avoid a declaration of indefiniteness at this stage of the litigation. It proposes that Claim 6 be defined as follows: "It states that data may be exchanged between the caller and the competent party as described in claim 1, and even if a conference call is established, this data and additional data can be shared among all of the competent parties while possibly excluding the caller from sharing the additional data." To support this construction, CSB first references several portions of the specification, which disclose that voice and data conferences among agents can be created where the customer can be either included or excluded:

If the called or switched competent party, e.g. at extension 11, requires the inclusion of another competent party or several competent parties to clarify questions and data of the caller, ***he can include these competent parties in a conference*** by operating the keyboard of his own personal computer 12 and by transferring a data record in the same way as described above via the intelligent telephone system 3 by establishing the connection so that all telephone extensions 2; 11; 13; and personal computers 4; 12; 14 are connected. Whereby all those participating in the conference can transfer data and information to the caller and

²⁰ At the Markman hearing, Defendant referenced the case of Gardner v. Toyota Motor Corp., No. CIV.A.08-632, 2009 WL 4110305, at *6 (W.D. Wash. Nov. 19, 2009), in which the court found a claim indefinite due to the presence of three ambiguous terms within the claim. Id. at *6 (discussing "said speed demands," "higher speeds," and "lower speeds.>"). Aside from the fact that the facts of that case have no bearing on whether Claim 6 as phrased in this case is indefinite, it is notable that the declaration of indefiniteness in Gardner was made on a motion for summary judgment and not during claim construction.

from the caller to all other participants in the conference. *Exchange of data between the competent parties is also possible irrespective of whether a caller is included in the speech and data communication or not.*

(‘953 Patent, col. 5 lines 3-17 (emphasis added).)

It is an additional feature of the present invention that the integration element is formed so that *data are transferable* when a speech and data communication has been established by every competent part[y] even during a conference and by all competent parties both to and from a caller to every participating competent party and *between the competent parties with and without a caller.*

(‘953 Patent, col. 3 lines 15-19 (emphasis added).) Moreover, in his Declaration, Dr. Gaynor opined that “[t]he specification makes clear that claim 6 covers a circuit arrangement that would allow a speech and data conference among one or more agents where data can be transferred that may or may not include the caller. Those of ordinary skill in the art would clearly see the meaning of scope of claim 6 from the claims and specification of the ‘953 patent.” (Gaynor Decl. ¶ 6.) Finally, at the Markman hearing counsel for CSB clarified, rather convincingly, that, “if you parse it, you’ll know that it just means a conference call is established and the data about the customer can be shared among all the call center agents so that they can help the customer, possibly with the – excluding the caller from the data if they have to talk amongst themselves.” (N.T. June 7, 2011, 132:8-12.)

While the claim is yet again inaptly phrased and difficult to follow, such poor writing does not automatically result in a legal determination of indefiniteness. See Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp., 616 F.3d 1357, 1372 (Fed. Cir. 2010) (holding that simply because claim language is “ungainly” does not mean that the claim is indefinite). Moreover, the mere fact that the experts disagree on the construction does not mean the court must find the claim to be

indefinite. Medtronic Vascular, Inc. v. Abbott Cardiovascular Sys., Inc., 614 F. Supp. 2d 1006, 1030-31 (N.D. Cal. 2009). As CSB’s definition of Claim 6 is in fact disclosed, albeit awkwardly, by the specification, the Court adopts such definition for the purposes of claim construction.

C. Conclusion as to Indefinite Terms

In sum, the Court declines, at this juncture, to find any of the claim terms raised by SAP to be indefinite. To that end, the Court’s decision to reject Defendant’s indefiniteness claims is made without prejudice to Defendant’s right to renew such claims during the course of summary judgment proceedings.

III. POST-MARKMAN HEARING ISSUES

In its post-Markman hearing brief, Defendant SAP has argued that the Court should make an additional construction not previously raised prior to or during the hearing. Specifically, it has asked the Court to rule that:

The claim term “said integration element sending a data record . . . to said personal computers” limits the claims of the 953 patent to a “Client/Server” architecture in which the integration element sends a data record containing identification of an incoming caller to a “client” – the personal computer (PC) at a call agent’s workstation – which results in the PC automatically “querying” a database server to receive from the server, and then display caller profile information.

(Def. SAP’s Post-Markman Br. 2.) SAP goes on to contend that there was a general consensus between the parties on this “Client/Server” aspect of the claims and this “now-agreed upon interpretation must be made explicit in the Court’s Claim Construction Order, as it is critical to the non-infringement and invalidity issues.” (Id. at 1.)

Had such a construction truly received the consensus that Defendant claimed, the Court

would be willing to include it in the claim construction order. By way of letter dated June 22, 2011, however, Plaintiff asserted that “SAP’s requested construction is facially incorrect and contains numerous limitations not found in or required by the ‘953 patent.” (CSB Letter dated June 22, 2011.) Moreover, Plaintiff “strenuously” disagreed with SAP’s interpretation of the evidence and requested that the Court not include this proposal in the Order.

Although the Court acknowledges that both parties did appear to agree to the “client/server” architecture at the hearing, the fact remains that Plaintiff has not had the opportunity to brief or argue the correct language to be used in construing the entirety of the aforementioned phrase. As such, the Court will not include this construction in the accompanying Order, but will, if necessary, consider it at summary judgment proceedings.

IV. CONCLUSION

For all of the foregoing reasons, the Court construes the disputed claim terms of the ‘953 Patents to give them their plain and ordinary meaning in the context of that Patent. In addition, the Court rejects, without prejudice, Defendant SAP’s indefiniteness argument. An appropriate Order follows.

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

| | | |
|-----------------------------------|---|--------------|
| CSB-SYSTEM INTERNATIONAL INC. | : | |
| | : | CIVIL ACTION |
| Plaintiff/Counterclaim Defendant, | : | |
| | : | |
| v. | : | |
| | : | NO. 10-2156 |
| SAP AMERICA, INC., | : | |
| | : | |
| Defendant/Counterclaim Plaintiff. | : | |

ORDER

AND NOW, this 27th day of *July*, 2011, upon consideration of Plaintiff CSB-System International Inc.’s Opening Claim Construction Brief (Docket No. 31), Defendant SAP America, Inc.’s Opening Claim Construction Brief (Docket No. 32), Defendant’s Opposition Claim Construction Brief (Docket No. 41), Plaintiff’s Opposition Claim Construction Brief (Docket No. 42), Plaintiff’s Post-Hearing Memorandum (Docket No. 60), and Defendant’s Post-Hearing Memorandum (Docket No. 61), together with all testimony, evidence, and arguments presented at the June 7, 2011 hearing held pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff’d, 517 U.S. 370 (1996), it is hereby **ORDERED** as follows:

1. The disputed claim terms in U.S. Patent Number 5,631,953 (“953 Patent”) are **CONSTRUED** as follows:
 - a. **“EDP System”** means “Electronic Data Processing system consists of computers and software for the processing of data, including a shared database.”
 - b. **“Telephone Extensions which are directly connectable to a telephone network selected from the group consisting of a public ISDN telephone network and Euro ISDN telephone network”** means “telephones and/or other

devices such as fax devices of the type that can be directly connected to either the public ISDN or Euro ISDN telephone network.” This phrase denotes a closed Markush group.

- c. **“Personal computer”** means “a desktop, floor-standing, or portable microcomputer that usually consists of a system unit, a display monitor, a keyboard, one or more diskette drives, internal fixed storage, and an option printer. A PC is designed to give independent computer power to a single user.”
 - d. **“Integration element”** means “a component that converts signals from the intelligent telephone system into data records, which it sends to the personal computer, and receives data records from the personal computer, which it can then convert into signals sent to the intelligent telephone system.”
 - e. **“Server”** means “a computer on the Local Area Network (LAN) that responds to requests from telephone software and provides shared services to the personal computers/workstations in response to queries from clients.”
 - f. **“Data record”** means “a set of data by which information is electronically sent from the integration element to the personal computer and back, and by which information is queried from a database by a client using a personal computer.”
 - g. **“ISDN”** means “integrated services digital network.”
 - h. **“Intelligent telephone system”** means “a telephone system capable of accepting signals to control its functions and sending signals containing information.”
 - i. **“SDLC”** means “an acronym for synchronous link data.”
 - j. **“Connection element”** means “intermediate hardware that connects other pieces of hardware.”
 - k. **“Selected from the group consisting of an SDLC connection element and an ISDN connection element”** is a closed Markush group.
2. Defendant’s argument that certain terms of the ‘953 Patent are indefinite is **DENIED WITHOUT PREJUDICE** to Defendant’s right to re-raise it during summary judgment proceedings, and the disputed terms are **CONSTRUED AS FOLLOWS**:
- a. **“An appropriate information”** means “the information useful for caller identification and other application purposes.”

- b. “*A necessary signal*” means “the signal that is sent from the integration element to the intelligent telephone system to obtain the function desired by the client making the request.”
 - c. “*Is formed so that it is possible*” means “the integration element software is configured so as to make it possible to use the connections and data sharing of Claim 2 so as to hold a conference among the connected telephone extensions.”
 - d. “*Where required*” means “where a competent party needs to clarify questions and data of the caller.”
 - e. “*An applied speech and data communication*” means “the telephone and data communication originally established in Claim 2 between the caller and the agent/client as now including one or more additional agents/clients.”
 - f. *Claim 6* states that “data may be exchanged between the caller and the competent party as described in claim 1, and even if a conference call is established, this data and additional data can be shared among all of the competent parties while possibly excluding the caller from sharing the additional data.”
3. Defendant’s post-Markman hearing request to construe phrases not previously addressed by the parties’ opening claim construction briefs is **DENIED WITHOUT PREJUDICE**.

It is so **ORDERED**.

BY THE COURT:

s/ Ronald L. Buckwalter
RONALD L. BUCKWALTER, S.J.