

**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

RONALD L. BUCKWALTER, S.J.

April 16, 2012

Currently pending before the Court is Plaintiff SAP America, Inc.’s (“SAP”) Motion for Summary Judgment of Infringement and Defendant Motion CSB-System International, Inc.’s (“CSB”) Cross-Motion for Partial Summary Judgment of Infringement. For the following reasons, Defendant’s Motion is granted in part and denied in part, and Plaintiff’s Motion is denied.

I. STATEMENT OF FACTS¹

A. The Patent

The patent involved in this case is U.S. Patent No. 5,631,953 (“the ‘953 Patent”), which claims a system or apparatus. (Def.’s Mot. Summ. J., Ex. 2 (“953 Patent”); Def.’s Statement of

¹ The parties each submit lengthy “Statements of Undisputed Facts,” which largely consist of either legal principles or facts which are vigorously disputed by the parties. Accordingly, the Court limits its recitation of facts to basic information about the patent at issue, the accused products at issue, and the procedural history of this case. To the extent other facts become relevant to the issues before the Court, they are addressed in the “Discussion” section of this Memorandum.

Undisputed Facts (“DSUF”) ¶ 1; Pl.’s Responsive Statement of Undisputed Facts (“PRSUF”) ¶

1.) This Patent recites eight claims, claim 1 of which states as follows:

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.) Via order issued on July 28, 2011, the Court construed the claim term “[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” to mean “telephones and/or other devices such as fax devices of the type that can be connected to either the public ISDN or Euro ISDN telephone network.” (Order, July 28, 2011, Docket No. 65.) In addition, the Court accepted the parties’ agreed-upon definition of “ISDN” as being an “integrated services digital network.” (Id.)

In the simplest of terms, the technology 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, 18:21–24:25, 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. (Id. at 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 (the server) answers requests from the client to get data. (Id. at 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. (Id. at 21:8–23:12.)²

The U.S. application which led to the ‘953 patent was filed on August 25, 1995. The United States Patent & Trademark Office (“USPTO”) allowed the claims as set forth in the ‘953 Patent. Ultimately the ‘953 patent issued on May 20, 1997.

B. The Accused Product

The accused products are the SAPphone interface and the Integrated Communication Interface (“ICI”) (collectively the “Accused Products”). The SAPphone interface was SAP’s first software product that had the capability to integrate an EDP system with the telephony system. (Def.’s Mot. Summ. J., Ex. 3, Expert Report of Mark Gaynor (“Gaynor Report”) ¶ 73.) In the context of a customer call center, the Accused Products run on application servers that, among other functions, coordinate the flow of data between the telephony server and the agent’s workstation. (Def.’s Mot. Summ. J., Ex. 8.) According to CSB’s expert, Dr. Mark Gaynor, the alleged direct infringement occurs at customer installations, when “[SAP] customers . . . have made CTI circuit arrangement that [1] includes the SAPphone interface that allows the integration . . . or [2] includes ICI and which are covered by the claims of the ‘953 patent.” (Gaynor Report ¶¶ 108, 112.) More precisely stated, Plaintiff’s allegation is that “[t]he SAPphone interface and the ICI interface cause the infringement because it makes a separated EDP and telephony system into the infringing computer integrated telephone circuit arrangement covered by the claims of the ‘953 patent.” (Id. ¶ 2.)

Each of the customers referenced by Dr. Gaynor who have set up such installations of the

² To the extent Plaintiff engages in a more detailed discussion of the client/server architecture, as distinguished from the host/terminal architecture in the prior art, the Court deems this discussion irrelevant to the present Motions.

SAPphone and ICI interfaces uses a “voice over internet protocol” or “VoIP” telephone extension.³ (PRSUF ¶ 9; Def.’s Mot. Summ. J., Ex. 4, Dep. of Michael Petrosch (“Petrosch Dep.”), 107:4–108:3, 108:17–109:4, 116:22–117:12, 120:7–18, 121:10–16, 123:7–124:17, Aug. 10, 2011; Def.’s Mot. Summ. J., Ex. 6, Dep. of Carol Wirth (“Wirth Dep.”) 15:3–21:3, 67:9–12, July 13, 2011; Def.’s Mot. Summ. J., Ex. 7, Dep. of Anthony Xeno Yuliano (“Yuliano Dep.”), 65:2–67:19, July 18, 2011.) A VoIP phone is not a conventional telephone, but rather a type of “soft phone” in which the agent communicates via a headset connected to a soundcard through software on the agent’s workstation computer. (Pl.’s Resp. Opp’n. Mot. Summ. J., Ex. 10, Expert Report of Suresh Gursahaney (“Gursahaney Report”) 12.) VoIP phones were not in prevalent use at the time of the ‘953 patent and, thus, are after-arising technology. (Pl.’s Opp’n Summ. J. Ex. 9, Dep. of Suresh Gursahaney (“Gursahaney Dep.”), 55:19-56:5, Dec. 1, 2011; Pl.’s Opp’n Summ. J., Ex. 6 at 7.) VoIP phones are not directly connected to the telephone switch, as they operate over the Local Area Network (“LAN”), and, unlike traditional digital extensions, VoIP phones convert voice into discrete, internet-compatible data packets, allowing the data to be dissected, distributed, replicated, and reintegrated. (Gursahaney Report 12.)

C. Procedural History

Plaintiff CSB-System International, Inc. brought the present patent action against Defendant SAP America, Inc. in this Court on May 11, 2010, alleging that the Accused Products infringe on the ‘953 Patent held by Plaintiff. The parties submitted extensive briefing on several

³ Dr. Gaynor admitted that he has no specific information regarding the configuration of circuit arrangements using the Accused Products beyond the three discussed in his report. (Gaynor Dep. 167:2–169:18.)

disputed claim terms and proceeded to a one-day Markman hearing⁴ on June 7, 2011, at which time each side offered a short tutorial and the testimony of an expert witness. Thereafter, on July 27, 2011, the Court issued a lengthy opinion construing each of the disputed claims, but declining to rule on SAP's claims of indefiniteness until the summary judgment stage.

Presently before the Court are Defendant's Motion for Summary Judgment of Non-Infringement and Plaintiff's Cross-Motion for Summary Judgment of Infringement. Briefing on these Motions was completed on March 2, 2012, making them ripe for consideration.

II. STANDARD OF REVIEW ON SUMMARY JUDGMENT

Summary judgment is proper "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c)(2). A factual dispute is "material" only if it might affect the outcome of the case. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). For an issue to be "genuine," a reasonable fact-finder must be able to return a verdict in favor of the non-moving party. Id.

On summary judgment, the moving party has the initial burden of identifying evidence that it believes shows an absence of a genuine issue of material fact. Conoshenti v. Pub. Serv. Elec. & Gas Co., 364 F.3d 135, 145–46 (3d Cir. 2004). It is not the court's role to weigh the disputed evidence and decide which is more probative, or to make credibility determinations. Boyle v. Cnty. of Allegheny, 139 F.3d 386, 393 (3d Cir. 1998) (citing Petruzzi's IGA Supermks., Inc. v. Darling-Del. Co. Inc., 998 F.2d 1224, 1230 (3d Cir. 1993)). Rather, the court must consider the evidence, and all reasonable inferences which may be drawn from it, in the

⁴ See Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995).

light most favorable to the non-moving party. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986) (citing United States v. Diebold, Inc., 369 U.S. 654, 655 (1962)); Tigg Corp. v. Dow Corning Corp., 822 F.2d 358, 361 (3d Cir. 1987). If a conflict arises between the evidence presented by both sides, the court must accept as true the allegations of the non-moving party, and “all justifiable inferences are to be drawn in his favor.” Anderson, 477 U.S. at 255.

Although the moving party must establish an absence of a genuine issue of material fact, it need not “support its motion with affidavits or other similar materials negating the opponent’s claim.” Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). It can meet its burden by “pointing out . . . that there is an absence of evidence to support the nonmoving party’s claims.” Id. at 325. Once the movant has carried its initial burden, the opposing party “must do more than simply show that there is some metaphysical doubt as to material facts.” Matsushita Elec., 475 U.S. at 586. “[T]he non-moving party must rebut the motion with facts in the record and cannot rest solely on assertions made in the pleadings, legal memoranda, or oral argument.” Berkeley Inv. Group. Ltd. v. Colkitt, 455 F.3d 195, 201 (3d Cir. 2006). If the non-moving party “fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden at trial,” summary judgment is appropriate. Celotex, 477 U.S. at 322. Moreover, the mere existence of some evidence in support of the non-movant will not be adequate to support a denial of a motion for summary judgment; there must be enough evidence to enable a jury to reasonably find for the non-movant on that issue. Anderson, 477 U.S. at 249–50.

III. DISCUSSION

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. 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).

Once the meaning and scope of the claims is established, the court must make a determination of “whether the properly construed claims encompass the accused device.” Zelinski v. Brunswick Corp., 185 F.3d 1311, 1315 (Fed. Cir. 1999); see also Markman, 52 F.3d at 976. “In order for a court to find infringement, the plaintiff must show the presence of every . . . [limitation] or its substantial equivalent in the accused device.” Wolverine World Wide, Inc. v. Nike, Inc., 38 F.3d 1192, 1199 (Fed. Cir. 1994) (quoting Perkin Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1532–33 (Fed. Cir. 1987)). Infringement of a patent claim may occur in one of two ways. Literal infringement exists when each limitation contained within a particular patent claim is present in an accused product. Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc., 467 F.3d 1370, 1378–79 (Fed. Cir. 2006); Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1310 (Fed. Cir. 2005). Where no literal infringement can be found, liability may attach pursuant to the doctrine of equivalents. Under this doctrine, an accused product that does not meet every element of a particular claim may nonetheless be deemed its equivalent because the differences between the two are insubstantial

from the standpoint of one of ordinary skill in the art. Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 39–40 (1997); Abraxis Bioscience, 467 F.3d at 1379. It is well-settled, however, that because the doctrine of equivalents deals with subject matter beyond the literal scope of the claim, the doctrine cannot be applied too broadly without “undermin[ing] the public’s reliance on the patent’s claim language and creat[ing] a situation in which ‘[c]ompetitors will never know whether their actions infringe a granted patent.’” Novartis Pharms. Corp. v. Abbott Labs., 294 F. Supp. 2d 557, 563 (D. Del. 2003) (quoting London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538 (Fed. Cir. 1991)). Mindful of this potential problem, the United States Court of Appeals for the Federal Circuit has warned that application of the doctrine of equivalents should be “the exception . . . [and] not the rule” in patent infringement actions. London, 946 F.2d at 1538.

Ultimately, direct infringement, whether literal or through the doctrine of equivalents, must be proven by the patentee by a preponderance of the evidence. Cross Med. Prods., 424 F.3d at 1310. When a survey of the record before the court discloses the lack of any genuinely disputed issues of material fact, summary judgment in favor of the defendant on the issue of infringement is appropriate. PC Connector Solutions LLC v. SmartDisk Corp., 406 F.3d 1359, 1364 (Fed. Cir. 2005). As emphasized by the Federal Circuit, however, “[i]nfringement under the doctrine of equivalents requires an intensely factual inquiry.” Vehicular Techs. Corp. v. Titan Wheel Int’l Inc., 212 F.3d 1377, 1381 (Fed. Cir. 2000); Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1251 (Fed. Cir. 2000); Novartis Pharms., 294 F. Supp. 2d at 563. Thus, the summary judgment standard, in the context of a doctrine of equivalents analysis is “lofty,” Overhead Door Corp. v. Chamberlain Grp., Inc., 194 F.3d 1261, 1269 (Fed. Cir. 1999), and “a

summary conclusion that a reasonable jury could not find infringement is often illusive.” Leggett & Platt, Inc. v. Hickory Springs Mfg. Co., 285 F.3d 1353, 1360 (Fed. Cir. 2002).

In the present case, the sole limitation at issue is the claim 1 limitation reading, “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.” (‘953 Patent, col. 5, lines 54–58.) As noted above, in the Markman Order, the Court construed this phrase 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.” (Order, July 28, 2011, Docket No. 65.) The Accused Products, unlike the ‘953 Patent, do not use ISDN phones as part of a CTI arrangement; rather they use VoIP phones or “software” phones in which the agent communicates via a headset connected to a soundcard on the agent’s workstation computer. (DSUF ¶ 9; Petrosch Dep. 107:18–108:10.) Because such VoIP phones cannot directly connect to a public or Euro ISDN network, Defendant asserts that Plaintiff’s infringement cause of action fails under both a literal infringement theory and a doctrine of equivalents theory. The Court considers each theory of infringement individually.

A. Literal Infringement

Defendant’s first argument asserts that VoIP phones do not literally satisfy the “directly connectable to . . . a public ISDN telephone network” claim limitation. “Literal infringement requires the patentee to prove that the accused device contains each limitation of the asserted claim(s).” Bayer AG, 212 F.3d at 1247 (citing Mas-Hamilton Grp. v. LaGard, Inc., 156 F.3d 1206, 1211 (Fed. Cir. 1998)). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” Id. “Summary judgment of no literal infringement is

proper when, construing the facts in a manner most favorable to the nonmovant, no reasonable jury could find that the accused system meets every limitation recited in the properly construed claims.” Catalina Mktg Int’l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 812 (Fed. Cir. 2002).

According to Defendant in this case, the ‘953 Patent requires that the telephone extensions/phones identified in claim 1 use ISDN-based protocols to communicate over, and with, other devices on the ISDN network without using any other intermediary device. As explained by Plaintiff’s expert, Mark Gaynor:

Q. Now, you say that: “Those of ordinary skill in the art would understand this term means ‘telephones and/or other devices such as fax devices which can connect to a telephone network without any intermediary devices.’” What do you mean by “intermediary devices”?

A. They can just be connected directly to a telephone network. They could be plugged into a telephone jack, for example.

Q. And it would work?

A. And it would work.

Q. Any telephone jack?

A. That is connected to a telephone network that is built upon the standards that the telephone networks have to adhere to.

(Gaynor Dep. 83:9–25.)

Q. So when you say it’s a telephone or other device such as fax which can connect to a telephone network, you’re referring to the external, the ISDN telephone—

A. I’m referring to the device works on standards that would work plugged—if it was plugged into the external network.

Q. And then it says “without any intermediary device.”

A. Yes.

(Id. at 84:17–85:2.)

Q. Where it says “which can connect to a telephone network without any intermediary devices,” does it mean it can connect—the telephones that are usable in this system of the ’953 patent can connect directly to an ISDN or Euro ISDN without some intermediary—

A. Yes. It means that the device is built on standards that will work on the telephone network.

Q. So it wouldn’t need a PBX; it could be directly connected?

A. Depending on the infrastructure, the devices—the phone devices could be connected to a telephone extension. Either that extension could come from a PBX or it could not.

Q. Meaning it could come through a PBX or it could come directly from the external ISDN?

A. Yes, but that’s not the infrastructure described in the ‘953 patent. What this is saying is that the actual device used could be connected to a telephone network. It’s just—all it’s saying is that the device is built on standards that will connect to a telephone network.

(Id. at 85:15–86:17.)

The evidence of record, however, reveals that the VoIP phones used in the Accused Products do not satisfy this limitation because they cannot be “directly connected to . . . a public ISDN network” as required by the claims. Indeed, Dr. Gaynor conceded as follows:

Q. All right. Can a voice-over IP phone with that internet connection connect directly to the public ISDN?

A. They are different networks. An ISDN phone plugs into an ISDN network. A Voice over IP phone plugs into a Voice over IP network.

Q. Is that directly connectable to an ISDN network?

A. I could not take, I cannot take a voice-over IP phone and directly plug it into

an ISDN network.

(Id. at 153:5–16.)

- Q. And the internet phone network as it exists today is different from an ISDN phone network?
- A. It's a different phone network. Yeah, it's a different protocol.
- Q. So that the protocols don't talk to each other, you can't connect one to the other without translating it?
- A. Yeah. You can't – I can't plug in a Voice over IP telephone let's say made by Cisco into an old ISDN phone number.

(Id. at 158:10–20.)

- Q. Okay. And does that, can this Voice over IP phone connect directly to an outside network, telephone network other than an internet network?
- ...
- A. It can connect to an Voice over IP network. It doesn't have to be that internet. It has to be something that is running an IP protocol because it's Voice over IP.
- Q. Okay.
- A. So, the main requirement for the Voice over IP is that you're taking the voice and sending it over IP for the layer-3 protocol. It doesn't mean that you're sending, it doesn't imply that you're sending it over for layer-2. Right? I can have any layer-2 protocol connect to networks.
- Q. But that's different from, like a PSTN or an ISDN network?
- A. It's a different phone network.

(Id. at 156:24–157:19.) Dr. Gaynor went on to explain that the only way that such VoIP phones could connect to the ISDN is through an intermediary device, known as a voice over IP gateway, that “translates telephone network data into digital data for transmission over a network.” (Id. at 117:10–12.)

Considering this testimony, the Court finds that Plaintiff has effectively admitted the essential fact that VoIP phones cannot be “directly connected” to an ISDN telephone network. Because CSB has no evidence that SAP’s customers use anything other than VoIP phones with the Accused Products, Plaintiff cannot prove literal infringement.

In an effort to sidestep this conclusion, Plaintiff offers two responsive arguments, neither of which the Court finds convincing. First, it contends that despite the Court’s construction of the “directly connectable” limitation, “SAP set forth a different test for this claim element stating that ‘[t]he claimed phones, therefore must use ISDN-based protocols to communicate over, and with, other devices on the ISDN network.’” (Pl.’s Resp. Opp’n Mot. Summ. J. 15.) According to Plaintiff, SAP’s contention that “in order to [satisfy] the directly connectable limitation the telephone extension had to be able to be plugged in without any intermediary device” is not accurate since even ISDN telephones need some interface device to plug into an ISDN telephone network. (Id. at 15–16.)

Plaintiff’s argument is misplaced. The Court construed the limitation at issue as meaning “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.” Dr. Gaynor similarly testified that “[t]hose of ordinary skill in the art would understand this term means ‘telephones and/or other devices such as fax devices which can connect to a telephone network without any intermediary devices,’” *i.e.* that “[t]hey can just be connected directly to a telephone network. They could be plugged into a telephone jack, for example . . . [a]nd it would work.” (Gaynor Dep. 83:9–25.) Plaintiff does not offer any evidence to dispute Defendant’s showing that the Accused Products use only VoIP phones. (DSUF ¶ 10; PRSUF ¶ 10.) In turn, Dr. Gaynor expressly and repeatedly

admitted that a VoIP phone cannot be directly connected to either the public ISDN or Euro ISDN telephone network. (Gaynor Dep. 153:5–16 (“ [Q.] Can a voice-over IP phone with that internet connection connect directly to the public ISDN? . . . [A.] I could not take, I cannot take a voice-over IP phone and directly plug it into an ISDN network.”); 158:10–20 (“You can’t—I can’t plug in a Voice over IP telephone let’s say made by CISCO into an old ISDN phone number.”).) Nothing in the evidence of record, the Court’s construction, or the patent language itself suggests—as Plaintiff now does—that the patent allows use of an intermediary device that translates from a VoIP protocol to an ISDN protocol.⁵ As a VoIP phone *cannot* be “directly connected” to the ISDN telephone network, the Court is precluded from finding literal infringement.

Alternatively, Plaintiff argues that summary judgment on this issue is premature “because CSB may issue subpoenas duces tecum for trial testimony from SAP customers,” presumably in an effort to prove that some customers use a literally infringing configuration. (Pl.’s Resp. Opp. Mot. Summ. J. 16.) It goes on to reason that such subpoenas would be warranted since “despite numerous discovery requests and follow-up letters, CSB only received from SAP a spreadsheet . . . that shows customers who are using the Interaction Center component containing SAPphone or ICI on October 4, 2011, nearly two months after the close of fact discovery.” (*Id.*)

⁵ Plaintiff cites to Newton’s Telecom Dictionary’s definition for “ISDN network termination device,” which states that “You can’t plug your ISDN phone directly into an ISDN line like you can with today’s analog lines. You needs [sic] a black box, called a Network Termination device.” (Pl.’s Resp. Opp’n Mot. Summ. J. 16 (citing Newton’s Telecom Dictionary 568).) As noted above, however, Dr. Gaynor unequivocally explained the ‘953 Patent to require that the telephones be able to connect to a telephone network “without any intermediary devices.” (Gaynor Dep. 83:9–25; 151:17–20.) The fact that a VoIP phone may connect to an ISDN line through a device known as an ISDN termination device is therefore irrelevant.

This argument is akin to a Motion under Rule 56(d), which allows a nonmovant to show, by declaration or affidavit, that because it has been unable to obtain certain facts or evidence to justify its opposition, the court should defer ruling on the motion. Fed. R. Civ. P. 56(d). A court will grant a properly-filed Rule 56(d) motion as a matter of course if “there are discovery requests outstanding or relevant facts are under the control of the moving party” that are material to a pending summary judgment motion. Doe v. Abington Friends Sch., 480 F.3d 252, 257 (3d Cir. 2007). In this case, Plaintiff has not made such a showing. First, fact discovery closed on August 16, 2011. During that period—as shown by Defendant and not rebutted by Plaintiff—Plaintiff received a revenue report listing customers. (Def.’s Reply Br., Ex. 13, Dep. of George Trammel Dep. (“Trammel Dep.”), 103:9–104:5, Aug. 12, 2011.) Moreover, it is undisputed that Plaintiff took more than thirty depositions of SAP customers during fact discovery, undermining any claim of ignorance as to the identity of SAP’s customers. Finally, even assuming that CSB did not get a full listing of SAP customers until October of 2011, it offers no justification to this Court for waiting for more than four months—until the filing of its Response to Defendant’s Motion for Summary Judgment of Non-Infringement and Cross-Motion for Summary Judgment on Infringement on February 10, 2012—before even suggesting that it *may* issue subpoenas duces tecum. “A request for a continuance to conduct additional discovery pursuant to Fed. R. Civ. P. 56(d) should be denied where, *inter alia*, movants ‘had ample time and opportunity to conduct discovery, but failed to do so.’” In re Asbestos Prods. Liab. Litig., No. Civ.A.09-9125, 2011 WL 1539883, at *2 (E.D. Pa. Feb. 22, 2011) (quoting Swisher v. Collins, 409 F. App’x 139, 142 (9th Cir. 2011)). As Plaintiff had more than adequate time to complete fact discovery or, alternatively, request a reopening of the fact discovery deadline, the

Court will not grant relief under Rule 56(d).

In short, the Court finds no genuine issue of material fact as to the issue of literal infringement. Claim 1 of the '953 Patent clearly requires a "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." The evidence is undisputed that the Accused Products use VoIP phones in their configurations and that those VoIP phones are not capable of being directly connected to an ISDN telephone network. Because a claim limitation is clearly absent from the accused device, the Court must find, as a matter of law, that there is no literal infringement. Summary judgment on this theory is therefore granted.

B. Infringement Under the Doctrine of Equivalents

"An accused device that does not literally infringe a claim may still infringe under the doctrine of equivalents if each limitation of the claim is met in the accused device either literally or equivalently." Cybor Corp. v. FAS Techs., 138 F.3d 1448, 1459 (Fed. Cir. 1998). "An element in the accused product is equivalent to a claim limitation if the differences between the two are 'insubstantial' to one of ordinary skill in the art." Catalina Mktg. Int'l, Inc., 289 F.3d at 812-13 (citing Warner-Jenkinson, 520 U.S. at 40). "Insubstantiality may be determined by whether the accused device 'performs substantially the same function in substantially the same way to obtain the same result' as the claim limitation." Id. (quoting Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608 (1950)). This is also known as the "function, way, result" inquiry. Aqua Tex Indus., Inc. v. Techniche Solutions, 479 F.3d 1320, 1326 (Fed. Cir. 2007). The United States Supreme Court has made clear that the "particular linguistic

framework used” is not important, so long as it addresses the “essential inquiry [of whether] the accused product or process contain[s] elements identical to or equivalent to each claimed element of the patented invention.” Warner-Jenkinson, 520 U.S. at 40. This is an objective inquiry done on an “element-by-element” basis. Id.

Courts have recognized that “[a]lthough simple to articulate, the doctrine of equivalents is conceptually difficult to apply,” and thus requires “particularized testimony” and “linking argument” as to “why the function, way and result of each element in the accused device [sic] is substantially the same as the elements of the claimed invention.” Novartis Pharms., 294 F. Supp. 2d at 563–64. The plaintiff must “articulate the comparison” between the claimed elements and the elements of the accused and present “substantial evidence” comparing the claimed elements and the accused device in each of the three aspects of equivalency, *i.e.* function, way, and result. Id. (citing Malta v. Schulmerich Carillons, Inc., 952 F.2d 1320, 1329 (Fed. Cir. 1991); Lear Siegler v. Sealy Mattress Co. of Mich., 873 F.2d 1422, 1427 (Fed. Cir. 1989)).

In the present case, each party claims entitlement to summary judgment on the issue of infringement under the doctrine of equivalents. Plaintiff argues that a VoIP telephone network, to which a VoIP phone could directly connect, performs the same function, in the same way, with the same result as the public ISDN or Euro ISDN telephone networks. Defendant, on the other hand, contends that the doctrine of equivalents should not apply based on: (1) the all elements rule; (2) Plaintiff’s failure to produce evidence of actual infringement by Defendant’s customers; and (3) an absence of evidence satisfying the function, way, result test. For ease of discussion, the Court initially considers Defendant’s first two arguments, and then discusses the parties’ opposing arguments as to whether the evidence conclusively establishes either infringement or

non-infringement.

1. Violation of the “All Elements” Rule

“The determination of infringement under the doctrine of equivalents is limited by two primary legal doctrines: (1) prosecution history estoppel, and (2) the ‘all elements’ rule.” Lockheed Martin Corp. v. Space Sys./Loral, Inc., 324 F.3d 1308, 1318 (Fed. Cir. 2003). The application of these doctrines is a question of law. Id. The latter doctrine—the “all elements rule”—“provides that the doctrine of equivalents does not apply if applying the doctrine would vitiate an entire claim limitation.” Asyst Techs., Inc. v. Emtrak, Inc., 402 F.3d 1188, 1195 (Fed. Cir. 2005).

Defendant argues that application of the doctrine of equivalents in this case would violate the “all elements” rule of the doctrine by removing the limitation of “directly connectable” to the claim. Specifically, it asserts that the claimed invention requires telephone extensions which are “*directly connectable* . . . to a public ISDN network.” The phones in the accused system—the VoIP phones—cannot, however, be directly connected to an ISDN network; rather they can only communicate with an ISDN network indirectly through a special computer called a “gateway.” Defendant goes on to conclude that “[i]f CSB is permitted to expand the scope of its claims to cover VoIP phones, then its claims would cover phones that are ‘indirectly’ connectable to ISDN through the use of intermediary gateways that translate between two different types of communication protocols.” (Def.’s Mem. Supp. Mot. Summ. J. 11.) In other words, “[t]o say that a claim requiring ‘directly connectable’ phones can cover ‘indirectly connectable’ phones would render the ‘directly connectable’ limitation meaningless.” (Id.)

As aptly noted by CSB, however, SAP’s argument rests on a “straw man” limitation.

Defendant improperly assumes that the equivalency sought by Plaintiff is between ISDN phones and VoIP phones. The '953 Patent, however, does not limit what types of phones may be used. Rather, as noted above, claim 1 merely references “a plurality of telephone extensions.” Nothing in this claim indicates that the telephone extensions must be either ISDN phones, VoIP phones, or some other specified type of phones. Indeed, even as construed by the Court, this claim 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.” Other than the fact that the phones must have the capability of being directly connected to the ISDN or Euro ISDN telephone network, the claim contains no other modifiers on the types of phones required. As such, Plaintiff need not establish the equivalence between a VoIP phone and an ISDN phone.

Plaintiff’s precise contention under the doctrine of equivalents is that there is no substantial difference between a public ISDN or Euro ISDN *network* and a VoIP *network*. Achieving equivalence between these networks would adequately preserve the “directly connectable” limitation, but merely replace the term “public ISDN telephone network and Euro ISDN telephone network” with the term “VoIP telephone network.” In other words, the patent would read “telephones and/or other devices such as fax devices of the type that can be directly connected to the VoIP network.”⁶

⁶ Defendant cites to the Federal Circuit case in Seachange Int’l, Inc. v. C-COR, Inc., 413 F.3d 1361 (Fed. Cir. 2005) for the proposition that, “as a matter of law,” a claim limitation requiring a “direct, point-to-point connection” could not be an equivalent of a system having an indirect connection. (Def.’s Mem. Supp. Mot. Summ. J. 12 (citing Seachange, 413 F.3d at 1378)). In that case, the court held that:

Seachange’s equivalents theory implies that a network in which every processor is connected to every other processor through indirect interconnections can be equivalent to a network in which every processor is connected to every other

Attempting to revive its “all elements” contention, Defendant argues, via its Reply Brief, that “[a]llowing CSB to distill the entire ‘directly connectable’ limitation into whether two network types are equivalent would render the limitation as a whole meaningless because *any* phone can be connected to *any* type of network via a Gateway to translate the incompatible communication protocols.” (Def.’s Reply Br. 8.) It goes on to aver that connecting in this manner is not the same as being “directly connectable” because a VoIP phone is not the type that can be directly connected without a Gateway to any type of network. (Id.) This contention again, however, either misunderstands or disregards Plaintiff’s theory. No party disputes—indeed Defendant’s expert admits—that the VoIP phone, which is used in the Accused Products, is directly connectable to the VoIP network without the use of any intermediary device or Gateway. (Gursahaney Dep. 53:15–21 (conceding that a VoIP telephone is directly connectable to a VoIP telephone network).) For the doctrine of equivalents to apply in this case, Plaintiff must establish that the VoIP network is substantially equivalent to the claimed public ISDN or Euro ISDN network, a theory that maintains the integrity of the “directly connectable” limitation. Accordingly, the Court rejects Defendant’s “all elements” argument.

processor by direct, point-to-point interconnections. However, equivalents under such a theory would vitiate the requirement that every processor be connected to every other processor point-to-point, and therefore must fail as a matter of law.

Seachange, 413 F.3d at 1378.

Seachange, however, is inapposite. In that case, the equivalents theory argued that the directly connected limitation could be satisfied by indirect connections. In this case, Plaintiff’s equivalents theory maintains the integrity of the “directly connectable” requirement, but simply seeks to substitute the network to which the telephone extensions must be capable of being connected.

2. Purely Hypothetical Usage of a “VoIP Network”

Defendant’s second attempt to undercut Plaintiff’s equivalents theory contends that to successfully oppose SAP’s motion, Plaintiff had to produce evidence regarding the accused systems of SAP’s customers showing actual infringement. Plaintiff, however, only points the Court to a hypothetical system that could infringe under the doctrine of equivalents. In other words, Plaintiff asserts that VoIP phones can be directly connected to a VoIP network, as opposed to the claimed ISDN networks, but fails to point to any evidence that SAP or any SAP customer actually uses VoIP networks. Therefore, Defendant argues that any equivalents analysis regarding VoIP networks is “at best academic.” (Def.’s Reply Br. 5.)

This contention, however, again misreads the patent at issue. As repeatedly set forth above, the sole claim at issue has been 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.” Nothing in the claim language requires that the telephone devices actually be connected to the public ISDN or Euro ISDN telephone network—only that they have the capability to be directly connected to such networks. See Intel Corp. v. U.S. Int’l Trade Comm’n, 946 F.2d 821, 832 (Fed. Cir. 1991) (holding that where claim uses capability language, the accused device, to be infringing, need only be capable of operating in the same way; actual evidence of operation in that way is not required); Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, 1343 (Fed. Cir. 2001) (“[I]n determining whether a product claim is infringed, we have held that an accused device may be found to infringe if it is reasonably capable of satisfying claim limitations, even though it may also be capable of non-infringing modes of operation.”). This was the precise construction advanced by Defendant at the Markman proceedings. Had the

drafters of the Patent intended that the telephone devices be connected, they would have used the phrase “directly connected” in lieu of “directly connectable.” In fact, as displayed in Figure 1 of the specification, the telephone extensions are not directly connected to the ISDN telephone network, but rather are connected to the intelligent telephone system. (‘953 Patent, Figure 1; Gursahaney Dep. 53:22–54:9.) Because the Patent only recites a capability, as opposed to a requirement that the telephone extensions be directly connected, Plaintiff need not come forward with evidence of Defendant’s customers using a VoIP network.

3. Whether Any Genuine Issues of Material Fact Remain on the Issue of Infringement

Having disposed with these preliminary arguments, the Court now turns to the most crucial question of whether either party has met its burden of showing an absence of a genuine issue of material fact regarding either infringement or non-infringement. Defendant asserts that the doctrine of equivalents has not been satisfied because: (1) Plaintiff’s expert has admitted that a VoIP network is “completely different” from an ISDN network, and (2) Plaintiff has failed to establish the “way” element of the “function-way-result” test. In response, Plaintiff contends that: (1) Dr. Gaynor has clearly opined that, using the function-way-result test there are insubstantial differences between a VoIP network and an ISDN network, making them equivalent for purposes of the ‘953 patent, and (2) Defendant has not offered any testimony or other evidence to rebut this finding of equivalency.

Given these competing assertions, the Court must turn to the evidence of record regarding equivalence. Looking first to the evidence offered by Plaintiff in support of its Motion for Summary Judgment on Infringement, Plaintiff rests heavily—indeed almost exclusively—on the

expert report of Dr. Gaynor. In that report, Dr. Gaynor opined that:

The function of a telephone extension that is directly connectable is that it uses a set of protocols that allows it to communicate with the protocols used by the PSTN [public switched telephone network] so that the agent can speak with the customer over the phone. This results in the agent being able to hear the caller initiator's voice. I have concluded that a VoIP telephone would have the same function, does it the same way to yield the same result. The function of a VoIP telephone is also for the agent to speak with the customer. To do this the VoIP network and the PSTN establish protocols to convert the VoIP data into data understood by the PSTN. This also results in the call center agent being able to hear the caller's voice. In addition, there are already all Internet phone networks available today that serve a similar function in a similar way so that pure VoIP telephone calls can be made that would also be covered.

(Gaynor Report ¶ 166.) The report goes on to explain, in some detail, more as to each of the elements, ultimately concluding that

[T]he newer analog telephone network is equivalent to the U.S. and European ISDN network, and the VoIP in the Internet in the context of the 953 patent: The same function is formed—receive an incoming call with information about the caller; in the same way—the telephone network provides the number of the incoming caller; and yields the same result—the incoming number is passed first to the intelligent telephone system and then makes its way to a client computer that can thus request additional information from a database based on this number.

(Id. ¶ 170; see also id. ¶¶ 167–169, 171–76, 300–05.) In a recently issued Declaration, Dr. Gaynor reiterated these conclusions with respect to all three elements. (Pl.'s Cross-Motion for Summ. J., Decl. of Mark Gaynor (“Gaynor Decl.”) ¶¶ 8–11, Mar. 2, 2012.) Finally, Plaintiff cites to the testimony of one of SAP's employees, Michael Petrosh, who testified that the function of any public switched telephone network (“PSTN”) is “just to transfer the call from a customer at an external site to the company that the customer is trying to call.”⁷ (Petrosh Dep.

⁷ Plaintiff makes an additional argument that because the VoIP telephone network is “after-arising technology that the inventors of the ‘953 Patent could not cover, the VoIP telephone network—which performs the same function as the ISDN telephone network in the ‘953 Patent—should be deemed an enforceable equivalent. (Pl.'s Mem. Opp'n Mot. Summ. J.

105:14–18.) Ultimately, Plaintiff concludes that any differences between the ISDN telephone network and the VoIP telephone network are insubstantial.

While, at first blush, this evidence is seemingly conclusive of the issue, Defendant puts forth several arguments that successfully undercut its decisiveness. First, as noted by Defendant, Dr. Gaynor offers little more than a bare conclusory statement that the claimed ISDN and European ISDN, and VoIP networks all work “in the same *way*—the telephone network provides the number of the incoming caller.” (Def.’s Reply Br. 6.) While the ensuing paragraphs of the report attempt to develop his conclusions somewhat, his explanation remains sparse in detail. (Gaynor Expert Report ¶¶ 171, 173.) Such a report is thus a far cry from the “particularized testimony,” “substantial evidence,” and “linking argument” that “articulate[s] the comparison” between the claimed and the elements of the accused. Novartis Pharms., 294 F. Supp. 2d at 564–64 (“Generalized testimony concerning the similarities between the claims and the accused device . . . are insufficient to establish infringement under the doctrine of equivalents.”).

Moreover, in his deposition, Dr. Gaynor expressly admitted to differences between the two networks. Specifically, Dr. Gaynor explained that for a phone to be directly connectable to a given telephone network, the phone and network must operate on the same set of standards.

24 (citing Festo Corp. v. Shoketsu Kinzoku Kogyo Kubushiki Co., Ltd., 234 F.3d 558, 619 (Fed. Cir. 2000) (Rader, J., concurring in part, dissenting in part), vacated, 535 U.S. 722 (2002); SmithKline Beecham Corp., 356 F.3d 1357, 1364 (Fed. Cir. 2004)).

This assertion does little to advance Plaintiff’s claim for summary judgment for two reasons. First, as demonstrated by Defendant’s Reply Brief and not rebutted by Plaintiff, while VoIP telephones may have arisen after the filing of the ‘953 Patent, the VoIP network—the basis of Plaintiff’s equivalence argument—existed long before CSB’s earliest filing date. (Def.’s Reply Br., Ex. 19.) Further, even assuming the VoIP network was after-arising technology, Plaintiff still bears the burden of proving equivalence between that network and the claimed public ISDN and Euro ISDN networks.

(Gaynor Dep. 83:9–25, 84:21–23, 85:15–24, 86:13–17, 151:25–152:14.) Thereafter, Dr. Gaynor admitted that a VoIP network is “completely different” phone network. (Id. at 156:19-20.) Further, he explained that the VoIP network and the ISDN network work on “different protocol[s]” that do not talk to one another and cannot connect to one another without translating between them. (Id. at 158:10–20.) Such remarks substantially subvert Dr. Gaynor’s report, particularly in light of Plaintiff’s complete failure to address their import in any of its briefing.

By the same token, however, these remarks are not—as Defendant presumes in its own summary judgment motion—conclusive proof of non-infringement. Gaynor’s testimony, while somewhat casually admitting that the two networks are “completely different,” does not make the crucial concession for purposes of the doctrine of equivalents that the differences between the two are substantial such that they do not satisfy the function-way-means test. Accordingly, it would be improper for the Court, without more, to equate Dr. Gaynor’s statement with an admission of non-equivalence. At most, Dr. Gaynor’s testimony, taken in light of all of the other evidence of record, simply creates a genuine issue of material fact regarding the equivalence between the ISDN network and the VoIP network.⁸

Defendant’s rebuttal expert report regarding non-infringement fares no better in establishing Defendant’s entitlement to summary judgment. Expert Suresh Gursahaney critiques

⁸ Defendant argues that because this deposition testimony contradicts the later representations in his expert report—wherein he opines that a VoIP telephone network performs the same function as an ISDN network, in the same way, to yield the same result—his report must be disregarded in its entirety. (Gaynor Report ¶ 166.) See Hackman v. Valley Fair, 932 F.2d 239, 241 (3d Cir. 1991) (“When, without a satisfactory explanation, a nonmovant’s affidavit contradicts earlier deposition testimony, the district court may disregard the affidavit in determining whether a genuine issue of material fact exists.”). As noted above, however, the contradiction is not as clear-cut as Defendant suggests. As such, the Court will not disregard his report.

Dr. Gaynor's report and opines that "[t]elephones used by SAP customers are IP phones with advanced call center telephone functions; such phones require an intermediate telephone switch or gateway to communicate with the outside telephone network. Gaynor's report provides no evidence to anything to the contrary." (Gursahaney Report 10–11.) Mr. Gursahaney goes on to note that "VoIP telephones work in a substantially different way from the way a 'directly connectable' traditional telephone extension would work" and that "SoftPhones [VoIP phones], because they are based on software, sound cards, and headsets very different from traditional telephone extensions . . . [and thus] are not equivalent to such extensions." (*Id.* at 12.) Notably, however, Mr. Gursahaney speaks only to the differences between traditional telephone extension and SoftPhones or VoIP phones—a comparison not at issue in this matter. (See Gaynor Decl. ¶¶ 9–11.) Throughout his discussion, he fails to opine on the equivalence between the ISDN *telephone network* and the VoIP *telephone network*—the crucial comparison for Plaintiff's equivalence theory. Accordingly, Mr. Gursahaney's report does little to bolster Defendant's claims of non-equivalence.

Ultimately, the Court is left with little on which to conclusively find either (a) clear infringement of the '953 Patent based on the doctrine of equivalents, or (b) an unequivocal absence of proof of infringement under the doctrine of equivalence. As emphasized by the Federal Circuit, "[p]atent infringement, whether literal or by equivalence, is an issue of fact, which the patentee must prove by a preponderance of the evidence." Siemens Med. Solutions USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc., 637 F.3d 1269, 1279 (Fed. Cir. 2011). In this matter, while Plaintiff has put forth evidence of infringement in the form of Dr. Gaynor's report, Defendant has managed to both identify weaknesses in the report's explanation of the

function-way-means analysis and point out potentially contradictory deposition testimony from Dr. Gaynor, thereby creating a genuine issue of material fact. On the other hand, Defendant has neither definitively undermined Dr. Gaynor's report nor provided any probative evidence of its own to rebut Dr. Gaynor's expert conclusion that the function-way-means test is satisfied. Ultimately, the Court is simply unable to conclude that no reasonable jury could either could or could not find infringement of the '953 Patent based on the doctrine of equivalents.⁹ Given the Federal Circuit's pronouncements that "[i]nfringement under the doctrine of equivalents requires an intensely factual inquiry," Vehicular Techs., 212 F.3d at 1381, and that the summary judgment standard, in the context of a doctrine of equivalents analysis is "lofty," Overhead Door, 194 F.3d at 1269, the Court will leave the infringement issue for full development at trial before a jury and decline to grant summary judgment in favor of either party.

⁹ To the extent, however, that Defendant raises a new argument in its Reply Brief regarding Plaintiff's obligation to have foreseen the limiting nature of the language in its patent and to have drafted the claims without limiting the type of network to ISDN, the Court declines to consider this contention. Defendant failed to raise this point in its Motion for Summary Judgment and addressed it only in a footnote in a Reply Brief.

Nonetheless, the Court notes that it is troubled by the '953 Patent's limiting language, particularly in specifying the type of telephone network. As recognized by the Federal Circuit, a skilled drafter should recognize the limiting nature of language in a patent and, if it desires a broader coverage over similar products, it should draft its claims with broader language. Johnson & Johntson Assoc. v. R.E. Serv. Co., Inc., 285 F.3d 1046, 1057–58 (Fed. Cir. 2002). Failure to do so does not then allow the patent to claim coverage of foreseeable similar structures under the doctrine of equivalents. Id. By the same token, however, the Federal Circuit has acknowledged that some types of subject matter may not be foreseeable during the application process arising from a change in the state of the art such as later-developed technology. Id. at 1058.

In the present case, Plaintiff clearly confined the claim 1 limitation at issue to a "public ISDN or Euro ISDN" telephone network, in lieu of seeking broader coverage of potential equivalents such as a VoIP network. As noted earlier, however, a question remains as to whether, given the fact that the VoIP *telephone* was later-developed technology, CSB should have foreseen the need to include VoIP telephone networks in order to encompass this equivalent. Given that neither party has briefed this issue, the Court need not address it now.

IV. CONCLUSION

For all of the foregoing reasons, the Court declines to grant summary judgment in favor of either party on the subject of infringement as a whole. While the Court finds that Defendant has adequately proven that no genuine issue of material fact exists on the issue of literal infringement, it has failed to prove a similar absence of issues of fact as to non-infringement under the doctrine of equivalents. By the same token, Plaintiff has not met its burden of proving application of the doctrine of equivalents by a preponderance of the evidence. In short, the intensely factual question of infringement in this case remains fraught with evidentiary disputes and questions not suitable for summary judgment resolution.