IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

SIGRAM SCHINDLER BETEILIGUNGSGESELLSCHAFT mbH,[1]	)	
Plaintiff,	)	
v.	)	Civ. No. 09-72-SLR
CISCO SYSTEMS, INC.,	)	
Defendant.	)	

CISCO SYSTEMS, INC.,	)	
Plaintiff,	)	
v.	)	Civ. No. 09-232-SLR
SIGRAM SCHINDLER BETEILIGUNGSGESELLSCHAFT mbH,	)	
Defendant.	)	

Steven J. Balick, Esquire and John G. Day, Esquire of Ashby & Geddes, Wilmington, Delaware. Counsel for Teles AG Informationtechnologien. Of Counsel: David W. Long, Esquire, Mark L. Whitaker, Esquire and Monica Lateef, Esquire of Howrey LLP, Washington, D.C.

[1]The court substitutes Schindler Beteiligungsgesellschaft mbH ("SSBG") for Teles AG Ingormationtechnologien ("Teles"), as discussed *infra* in section IV-A. The court refers to Teles in discussing the pre-acquisition procedural history and in connection with Teles's motion to amend and opposition to Cisco's motion to dismiss which gave rise to the substitution determination.

Jack B. Blumenfeld, Esquire and Rodger D. Smith II, Esquire of Morris, Nichols, Arsht & Tunnell LLP, Wilmington, Delaware. Counsel for Cisco Systems, Inc. Of Counsel: J. Anthony Downs, Esquire and Lana S. Shiferman, Esquire of Goodwin Procter LLP, Boston, Massachusetts.

MEMORANDUM OPINION

Dated: July 26, 2010
Wilmington, Delaware

ROBINSON, District Judge

I. INTRODUCTION

Presently before the court are ten motions brought in two related patent infringement actions involving SSBG and Cisco Systems, Inc. ("Cisco") relating to Teles's U.S. Patent Nos. 6,954,453 ("the '453 patent"), 7,145,902 ("the '902 patent") and 7,483,431 ("the '431 patent") (collectively, the "patents in suit"). The procedural history of these actions is complex and detailed below. Pending before the court are: (1) Teles's motion to amend its pleadings (Civ. No. 09-72, D.I. 86; Civ. No. 09-232, D.I. 170); (2) Cisco's motion to dismiss for lack of subject matter jurisdiction (Civ. No. 09-72, D.I. 198; Civ. No. 09-232, D.I. 281); (3) Cisco's motion to exclude the opinion of SSBG's expert Christopher Spadea on commercial success (Civ. No. 09-72, D.I. 202; Civ. No. 09-232, D.I. 285); (4) SSBG's motion to limit the testimony of Cisco's expert Thomas La Porta (Civ. No. 09-72, D.I. 205; Civ. No. 09-232, D.I. 288); (5) SSBG's motion to limit the testimony of Cisco's expert Kevin Negus (Civ. No. 09-72, D.I. 206; Civ. No. 09-232, D.I. 289); (6) SSBG's motion for partial summary judgment of no inequitable conduct (Civ. No. 09-72, D.I. 216; Civ. No. 09-232, D.I. 299); (7) Cisco's motion for summary judgment of noninfringement (Civ. No. 09-72, D.I. 218; Civ. No. 09-232, D.I. 301); (8) SSBG's motion for partial summary judgment of infringement (Civ. No. 09-72, D.I. 222; Civ. No. 09-232, D.I. 305); (9) Cisco's motion for partial summary judgment for invalidity of the '431 patent pursuant to 35 U.S.C. § 112 and for confirmation of the priority date for the '431 patent (Civ. No. 09-72, D.I. 223; Civ. No. 09-232, D.I. 306); and (10) Cisco's motion for summary judgment of invalidity (Civ. No. 09-72, D.I. 227; Civ. No. 09-232,

D.I. 310).[2] The court has jurisdiction over these matters pursuant to 28 U.S.C. § 1338.

II. BACKGROUND

A. The Parties and Patents in Suit

The patents in suit relate to voice over internet protocol ("VoIP") telephony. Cisco provides routers and other network products that provide access to VoIP service providers. Teles is the listed owner by assignment of the patents in suit. In mid-2009, Teles transferred ownership of the '453, '902 and '431 patents by assignment to SSBG, a German corporation owned solely by Prof. Sigram Schindler, founder of Teles and inventor of the patents in suit. SSBG represents that it and Prof. Schindler own a controlling interest in Teles, and Teles has been granted a non-exclusive license to manufacture, use and sell products under the patents.

The patents in suit share a common specification claiming priority to original German patent applications filed in October 1996. The '453 patent issued from PCT No. PCT/DE97/02363, filed on October 7, 1997. The application issuing as the '902 patent was filed as a divisional application from the '453 patent application (U.S. Patent Application No. 09/147,970). The '431 patent was filed as a continuation of the '902 patent application (U.S. Patent Application No. 11/456,549).

B. The Technology at Issue

---

[2]Henceforth, the court will refer to docket numbers in Civ. No. 09-72 unless otherwise noted.

On July 22, 2010, less than a week prior to the pretrial conference in this matter, SSBG filed a motion for leave to supplement the summary judgment and claim construction record based on what it claims to be new admissions from Cisco witnesses deposed following their identification as trial witnesses. (D.I. 377) The court denies the motion.

1. Generally

This case concerns internet telephony. Traditional telephony involves routing a telephone call over the public switched telephone network (the "PSTN") from one telephone to another. The patents in suit and the accused Cisco products relate to VoIP technology through which a telephone call may be routed over a data network, such as the internet, rather than the PSTN.

The patents describe two methods of data transfer: line-switching (or circuit switching) and packet-switching. Line-switching connections are synchronous connections. ('902 patent, col.1:45-48) When a line-switching call is put through, a continuous, real-time connection is established using the full bandwidth of a channel. (*Id.* at col. 1:49-52) Data is transferred from one line section to an adjoining line section through a switch. (*Id.* at col. 1:45-48) Although a line-switching connection is free of any time delay and has a fixed bandwidth, such connections are expensive, since costs accumulate irrespective of the data actually being transferred. (*Id.* at col. 1:52-58)

A packet-switching exchange involves the transfer of data, such as audio or video data or computer files, which are packeted and transferred as data packets. (*Id.* at col. 1:59-62) Packet-switching is asynchronous, and a fixed connection need not be maintained. (*Id.* at col. 1:62-67) The data packets are transferred time-delayed between two adjoining line sections by a switch; "each packet is treated individually and not in conjunction with the others." (*Id.* at col. 1:62-2:2) Packet-switching is used on the internet, whose data packets are termed "IP packets" (for "Internet Protocol"). (*Id.* at col. 2:3-5) IP packets have a length of 16 bytes or more because they contain

information in their headers, such as sender and receiver addresses. (*Id.* at col. 2:5-11) Because of this length, a time delay occurs in the packet-switch (an IP-switch or router[3]) when transferring data. "This time delay can be so great, when there is a heavy load on the packet-switching apparatus which passes a data packet over the router to the destination address, that certain applications are no longer possible." (*Id.* at col. 2:10-15) Such delay is problematic with internet telephony; when the delay of individual packets is significant, a normal conversation is no longer possible. (*Id.* at col. 2:16-22)

2. Overview of the invention

The patents disclose that, "[b]ased on the prior art, the present invention is concerned with the problem of providing a method for transferring data from a first switch to a second switch and providing a switch[ ] for carrying out the method which, depending on the data origin and headers of a user or network management system, allows flexible data transfer between the switches and more particularly **cost-effective data transfer with real-time properties**." (*Id.* at col. 3:17-19) (emphasis added) "The solution according to the present invention makes it possible during [a] packet-switching connection between two switches to achieve a dynamic change-over [from a packet-switching connection] to [a] line-switching connection without interrupting the connection." (*Id.* at col. 3:20-24) In other words, a line-switching connection is "established only when required, i.e., when a packet-switching data transfer no longer

---

[3]It is the court's understanding that a router is (today) a more sophisticated network device than a switch. Routers join multiple networks, while a switch typically joins multiple computers to a network. *See gen.* http://compnetworking.about.com/od/homenetworkhardware/f/routervsswitch.htm. The patents, however, use the terms "packet switch" and "router" interchangeably. ('902 patent, col. 1:44-45)

has the desired bandwidth," such that data blockage is bypassed. "Slight time delays" may be present, but the bypass enables the data transfer to occur "substantially in real time." (*Id.* at col. 3:26-34)

The patents describe utilizing switches having both line-switching and packet-switching functionality. (*Id.* at col. 3:43-46) That is, the switch has "a packeting device for packeting and unpacketing data, an IP-switching device for routing data packets, a line-switching device for establishing connections for switching through data channels and a control device which directs incoming data either to the IP-switching device or to the line-switching device depending on the control signals." (*Id.* at col. 3:46-53; fig. 4) "The important factor is therefore the possibility of dynamically switching between packet-switching and line-switching during one transfer." (*Id.* at col. 7:20-22) The internal control commands (as to whether packet-switching is to take place through an IP-switch or line-switching is to take place through a line-switching device) are produced in a control unit, which is itself "substantially a switch" that monitors and controls open connections. (*Id.* at col. 8:49-60) The switching decision is made by the control unit based on specified transfer parameters. (*Id.* at col. 9:46-56)

Together, the patents in suit contain 210 claims to various methods and apparatus encompassed by the invention, for example, methods for data transfer and data switching apparatus. SSBG asserts that Cisco infringes the following claims: (A) claims 2, 34, 68, 69, 71, 74-77, 79, 82-85, 87, 90-92, 95, 98, 100-01, and 104 of the '902 patent; (B) claims 34-36 and 38 of the '453 patent; and (C) claims 1, 3, 6, 8, 11,

13, 16, 18, 45, 46 and 47 of the '431 patent. (D.I. 281, JA6440 at ¶ 10[4]) Certain of these claims have been identified by the parties in connection with their claim construction papers (in which the parties seek the construction of sixty-three (63) terms). The court focuses its limited resources on those most essential claim terms and issues addressed by the parties in their summary judgment motions.

C. Litigation History

The '453 patent issued on October 11, 2005. On October 18, 2005, Cisco filed a declaratory judgment action against Teles in the United States District Court for the District of Columbia, seeking a declaration that the '453 patent is invalid and not infringed (hereinafter, "*Teles I*"). (Civ. No. 09-232, D.I. 1)[5] On March 24, 2006, Teles filed suit against Quintum Technologies, Inc. ("Quintum")[6] in this judicial district for infringement of the '453 patent (hereinafter, "*Quintum*"). (Civ. No. 06-197-SLR)

The '902 patent issued December 5, 2006. Teles amended its *Quintum* complaint in December 2006 to add a count of infringement of the '902 patent; the amendment was not opposed by Quintum. (Civ. No. 06-197, D.I. 28)

In February 2007, Teles was granted leave to amend its counterclaims to include allegations that Cisco infringes the '902 patent. (Civ. No. 09-232, D.I. 39; D.I. 41) In August 2007, Cisco filed a request for inter partes reexamination of the '453 and '902

---

[4]As identified by SSBG's expert in his opening report.

[5]The District of Columbia civil action number corresponding to *Teles I* was 05-2048-RBW; the court will hereinafter reference docket entries of this court.

[6]In December 2007, Quintum merged into another Delaware corporation and became Quintum Technologies, LLC, which was substituted as the named defendant. (Civ. No. 06-197, D.I. 81)

patents with the United States Patent and Trademark Office (the "PTO"), and moved to stay *Teles I*.[7] (*Id.*, D.I. 47, ex. 1) Judge Reggie B. Walton of the United States District Court for the District of Columbia granted Cisco's motion. (*Id.*, D.I. 68)

On May 9, 2008, Quintum moved to transfer *Quintum* to the District Court for the District of Columbia or, in the alternative, to stay the action pending reexamination of the '453 and '902 patents. (Civ. No. 06-197, D.I. 49) This court denied the motion.

The '431 patent issued January 27, 2009. Two days later, Teles filed a complaint against Cisco in this court alleging infringement of the '431 patent (hereinafter, "*Teles II*"). (Civ. No. 09-72, D.I. 1) In early February, Cisco filed a declaratory judgment complaint for invalidity and non-infringement of the '431 patent in the District of Columbia (hereinafter, "*Teles III*"). (D.D.C. Civ. No. 09-224-RBW, D.I. 1)

On February 5, 2009, Cisco filed a motion to transfer *Teles II* to the District of Columbia or, in the alternative, to dismiss or stay the action pending the conclusion of *Teles III*. (Civ. No. 09-72, D.I. 5) Judge Walton subsequently dismissed *Teles III* in favor of *Teles II* under the first-filed rule. (*Id.*, D.I. 16)

On February 23, 2009, Cisco moved for leave to amend its declaratory judgment complaint in *Teles I* to add claims relating to the invalidity, unenforceability, and Cisco's non-infringement of the '431 patent. (Civ. No. 09-232, D.I. 81) The following day, Teles moved to transfer to this court. (*Id.*, D.I. 82) The *Teles I* stay was terminated on March 4, 2009. (*Id.*, D.I. 85) On March 24, 2009, Judge Walton denied Cisco's motion to amend its complaint in *Teles I* given that the '431 patent was the subject of *Teles II* and,

[7]Cisco's motion requested a stay pending reexamination of the '902 patent only; the '453 reexamination was not filed until after Cisco's motion.

following consultation with this judicial officer, transferred *Teles I* to this court. (*Id.*, D.I. 91)

On April 24, 2009, Teles moved to consolidate the three Delaware actions (*Teles I*, *Teles II*, and *Quintum*), which motion was denied.[8] (Civ. No. 06-197, D.I. 106) By the parties' stipulation, *Quintum* was dismissed in October 2009. (*Id.*, D.I. 152) Trial in the related *Teles I* and *Teles II* actions is currently scheduled to begin on August 9, 2010.

D. Reexaminations

The reexaminations of the '453 and '902 patents have proceeded concurrently with this litigation.[9] Cisco filed its request for (*inter partes*) reexamination of the '902 patent on August 8, 2007 and its request for (*ex parte*) reexamination of the '453 patent on August 30, 2007. The PTO granted reexamination of the '453 patent on November 23, 2007. On November 27, the PTO both granted reexamination of the '902 patent and issued an office action rejecting all of the claims of the '902 patent as both anticipated and/or obvious.[10] (D.I. 246, ex. C; D.I. 245, ex. A) A first office action rejecting the asserted claims of the '453 patent issued from the Central Reexamination Unit of the PTO (the "CRU") on February 13, 2008. In that action, each of the '453 claims on reexamination (claims 34-36 and 38) were rejected as anticipated and/or obvious. (D.I. 246, ex. D) During this time, the prosecution of the '431 patent

---

[8]Although the specific date that title passed to SSBG is unclear, it appears as though Teles remained the owner of the patents in suit in April 2009.

[9]The court is appreciative of the timelines and comparative charts submitted by Cisco with its papers. (D.I. 245)

[10]Claims 6, 37, 41, 54-58, 60-62, 64, 66, 68-69, 71, 75, 77, 79, 82, 84, 87, 90-92, 95, 98, 100, 102, 104 and 118-25. (D.I. 246, ex. C at 3)

application, filed in July 19, 2006, was ongoing.

On August 6, 2008, a final office action issued in the '453 patent reexamination affirming the rejection of all claims. (D.I. 246, ex. E) On October 3, 2008, the CRU issued an "Action Closing Prosecution" in the '902 patent reexamination, finally rejecting all of the claims except dependent claims 91 and 104. (*Id.*, ex. F)

The parties have since appealed both final actions by the CRU to the Board of Patent Appeals and Interferences ("BPAI"), which heard argument on the '453 patent in December 2009. No decision has yet issued. Oral argument has not yet been scheduled on the '902 patent.

III. STANDARD OF REVIEW

A court shall grant summary judgment only if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). The moving party bears the burden of proving that no genuine issue of material fact exists. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 n.10 (1986). "Facts that could alter the outcome are 'material,' and disputes are 'genuine' if evidence exists from which a rational person could conclude that the position of the person with the burden of proof on the disputed issue is correct." *Horowitz v. Fed. Kemper Life Assurance Co.*, 57 F.3d 300, 302 n.1 (3d Cir. 1995) (internal citations omitted). If the moving party has demonstrated an absence of material fact, the nonmoving party then "must come forward with 'specific facts showing that there is a genuine issue for trial.'" *Matsushita*,

475 U.S. at 587 (quoting Fed. R. Civ. P. 56(e)). The court will "view the underlying facts and all reasonable inferences therefrom in the light most favorable to the party opposing the motion." *Pa. Coal Ass'n v. Babbitt*, 63 F.3d 231, 236 (3d Cir. 1995). The mere existence of some evidence in support of the nonmoving party, however, will not be sufficient for denial of a motion for summary judgment; there must be enough evidence to enable a jury reasonably to find for the nonmoving party on that issue. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986). If the nonmoving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

IV. DISCUSSION

A. Teles's Motion to Amend and Cisco's Motion to Dismiss

On October 1, 2009, Teles filed a motion to amend its patent infringement complaints in Civ. Nos. 09-72-SLR and 06-197-SLR and to amend its counterclaims and request for declaratory judgment in Civ. No. 09-232-SLR. (D.I. 86) Cisco opposed the motion on the basis that Teles remains a named party in the amended pleadings. Cisco argued that Teles, a non-exclusive licensee, now lacks standing to sue and has filed a motion to dismiss on that basis. (D.I. 198) Cisco also opposed the motion to amend on the basis that the amended pleadings in Civ. No. 09-232-SLR contain an extended list of accused products adding over 200 new products over multiple categories to the litigation. (D.I. 97 at 5) Cisco objected that the amended pleadings only conclusorily assert infringement as to these products; the bases for infringement

are not detailed. (*Id.*)

On June 7, 2010, after discovery closed and oral argument on claim construction had been held, the court issued an order that the parties supplement their briefing on the motions to amend and to dismiss. Specifically, it was not clear to the court if any of Cisco's concerns with respect to the motion to amend had been mooted by the close of discovery and whether all of the 200 products sought to be added to the pleadings in Civ. No. 09-232-SLR had been vetted through the discovery process. (D.I. 353) The parties have clarified their respective positions as follows.[11] (D.I. 362)

The parties agree that SSBG should be substituted for Teles in this case pursuant to Federal Rule of Evidence 25(c) and, therefore, the court will do so. (D.I. 361 at 1; D.I. 362 at 2) Cisco is correct that Teles's motion to amend must be denied, however, insofar as the proposed pleadings filed in connection with that motion merely add, rather than substitute, SSBG as a party. (D.I. 86, ex. 1B (Civ. No. 09-232-SLR), ex. 2B (Civ. No. 09-72-SLR)) The court no longer has jurisdiction over Teles, a non-exclusive licensee. *See Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1367 (Fed. Cir. 2008) (collecting authority). Accordingly, Cisco's motion to dismiss Teles is denied as moot.

In its request for supplemental briefing, the court informed Teles that it could file amended proposed pleadings deleting any of the 200 products that had not been vetted through discovery. Teles responded that it was its "understanding" that all of the 200

---

[11]Teles filed its submission on June 15, 2010, a day past the court's June 14, 2010 deadline. The court has elected not to strike the submission as untimely in this instance.

products "were the subject of discovery" and, quite surprisingly, listed an **additional** ten products "identified . . . after the earlier proposed pleading." (D.I. 362 at 3-4) The court rejects counsel's attempt to expand the record in this manner.[12]

Cisco has identified at least six products[13] that it contends were not contained in expert reports or otherwise vetted through discovery.[14] The parties' infringement and noninfringement briefs concentrate on the functionality of Cisco's operating system software and, to a large degree, omit reference to specific products; they certainly do not group or address 194 of them. Furthermore, Cisco argues that many of these products are not actually "accused products," they have been included for SSBG's damages case (as possible "convoyed sales"). (D.I. 368) The accused products are not clearly identified in plaintiff's summary judgment papers. Therefore, to the extent disputes regarding the accused products remain following the court's issuance of its claim construction order and the present opinion, the court has determined that they would be better decided from the bench (following proper identification in the pretrial order). Teles's motion to amend is denied to the extent that Teles will not remain a party, and denied as moot in other respects. The court will hereinafter refer to "SSBG" when discussing the infringement, enforceability and validity arguments at bar.

---

[12]Teles had not previously moved for leave to file a revised proposed pleading in connection with its pending motion. (D.I. 198) Presumably, had the court granted the motion and not requested supplemental briefing, Teles would have been satisfied with the original list.

[13]The 881 SRST and 888 SRST routers, MCS 6700 servers, ICS 7750 servers, Cisco IP phones, and Cisco IP phone software. (D.I. 361 at 3-4)

[14]The court agrees that these products do not appear in plaintiff's expert's infringement report. (D.I. 281 at JA6441-45)

B. Infringement

The court has before it cross motions for summary judgment. SSBG seeks partial summary judgment that Cisco's 1861, 881 SRST and 888 SRST router products infringe claim 34 of the '453 patent, claim 45 of the '431 patent, and claims 69 and 84 of the '902 patent. (D.I. 224) Cisco seeks summary judgment that its router products do not infringe the patents under any of the "fourteen infringing scenarios" identified by SSBG's expert in his infringement report.[15] (D.I. 302)

At issue in SSBG' infringement motion are apparatus claims of each patent, as follows:

'431 patent

> 34. Switching apparatus for routing a telephone call comprising non-packetized data **from a first end terminal located at a user's premises to a second end terminal located at another user's premises**, selectively by line switching or packet switching, the switching apparatus comprising:
>
> means for establishing a connection through a line-switching network to the second end terminal;
>
> means for line-switching transferring data received from the first end terminal as non-packetized data over the line-switching network to the second end terminal;
>
> means for establishing a connection through a packet-switching network to the second end terminal;
>
> means for packet-switching transferring data received from the first end terminal

---

[15]The court will focus, as the parties have, on whether certain limitations common to the asserted claims are met by SSBG's "infringing scenarios." The court found SSBG's papers largely unclear regarding its theories of infringement and, as a result, has relied upon SSBG's expert, through whom SSBG would establish its case at trial.

The court notes that the appendices to SSBG's expert report, supposedly organizing its infringement theories in charts and to a greater level of detail, were not included in the Joint Appendix nor were the pages contained on the CDs supplied by SSBG. The court, therefore, has relied on the text of that report.

as non-packetized data over the packet-switching network to the second end terminal;

and means responsive to a control signal for transferring to a line-switching transfer or a packet-switching transfer to the second end terminal;
said means responsive to a **control signal changing-over to a line-switching data transfer or a packet-switching transfer during the existing transfer** with the presence of said control signal.

'902 patent

69. Switching apparatus for selectively routing a telephone call from a first end terminal to a second end terminal, comprising:

means for **establishing a connection** to a packet switching network through which data can be sent to the second end terminal;

means for transferring first data of the telephone call originated by the first end terminal over the connection through the packet switching network for delivery to the second end terminal;

means for **establishing a connection** to a line-switching network through which data can be sent for delivery to the second end terminal;

means for transferring second data of the telephone call originated by first end terminal **over the connection** through the line-switching network for delivery to the second end terminal;

and means responsive to a control signal **for changing-over from a packet-switching mode of transfer of the first data of the telephone call to a line-switching mode of transfer of the second data of the telephone call without interruption of a call set-up procedure.**

84. Switching apparatus for switching data packets from multiple origin end terminals, the data packets containing headers including information identifying respective origin and destination end terminals, the switching apparatus comprising:

a packet switching device for transferring data packets through a packet switching network through which data can be sent for delivery to destination end terminals;

a line switching device for establishing **line connections** through a line-switching network through which data can be sent to the destination end terminals;

and a control device connected to the packet switching device and the line switching device for directing the data packets from the multiple origin end terminals to either the packet switching device or to the line switching device, the control device being responsive to the data packet headers for controlling the packet switching device and the line switching device for establishing and maintaining respective communications connections for data transfer with real-time properties between origin end terminals and destination end terminals, the control device also being responsive to a control signal **for changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communication connection without interruption of the communications connection.**

'431 patent

45. Switching apparatus for routing a telephone call from a first end terminal to a second end terminal, selectively by line switching or packet switching, the switching apparatus comprising:

means for **establishing a connection** through a line-switching network to the second end terminal;

means for line-switching transferring data received from the first end terminal over the line-switching network to the second end terminal;

means for **establishing a connection** through a mobile packet-switching network to the second end terminal;

means for packet-switching transferring data received from the first end terminal over the mobile packet-switching network to the second end terminal;

and means responsive to a control signal for transferring to a line-switching transfer or a packet-switching transfer to the second end terminal;

said means responsive to a control signal **changing-over to a line-switching data transfer or a mobile packet-switching transfer during the existing transfer** with the presence of said control signal.

(emphases added) Cisco seeks summary judgment of noninfringement with respect to all of the asserted claims and accused products.

By its memorandum order of the same date, the court has construed certain

claim limitations relevant to the issue of infringement.[16] Specifically, a "connection" or "communications connection" is a pathway between end-terminals through which data are transferred and, importantly, is established after the completion of call set-up. The "changing over" limitations require that the change-over occur during the communications connection between end-terminals, i.e., after completion of call set-up and during the voice or audio phase of the call. As described in further detail in the court's claim construction order, the problem solved by the invention was how to use internet telephony without interrupting the real-time transfer of data, i.e., a telephone conversation. *See* '902 patent at col. 3:25-28. The prosecution, reexamination history and specification are replete with references to this problem, the solution being a dynamic change-over from packet-switching to line-switching without having to terminate the call and start over. The court has also determined that the "means responsive to a control signal for changing over" is the control device 71 described in figure 4 of the patents.

With these constructions in mind, the court turns now to the issues of infringement.

1. Cisco's products

It is SSBG's position that Cisco products that are capable of executing software that enables routers to be "voice-enabled" infringe the patents in suit. (D.I. 281 at

[16]The parties have identified dozens of disputed terms. The court has construed the terms most essential in view of the parties' infringement positions and positions regarding the validity of the '431 patent. As discussed *infra*, the court has elected to stay its consideration of the validity of the '453 and '902 patents pending a final determination on the merits of the reexaminations of those patents and, therefore, need not construe every term identified by the parties.

JA6445-46, ¶¶ 14-15, 17) The Cisco software having these voice-enabled features is Cisco's Internetworking Operating System (or "IOS"). The IOS software has IP telephony capability and renders the accused Cisco products capable of interconnection and data transfer over packet-switching networks (e.g., an IP Wide Area Network or IP "WAN") or a line-switching network (such as the PSTN).

Although over 200 Cisco products (running the IOS) are accused of infringement, SSBG focused on the Cisco 1861 router at oral argument and in its summary judgment briefing. Cisco's 1861 router is marketed to small to medium sized offices to provide a unified communications system by offering the integration of voice gateway, call processing, voicemail, conferencing and security capabilities, among others.[17] The 1861 router has eight built-in ethernet ports that are used to transmit data packets to and from IP telephones. The 1861 router has four FXS[18] ports that are used to transmit analog (or non-packeted) data to and from analog telephones.

The Cisco 1861 router has built-in interfaces, specifically, FXO and ISDN Basic Rate Interface ("BRI") configurations,[19] for interfacing with the PSTN. These interfaces

---

[17]Unless otherwise indicated, these facts pertaining to Cisco's routers are derived from SSBG's "statement of undisputed facts" and Cisco's responses thereto. (D.I. 224 at 5 et al.; D.I. 330 at 30 et al.)

[18]It is the court's understanding that FXS ("foreign exchange subscriber" interface) and FXO ("foreign exchange office" interface) are common interfaces (or ports) found in analog telephony. Most simply, FXS is the wall plug; FXO is the plug on the telephone. A PBX ("private branch exchange") connection provides both FXS and FXO ports.

[19]ISDN is a common abbreviation for "integrated services digital network," an international communications standard for sending data over digital telephone lines or normal telephone wires. *See* http://www.webopedia.com/TERM/I/isdn.html. BRI is the basic ISDN configuration, consisting of two B-channels for carrying voice or data and

are capable of connecting to a line-switched network (such as the PSTN) and transferring telephone call data from a first telephone through the line-switched network for delivery to a second telephone. The 1861 router is capable of connecting to mobile data networks such as a 3G cellular network when equipped with a high-speed WAN interface card (or "HWIC").

The 1861 router (with the IOS) will attempt to transfer data over the IP WAN, but will change over to the PSTN upon determining that the IP WAN would not be suitable for the transfer. Reasons that the IP WAN may not be suitable include too much time delay or variation in delay. Additionally, certain "cause codes" (generated by the remote router connected to the telephone being called) indicate that the remote router has problems in forwarding data to the telephone being called and will cause a change over to PSTN.

SSBG also asserts that Cisco's 881 and 888 SRST routers infringe the claims. These routers have four built-in ethernet ports that are used to transfer data packets to and from IP telephones. The 881 and 888 SRST routers also have four FXS ports that are used to receive analog (non-packeted) data from analog telephones.

2. "Infringing Scenarios"

SSBG's expert, Robert Stillerman ("Stillerman"), has identified several "infringing scenarios" relevant to Cisco's products. Stillerman's infringement opinion relates to "Cisco products that are capable of executing software that enables routers [or]

---

one D-channel for carrying call control information. *See* http://www.webopedia.com/TERM/b/bri.html.

gateways [ ] to be 'voice-enabled.'" (D.I. 281 at JA6445, ¶ 14) These "Voice Enabled Switching Products" comprise "Voice Enabled IOS Products" that utilize Cisco's IOS software. (*Id.* at ¶ 15)

Stillerman explains that the Cisco Voice Enabled Switching Products employ two mechanisms for determining how to route a telephone call: consideration of the dial plan and Call Admission Control ("CAC"). From the dial plan, the Voice Enabled Switching Products "determine when a roundtable number has been dialed, and then determine which routes are available to reach the destination having that routable number." (*Id.*, JA6491-92 at ¶ 183) CAC determines whether a packet network has the "resources" to carry a voice call. (*Id.*, JA6488 at ¶ 176, citing "Tarng Exhibit 215") "CAC occurs during call setup after a dialable number has been matched and is done on a call by call basis." (*Id.*, JA6487 at ¶ 173) "When a call that is intended for the packet switching network fails to be admitted to that network, the next preferred route is considered. When that next route is the PSTN, then switch over from the packet switching network to the line switching network occurs." (*Id.*, JA6492 at ¶ 185)

According to Stillerman, all of the Voice Enabled Switching Products use CAC "at least in the handling of calls being considered for a packet switching network." (*Id.*, JA6490 at ¶ 178) "PSTN Fallback" and "MAX CONN" are examples of CACs used by the Voice Enabled Switching Products. (*Id.*, JA6488 at ¶ 175) With PSTN Fallback, "[i]n the event [an] impairment [delay, jitter and packet loss] is determined to be too high for the call being considered,[20] the call that was attempted over the first route packet

[20]A description of the different availability checks performed by the Voice Enabled Switching Products is not necessitated by the motions at bar.

switching network is abandoned and an alternate route to the destination [such as the PSTN] is attempted." (*Id.*, JA6498 at ¶¶ 202, 204, 206) That is, PSTN Fallback will establish a call over the packet-switching network so long as an acceptable value of delay is detected, otherwise, that route will be abandoned and the call will be attempted on the PSTN. (*Id.* at ¶ 209) This also occurs in the "PSTN Fallback with PBX Hairpin" scenario described by Stillerman, the only difference being that the first data of the call is a request from the PBX to route a call to a dialed number over a packet switching network. (*Id.*, JA6503 at ¶ 211)

Stillerman describes the "MAX CONN" CAC as follows:

> During the call setup, and during the period where information is being transferred as messages are exchanged between site A and site B, site B determines that the maximum number of connections ["max conn"] has already been reached. Site B rejects the call in a message to site A. Site A then checks to see if the call can be routed over another dial peer. The alternate dial peer using the PSTN is found and the call is routed over the PSTN.

(*Id.*, JA6504 at ¶ 215) Stillerman describes one scenario wherein this procedure may occur outside of the "call setup" phase and in the "voice state," that is, where a caller decides to transfer the call to another extension within the network. A transfer operation may occur whereby the PSTN is selected upon the caller's use of a "switch-hook flash" or "a button configured on the phone for flash or transfer." (*Id.*, JA6504-05 at ¶ 216) The second caller is on hold during the exchange process.[21] (*Id.*)

Stillerman describes several other infringing scenarios in which the decision as to whether to admit a call and/or to switch over to the PSTN occurs when the call is initially

---

[21]The foregoing "MAX CONN" scenarios fall under the umbrella of "Location Based CAC with Voice Enabled IOS," as defined by Stillerman.

routed, as compared to in the voice phase. (*Id.*, JA6508 at ¶¶ 222, 227 ("Resource-Based CAC with Gatekeeper); JA6515 at ¶ 239 ("CAC using Cisco Call Manager" ("CCM")); JA6518 at ¶ 248 ("CAC with RSVP Agent"); JA6520 at ¶ 257 ("Call Setup and re-routing under various network conditions"); JA6522 at ¶ 263 ("Call Forward"); JA6523 at ¶ 269 ("Call Forward – idivert"); JA6528 at ¶ 282 ("Call Control Discover"); JA6529 at ¶¶ 286-88 ("Codec Mismatch"); and JA6531 at ¶ 293 ("Infringing Wireless Scenarios").

3. "Changing over" or "change-over"

The primary claim construction issue presented by the parties concerns the use of the term "changing over" (or "change-over") in the patents. According to SSBG, a telephone call has three phases – a call set up, media, and tear-down phase – and change-over may occur during any of these phases. Cisco advocated that a change-over must occur only during the media (voice or midcall) phase of the call. For reasons discussed in the court's commensurate claim construction order, the court has found Cisco's construction to be the proper one.

The court need go no further than this construction to find the majority of SSBG's "infringing scenarios" inapplicable. As characterized by Stillerman, in all scenarios except for "Call Transfer," Cisco's routers redirect a call automatically to the PSTN when the data network is congested at the time of call **setup**. At no point does Stillerman describe calls being rerouted to PSTN after call setup or while the call is in progress (rather than placed on hold). There is no indication that congestion is detected between routers after data is transmitted between the end terminal

telephones.[22] SSBG makes no such arguments in its papers. (D.I. 247) Stillerman's declaration in support of SSBG's motion for summary judgment of infringement is consistent with his expert report in these respects.[23] (D.I. 222, ex. 3 at ¶¶ 18, 22)

4. "Call Transfer" scenario

The "call transfer scenario" is the only of SSBG's infringing scenarios that implicate a change-over following the establishment of a connection. During a call in progress, caller one or two may initiate a call transfer (to caller three) by "a switchhook flash and dialing a number, or by depressing the appropriate soft key on a Cisco phone[.]" (D.I. 281, JA6523 at ¶ 270) Stillerman describes the "first data" of the call, including the dialed digits, destined for the end terminal as well as the "second data" of the call, which is any data sent over the PSTN once the call is transferred to the PSTN. (*Id.*, JA6523 at ¶¶ 271-72) He describes the control signal that is sent for the purpose of routing the call over the most preferable network. (*Id.* at ¶ 273) According to Stillerman, "[s]witch over occurs when the next configured dial peer to be used for the

---

[22]One final "infringing scenario" proffered by Stillerman – the Verification Involving PSTN Reachability (or "VIPR") feature – is not addressed by the court in this opinion. To date, the VIPR functionality is part of only one Cisco product, the "Intercompany Media Engine" software. Insofar as this product was not released by Cisco until after the close of discovery in this action and, consequently, was not the subject of discovery, the court has excluded Intercompany Media Engine (and, consequently, VIPR) from the present action. (D.I. 370 at 173-74) The excluded Intercompany Media Engine product (with VIPR) is the only product identified by SSBG as meeting the "change over" limitation under Cisco's proffered construction. (D.I. 247 at 6-11)

[23]Cisco objects that the 881 and 888 SRST routers were never previously identified as "accused products" in this lawsuit and, consequently, they should be excluded from trial. The court need not decide the issue because these products would not infringe under the court's construction of "change over."

two separate calls (connections). Viewed in the context of the new call being initiated to caller three, the change-over precedes the voice phase of this connection with the transferee and, therefore, falls outside of the scope of the claims. Viewed in the context of the call between callers one and two, the change-over does occur after the initiation of the voice phase of the call. The purpose of this change-over, however, is not to improve the call quality or improve data flow between callers one and two; the purpose is to establish the best connection for the call being initiated to transferee caller three. As the court has found that a "change-over" must occur after the call setup phase, the issue presented by the call transfer scenario is whether the change-over from packet-switching to line-switching occurs during an ongoing end-terminal to end-terminal connection between callers one and two. Stillerman provides no detail regarding the effect of the user's request for call transfer, such as, at what point data flow between callers one and two is suspended or terminated. There is simply no evidence of record that the preexisting call between callers one and two does not terminate upon the request for transfer to caller three. Absent any indication that the change-over occurs during an existing voice connection (between callers one and two), as construed by the court, summary judgment of noninfringement is appropriate.

5. "Means responsive to a control signal for changing over"

The parties agree that a control device is disclosed as the structure corresponding to the "means responsive to a control signal for changing over" function; such device is control device 71 (described by figure 4 of the patents). There are no other corresponding structures specifically disclosed in the specification. Cisco argues that the claims should be limited, therefore, to the control device 71. SSBG asserts that

the patents describe "general control devices for performing the change-over," many of which were known in the art and appreciated by persons of ordinary skill in the art as being capable of the function of responding to a control signal. (D.I. 247 at 19) SSBG relies on the deposition testimony of Cisco's expert, Thomas La Porta ("La Porta"), in this regard. (D.I. 247 at 19 n. 66&67; D.I. 207 at 33, n. 93-94) Thus, SSBG asserts, the claims need not be limited to control device 71.

A corresponding structure for purposes of 35 U.S.C. § 112, ¶ 6 must be disclosed within the four corners of the patent or clearly within the intrinsic record. *See Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1208 (Fed. Cir. 2002) ("Structure disclosed **in the specification** is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.") (citation omitted) (emphasis added). SSBG agrees that control device 71 (in figure 4) is a corresponding structure. (D.I. 207 at 35-36) It generally argues, however, that the patents provide a more general description of a control device in the following passages:

> (1) "A switch according to the present invention has a packeting device for packeting and unpacketing data, an IP switching device for establishing connections for switching through data channels and a control device which directs incorning data either to the IP switching device or to the line switching device depending on the control signals." ('902 patent, col. 3:51-57)
>
> (2) "A packet switch, alias packet switching apparatus, is also called a router, an IP switch or a host computer." (*Id.*, col. 1:44-45)
>
> (3) "In addition where applicable, an ATM interface and an interface with a mobile phone network can also be provided." (*Id.*, col. 8:37-38)
>
> (4) "The implementation of the switches 7a and 7b [of Figure 1] takes place selectively through hardware or software. The line switching is thereby

> preferably implemented by hardware and the packet-switching by software. Thus with line switching, after switching through a connection the data are forwarded without further examination, whilst with packet switching the destination address of each data packet is evaluated and the next IP switch has to be selected from the routing tables. A switching device for the switches 7a and 7b which undertakes a change over between packet and line switching is preferably likewise implemented as software." (*Id.* at col. 7:37-47)

(D.I. 207 at 25 & n.41-44)

La Porta's testimony does not call out any other disclosures in the specification. Rather, La Porta generally testified that persons of skill in the art would know how to use a control device or equivalent device to perform the claimed function. Specifically, "[t]he structure would be a switch that could take an input signal and switch from one line to another, one communication path to another, and I think that is a well-known structure" in the art. (D.I. 282 at JA8930, p. 403)

The disclosures called out by SSBG do not expand the guidance provided in the specification with respect to the control devices illustrated in figure 4:

> The internal control commands, as to whether a packet switching is to take place through the IP switch or a line switching is to take place through the line switching device 73, are produced in a control device 71. The device 71 is substantially a switch which forwards the incoming data either as data packets to the IP switch 72 or as bit flow to the line switching device 73. To this end, the control information of the incoming data are evaluated. The change-over control unit 711 monitors and controls which open connections are present (i.e., which and how many data channels are connected) and which bandwidth the individual data channels require.
>
> In detail the control device 71 has a change-over control unit 711, two packeting/unpacketing devices 713 and 714, and an intermediate register 712. The change-over control unit is connected to a topography data bank 75 which contains geographical data for a number of IP addresses.

('902 patent, col. 8:59 – col. 9:9) In view of this specific disclosure, the "means responsive to a control signal for changing over" limitation is limited to the control

device 71 and its equivalents. *See Minks v. Polaris Indus., Inc.*, 546 F.3d 1364, 1377 (Fed. Cir. 2008) (limiting claim to a structure of one Figure and structural equivalents) (citations omitted).

In this regard, not all structures known in the art necessarily fall within the scope of permissible equivalents. In order to prove literal infringement, SSBG must show "that the relevant structure in the accused device perform[s] the identical function recited in the claim and [is] identical or equivalent to the corresponding structure in the specification." *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1320 (Fed. Cir. 2003). Equivalence is determined by whether the structures "perform the identical function, in substantially the same way, with substantially the same result." *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1364 (Fed. Cir. 2000).

The issue at bar, therefore, is whether SSBG has adduced proof of equivalence regarding control device 71.[25] SSBG asserts that, if the court were to agree with Cisco's construction, a reasonable juror could find that Cisco's products meet the control device limitation through the doctrine of equivalents. (D.I. 247 at 20 ("A control device for changing-over generally includes a microprocessor, memory, and input/output circuits to perform the control function[.]")) In support, SSBG points to one paragraph of Stillerman's declaration filed in connection with SSBG's opposition to Cisco's motion, which does not provide a function/way/result analysis.[26] (D.I. 247 at 20,

---

[25]Equivalence is a question of fact, but summary judgment is appropriate where no reasonable fact finder could find equivalence. *See Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) (citations omitted).

[26]SSBG also broadly cites its claim construction briefs.

citing *id.*, ex. 1 at ¶ 10) SSBG cannot demonstrate infringement on this record.

6. Direct infringement

"Direct infringement requires a party to perform each and every step or element of a claimed method or product." *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378 (Fed. Cir. 2007). "If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law." *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000).

Cisco asserts that it cannot infringe the '431 patent under Stillerman's "infringing wireless scenario" because, for a customer to carry out this scenario using Cisco's products, the customer would have to: (1) purchase a Cisco voice-enabled router with a 3G card; (2) obtain the appropriate service plan with his wireless carrier, including a SIM[27] card for a supported wireless carrier; (3) configure the router to support packet-switched VoIP calls; (4) "configure the dial[ ] peers such that VoIP calls must be first routed so that the packet-switched wireless communication through the 3G card is the primary route, and the PSTN is the back up route;" and (5) configure one of the CACs for these calls. (D.I. 219 at 34) Cisco states that SSBG has not provided any evidence that any customer has actually done this and used its products in an infringing manner. (*Id.*) Moreover, there is no indication that Cisco recommends or intends that its customers configure its products in this way. (*Id.*) According to Cisco's data sheet, its 3G card provides a "secure backup solution" that is an "alternative to wireline backup

[27]An acronym for a subscriber identity module. Generally, a SIM card is a smart card that encrypts voice and data transmissions and stores data about a user for identification purposes. *See* http://www.webopedia.com/TERM/S/subscriber_identity_module.html.

solutions;" "[i]f a network fails, the Cisco integrated services router routes mission-control data to the Cisco 3G WWAN HWIC for transmission across the wireless infrastructure." (*Id.* at 35, citing D.I. 221, ex. 1 at 1)

In his expert report, Stillerman states that, in this scenario, "it is **possible** for a phone, for example a Cisco 7961 **configured** for SIP operation, to make a call to a destination end terminal via the Cisco Voice Enabled Switching Product at the branch office . . . and access the mobile data network for the call. When [this product] is also able to access the PSTN, then any call that is placed over the mobile packet data network will be subject to the CAC functions . . . that the Cisco Voice Enabled Switching Products perform prior to admitting the call to that mobile packet data network." (D.I. 281 at JA6530-31, ¶ 293) (emphasis added) Stillerman provides no examples of customers who are alleged to have actually used the accused products in this manner, nor does SSBG call out any in its papers.

In response to Cisco's motion, SSBG asserts, without further explanation, that "Cisco sells numerous types of adapters/modules for 3G GSM, CDMA and WiFi wireless capabilities," which Cisco has ignored in its motion. (D.I. 247 at 22) SSBG also asserts that, under *Fantasy Sports Properties, Inc. v. Sportsline.com, Inc.*, 287 F.3d 1108 (Fed. Cir. 2002), Cisco infringes by selling software that may be configured by a user to infringe, since the infringing capabilities are "already present in the underlying software." (D.I. 247 at 22-23, citing *Fantasy Sports*, 287 F.3d at 1118)

The court disagrees that *Fantasy Sports* is applicable to the present situation. In that case, the accused fantasy football software product was "able to [be] customize[d]"

to include a bonus scoring system that was described in the asserted patent. Emphasizing that infringement may not be based on only a mere capability of infringing modification,[28] the Federal Circuit stated that,

> in order to infringe the '603 patent, the code underlying an accused fantasy football game must be written in such a way as to enable a user of that software to utilize the function of awarding bonus points for unusual plays such as out-of-position scoring, without having to modify that code. In other words, an infringing software must include the "means for scoring . . . bonus points" regardless [of] whether that means is activated or utilized in any way.

Id. at 1117-18. In contrast to *Fantasy Sports*, SSBG concedes that Cisco does not supply the entire invention: Cisco does not make or sell SIM cards. SSBG nevertheless argues that "SIM cards are simply something customers are intended to have and install" in order to access a 3G wireless network. (D.I. 247 at 23) SSBG cites no evidence, from its expert or otherwise, in support of this proposition.[29] Insofar as no reasonable jury could find that Cisco directly infringes on this record, summary judgment of noninfringement is warranted on this alternative basis.

7. Conclusion

All but one of SSBG's relevant "infringing scenarios" are premised on its construction of the term "change over," which the court has rejected. SSBG has not identified a genuine issue of material fact for trial with respect to "call transfer." With respect to those asserted claims requiring "means responsive to a control signal for

---

[28] *See, e.g., Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1331 (Fed. Cir. 2001) ("Under the precedent of this Circuit[,] that a device is capable of being modified is not sufficient, by itself, to support a finding of infringement.") (cited by *Fantasy Sports*).

[29] The court notes that SSBG devoted only about two pages of its responsive brief to this issue.

changing over," the court's holding is buttressed insofar as there is no dispute that Cisco's products do not contain the "control device" structure as described in the specification. Finally, no reasonable jury could find that Cisco infringes the '431 patent for the additional reason that there is no indication that Cisco directly infringes that patent. Cisco's motion for summary judgment of noninfringement is granted;[30] SSBG's motion for partial summary judgment of infringement is denied.

C. Validity of the '453 and '902 Patents: 35 U.S.C. §§ 102 and 103

1. Background

Cisco seeks judgment that the '453 and '902 patents are invalid in view of the same references it has advanced in the reexaminations. These primary references are U.S. Patent No. 6,069,890 to White et al. ("White"), U.S. Patent No. 6,137,792 to Jonas et al. ("Jonas"), and U.S. Patent No. 5,598,411 to Matsukawa ("Matsukawa"). Each were before the PTO on reexamination and found to invalidate certain claims. Cisco reiterates those positions here, as well as advances certain new arguments not considered by those examiners.

Specifically, Cisco asserts that the combination of White and Jonas render the asserted claims of the '453 patent obvious, consistent with the PTO's conclusions. (D.I. 278 at JA3881) Cisco now also asserts that the White-Jonas combination renders the '902 patent obvious.

On reexamination, the PTO has found claims 68, 69, 71, 75, 77, 79, 82, 84, 87, 90, 92, 95, 98, and 100 (plus others not at issue) of the '902 patent anticipated by

---

[30]In view of the foregoing, SSBG's motion in limine to limit the trial testimony of Cisco's expert Kevin Negus is denied as moot. (D.I. 206)

Jonas. (D.I. 284 at JA10149-71, 10228-56) Cisco seeks judgment that claims 34, 74, 76, 83, 85, 91, 101 and 104 of the '902 patent, added to this litigation after the commencement of the '902 patent reexamination, are anticipated by Jonas, as are claims 34, 35, 36 and 38 of the '453 patent.

The PTO also rejected the '902 patent claims at issue in the reexamination as anticipated by Matsukawa; Cisco seeks that same judgment here, and adds that Matsukawa also anticipates claims 34, 68, 69, 71, 74-77, 79, 82-85, 87, and 90-91 of the '902 patent, as well as claims 34, 35, 36 and 38 of the '453 patent. (*Id.* at JA10259-62) Finally, Cisco asserts that, if this court adopts its construction of the "mobile phone packet switching network" limitation, the combination of Jonas plus U.S. Patent No. 6,125,113 to Farris, et al. ("Farris") renders the '431 patent invalid as obvious.

In short, the PTO has found that Jonas identifies the problem inherent with sending time-sensitive data communications over the internet, and discloses a solution of changing over in the middle of an end-to-end connection. This ability to change-over during the existing transfer is the only component of the patented inventions not disclosed by White. Farris is similar to White, but also discloses routing calls from cellular telephones. Finally, the PTO has determined that Matsukawa discloses changing over an existing end terminal to end terminal call from a packet-switching to a line-switching connection during (and without interruption of) the call-set up procedure.

2. Discussion

The court notes at the outset that the BPAI and Federal Circuit have not affirmed the rejection of any of the claims on reexamination and, consequently, the PTO's findings at this stage are not binding. Moreover, the examiners' conclusions on

reexamination are not relevant to the merits of the pending summary judgment motion. This court is not, as the examiners were, a finder of fact with respect to invalidity; it may only adjudge whether SSBG has advanced sufficient evidence from which a reasonable jury could find the patents valid.[31]

At this juncture, the court notes that SSBG cites a total of two paragraphs of Stillerman's rebuttal expert report in support for its validity position. (D.I. 251 at 25-36[32]) In full, those sections state only that:

> The Supplemental Response [of June 2, 2004 in the '453 patent prosecution history] correctly argued that the teachings of the Jonas and Arango patents were limited to transmission of data packets (as compared with the '453 which taught other forms of data, such as analog data), computer-to-computer communications (as opposed to human-to-human or non-machine communications) and POPs (Points of Presence) or signaling or routing tables or ports (as opposed to other types of routers, such as CPE routers and WAN routers). It is implicit that the examiner agreed with these arguments, as the patents were issued over that art.

(D.I. 281 at JA7640, ¶ 93) Additionally:

> La Porta has not identified the structure in Jonas that corresponds to the switch 7 of the patents-in-suit. There is no disclosure in Jonas of a structure that is identical to switch 7. For example, Router 20 receives data packets from a host 1. The invention is directed to transmitting data packets, not real-time voice packets. Jonas is oriented to using protocols such as TCP over IP as opposed to voice protocols that are typically carried over UDP. Therefore, even the packet protocols are ill suited to voice transmission. Furthermore, there is no

---

[31]It is generally not the court's practice to admit the reexamination record as trial evidence. As the rejections on reexamination are not binding, they are generally not relevant to the issues to be tried. Almost always, such evidence is more prejudicial than probative, and creates jury confusion vis a vis the complex invalidity standards they are asked to apply – for example, that patents enjoy a statutory presumption of validity.

[32]In its argument, SSBG references its proffered statement of facts at paragraphs 20, 26-28 and 31-34. Only paragraphs 93 and 306 of Stillerman's rebuttal expert report are cited in evidentiary support of those sections.

> disclosure in Jonas regarding transmitting of voice data for which the patents-in-suit are directed.

(*Id.* at JA7686-87, ¶ 306) Even if this cursory discussion were sufficient to withstand summary judgment on anticipation by Jonas, these passages do not relate to Cisco's other anticipation or obviousness arguments. Stillerman's validity report does address each asserted reference substantively. The court declines, however, to extend its limited judicial resources crafting validity positions on behalf of SSBG, which is represented by (at least six) counsel.

The court is generally reluctant to stay proceedings in view of concurrent reexamination proceedings, but does so in this case for several reasons. Granting summary judgment of invalidity on this record would be, essentially, founded on SSBG's failure of proof, not necessarily the merits of Cisco's claims. Reexamination of the '453 and '902 patents has moved to final action. As both reexaminations are nearing the conclusion of the first stage of appellate review (with the BPAI), it is very possible that the Federal Circuit will hear the case through an appeal of the BPAI decisions prior to receiving the court's issuance of a post-trial (JMOL) opinion in this case and an appeal therefrom.[33] Under these unusual circumstances, the court will stay the issue of validity of the '453 and '902 patents pending appeal of the rejections on the reexaminations and will issue an order accordingly. The court need not stay consideration of the obviousness of the '431 patent; insofar as the court finds the '431

---

[33]Even should a jury find in SSBG's favor, and the ruling be upheld by the court on the trial record, the PTO may nevertheless find the patents invalid; the presumption of validity does not apply in PTO proceedings. *See, e.g., In re Swanson,* 540 F.3d 1368, 1378-79 (Fed. Cir. 2008).

invalid under 25 U.S.C. § 112, as discussed *infra*, that issue is moot.

3. *Daubert* motions

Two of the pending motions in limine relate to validity, specifically, SSBG's motion to limit La Porta's testimony and Cisco's motion to exclude the opinion of SSBG's expert Christopher Spadea ("Spadea") on commercial success. (D.I. 205, 202) There is no cross-motion (by SSBG) for a judgment of validity, therefore, the court's ruling on the La Porta motion does not affect its disposition of the issues at bar. In view of the court's decision to stay trial on the '453 and '902 patents on validity, the remaining *in limine* motions are denied as moot.[34]

D. Inequitable Conduct

Cisco claims that the '431 patent is unenforceable due to inequitable conduct. Specifically, Cisco asserts that Vincent DeLuca ("DeLuca"), who was acting as both the prosecuting attorney for the '431 patent application and as lead counsel for SSBG in the '453 and '902 rexaminations, committed inequitable conduct by knowingly and intentionally failing to disclose information about those reexaminations to the examiner of the copending '431 patent application. (D.I. 245 at 1) Cisco also claims that the duty of candor was violated by Prof. Schindler, first named inventor on the '431 patent. (*Id.* at 14) SSBG seeks summary judgment of no inequitable conduct. (D.I. 217) There is no cross motion by Cisco.

1. Standards

Applicants for patents and their legal representatives have a duty of candor,

---

[34]The parties' stipulations to extend time to file trial-related materials (D.I. 378, 383) are terminated.

good faith, and honesty in their dealings with the PTO. *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995); 37 C.F.R. § 1.56(a). This duty is predicated on the fact that "a patent is an exception to the general rule against monopolies and to the right of access to a free and open market." *Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.,* 324 U.S. 806, 816 (1945). The duty of candor, good faith, and honesty includes the duty to submit truthful information and the duty to disclose to the PTO information known to patent applicants or their attorneys which is material to the examination of a patent application. *Elk Corp. of Dallas v. GAF Bldg. Materials Corp.*, 168 F.3d 28, 30 (Fed. Cir. 1999). A breach of this duty constitutes inequitable conduct. *Molins*, 48 F.3d at 1178.

If it is established that a patent applicant engaged in inequitable conduct with respect to one claim, then the entire patent application is rendered unenforceable. *Kingsdown Med. Consultants v. Hollister Inc.*, 863 F.2d 867, 877 (Fed. Cir. 1988). Additionally, "[a] breach of the duty of candor early in the prosecution may render unenforceable all claims which eventually issue from the same or a related application." *Fox Indus., Inc. v. Structural Pres. Sys., Inc.*, 922 F.2d 801, 803-04 (Fed. Cir. 1990).

A finding of inequitable conduct is "an equitable determination" and, therefore, "is committed to the discretion of the trial court." *Monon Corp. v. Stoughton Trailers, Inc.*, 239 F.3d 1253, 1261 (Fed. Cir. 2001). In order to establish unenforceability based on inequitable conduct, a defendant must establish by clear and convincing evidence that: (1) the omitted or false information was material to patentability of the invention; (2) the applicant had knowledge of the existence and materiality of the information; and (3) the

applicant intended to deceive the PTO. *Molins*, 48 F.3d at 1178. A determination of inequitable conduct follows a two-step analysis. The withholding of information must first meet threshold findings of materiality and intent. *Id.*

Rule 56 provides:

> Information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
>
> (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
>
> (2) It refutes, or is inconsistent with, a position the applicant takes in:
> (i) Opposing an argument of unpatentability relied on by the Office, or
> (ii) Asserting an argument of patentability.

37 C.F.R. § 1.56(b) (2007).[35]

After determining that the applicant withheld material information, the court must decide whether the applicant acted with the requisite level of intent to mislead the PTO. *See Baxter Int'l, Inc. v. McGaw Inc.*, 149 F.3d 1321, 1327 (Fed. Cir. 1998). "Intent to deceive cannot be inferred solely from the fact that information was not disclosed; there must be a factual basis for finding a deceptive intent." *Hebert v. Lisle Corp.*, 99 F.3d 1109, 1116 (Fed. Cir. 1996). That is, "the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability

---

[35]Further,

> [a] prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

37 C.F.R. § 1.56(b) (2007).

to require a finding of intent to deceive." *Kingsdown*, 863 F.2d at 876. A "smoking gun" is not required in order to establish an intent to deceive. *See Merck*, 873 F.2d at 1422. An inference of intent, nevertheless, is warranted where a patent applicant knew or should have known that the withheld information would be material to the PTO's consideration of the patent application. *Critikon, Inc. v. Becton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1256 (Fed. Cir. 1997)

call is tried after not admitting the forwarded call to the packet-switching network attempt." (*Id.*, JA6524 at ¶ 274) (emphasis added)

Call transfer necessarily involves establishing a connection to a third end terminal. According to Cisco, one of the original callers must put the call on hold in order to initiate the transfer. Assuming that the Cisco voice-enabled router products establish the proposed call over the PSTN (rather than the WAN), the original transferor is thereafter dropped from the call. Thus, "there is no change over from packet-switching to line-switching of the voice data that was transferred during the **original** connection" between the first and second end terminals. (D.I. 219 at 23) (emphasis added)

SSBG's response is both brief and convoluted; it simply states that "Cisco ignores the fact that Cisco phone systems may allow a phone call for delivery to one end terminal to be answered by another party, such as a secretary." (D.I. 247 at 17) SSBG provides no rebuttal to Cisco's characterization of the call transfer process. SSBG appears to assert a doctrine of equivalents argument, but cites no expert testimony or other evidence in support thereof.[24] (D.I. 247 at 18 ("[A] reasonable juror could find that the ability for a call center to transfer an incoming call to the intended party without dropping the call and requiring the call to redial is a call from end terminal

The most pertinent dates relating to this motion are as follows. A first office action was issued in the '453 reexamination on February 13, 2008, rejecting all of the claims on reexamination, including claim 34. (D.I. 246, ex. D) On November 27, 2007, a first office action issued in the '902 patent reexamination, rejecting all claims, including claim 36. (*Id.*, ex. C) Examiner Escalante relied on six prior art references in support of his initial rejections under 35 U.S.C. §§ 102 and 103.

On August 6, 2008 and October 3, 2008, respectively, Examiner Escalante issued a final rejection in the '453 patent reexamination and a right of appeal notice in the '902 patent reexamination. With the exception of dependent claims 91 and 104 of the '902 patent, all of the claims remained rejected.

On August 19, 2008, an amendment was filed in the '431 application. In that amendment, DeLuca added three new claims, claims 72-74. Claims 72 and 73 issued as claims 45 and 46 of the '431 patent without amendment. Those claims are nearly identical to claim 34 of the '453 patent and claim 36 of the '902 patent, rejected on reexamination:

'453 Patent, Claim 34 - rejected	'431 Patent, Claim 45
Switching apparatus for routing a telephone call **comprising non-packetized data** from a first end terminal **located at a user's premises** to a second end terminal **located at another user's premises**, selectively by line switching or packet switching, the switching apparatus comprising:	Switching apparatus for routing a telephone call from a first end terminal to a second end terminal, selectively by line switching or packet switching, the switching apparatus comprising
means for establishing a connection through a line-switching network to the second end terminal	means for establishing a connection through a line-switching network to the second end terminal;
means for line-switching transferring data received from the first end terminal **as non-packetized data** over the line-switching network to the second end terminal	means for line-switching transferring data received from the first end terminal over the line-switching network to the second end terminal;
means for establishing a connection through a packet-switching network to the second end terminal	means for establishing a connection through a **mobile** packet-switching network to the second end terminal
means for packet-switching transferring data received from the first end terminal **as non-packetized data** over the packet-switching network to the second end terminal; and	means for packet-switching transferring data received from the first end terminal over the **mobile** packet-switching to the second end terminal; and
means responsive to a control signal for transferring to a line-switching transfer or a packet-switching transfer to the second end terminal; said means responsive to a control signal changing-over to a line-switching data transfer or a packet-switching transfer during the existing transfer with the presence of said control signal.	means responsive to a control signal for transferring to a line-switching transfer or a packet-switching transfer to the second end terminal; said means responsive to a control signal changing-over to a line-switching data transfer or a **mobile** packet-switching transfer during the existing transfer with the presence of said control signal.

'902 Patent, Claim 36 - rejected	'431 Patent, Claim 46
A method for transferring data selectively by line switching or by packet switching from a first switch to a second switch, the first switch being part of or having access to a line-switching network and a packet switching network, comprising:	A method for transferring data selectively by line switching or by packet switching from a first switch to a second switch, the first switch being part of or having access to a line-switching network and a **mobile** packet switching network, comprising:
packetizing the data into data packets in the first switch if the data does not yet exist as data packets	packetizing the date into data packets in the first switch if the data does not yet exist as data packets;
transferring the data packets from the first switch through the packet-switching network to the second switch	transferring the data packets from the first switch through the **mobile** packet-switching network to the second switch;
checking whether a control signal exists for changing-over from the packet-switching data transfer of the data packets through the packet switching network to a line-switching connection to the second switch, wherein the control signal is produced by a network management system	checking whether a control signal exists for changing-over from the packet-switching data transfer of the data packets through the **mobile** packet switching network to a line-switching connection to the second switch, wherein the control signal is produced by a network management system;
establishing the line-switching connection through the line-switching network to the second switch in response to said control signal, if the line-switching connection is not yet present; and	establishing the line-switching connection through the line-switching network to the second switch in response to said control signal, if the line-switching connection is not yet present; and
changing-over from the packet-switching data transfer of the data packets through the packet switching network to a line-switching data transfer in response to said control signal and transferring data over the line switching connection to the second switch.	changing-over from the packet-switching data transfer of the data packets through the **mobile** packet switching network to a line-switching data transfer in response to said control signal and transferring data over the line switching connection to the second switch.

To reiterate, these claims were added to the '431 patent application **after** the final rejection was received in the '453 patent reexamination, and between the first and final rejections of the '902 patent on reexamination.

There is no dispute among the parties that DeLuca did not specifically inform the '431 Examiner Qureshi, at any time prior to the issuance of the '431 patent, of the final rejections of either the '453 or '902 patents on reexamination. (e.g., D.I. 217, ex. 9 at 60:6-61:2) It is SSBG's position that Examiner Qureshi indicated to DeLuca that he need not supply any such information. According to DeLuca, on December 17, 2007, prior to the issuance of both final rejections in the reexaminations, DeLuca had an in-person interview with Examiner Qureshi. DeLuca testified that the "first thing [he] brought up" at that meeting was generally confirming with Examiner Qureshi that he was "aware . . . that the parent applications [were] presently involved in reexamination proceedings." (*Id.* at 53:6-56:20) According to DeLuca, he asked Examiner Qureshi whether he wanted the applicants to duplicate any of the filings in the reexaminations in the '431 file wrapper, to which Examiner Qureshi replied "don't worry about it."[36] (*Id.*) Schindler, who was also allegedly at the meeting, testified similarly.[37] (*Id.*, ex. 8 at 242:18-244:6) There is no indication in the file wrapper of the '431 patent that this interview occurred.

---

[36]DeLuca has also submitted a declaration to this effect. (D.I. 217, ex. 4 at ¶ 6)

[37]The court notes that, despite the reams of (largely unnecessary) paper filed in support of the motions at bar, SSBG provided only four pages of Schindler's testimony in connection with its motion.

SSBG also cites testimony of its former in-house attorney, Joern Gender ("Gender"), to this effect, as well as a declaration. (D.I. 217, ex. 3 at ¶ 10) In both instances, SSBG has not submitted the pages prior to its cited excerpts. It is not abundantly clear to the court, therefore, that Gender was in attendance at this supposed meeting, although it seems to be SSBG's position insofar as Gender had notes regarding the interview. Gender's declaration states that either Schindler or DeLuca suggested that SSBG would provide to Examiner Qureshi the first office actions in the reexaminations, but that Examiner Qureshi later indicated that he did not need to discuss the reexaminations. (*Id.*, ex. 3 at ¶¶ 10-11)

3. Discussion

The first basis of SSBG's motion is that, in its view, Cisco has not substantiated its claim that rejections of claim 34 of the '453 patent and claim 36 of the '902 patent are material. (D.I. 293 at 8-11) This position is quite remarkable, as the Federal Circuit has explicitly stated that the rejection of substantially similar claims in co-pending applications is material:

> [A] contrary decision of another examiner reviewing a substantially similar claim meets the *Akron Polymer* "reasonable examiner" threshold materiality test of "any information that a reasonable examiner would substantially likely consider important in deciding whether to allow an application to issue as a patent." 148 F.3d at 1382[.] Patent disclosures are often very complicated, and different examiners with different technical backgrounds and levels of understanding may often differ when interpreting such documents. Although examiners are not bound to follow other examiners' interpretations, knowledge of a potentially different interpretation is clearly information that an examiner could consider important when examining an application.

Further,

> [the] information meets the threshold level of materiality under new Rule 56, in that "[i]t refutes, or is inconsistent with, a position the applicant takes in. . . [a]sserting an argument of patentability." 37 C.F.R. § 1.56(b)(2) (2002). When prosecuting claims before the Patent Office, a patent applicant is, at least implicitly, asserting that those claims are patentable. A prior rejection of a substantially similar claim refutes, or is inconsistent with the position that those claims are patentable. An adverse decision by another examiner, therefore, meets the materiality standard under the amended Rule 56.

Dayco Products, Inc. v. Total Containment, Inc., 329 F.3d 1358, 1368 (Fed. Cir. 2003). The *Dayco* rationale is equally applicable to prior rejections during reexamination (wherein the applicant's rights are at stake). The court also rejects SSBG's suggestion that the rejections of claim 34 of the '453 patent and claim 36 of the '902 patent were necessarily cumulative insofar as Examiner Qureshi indicated he was aware of the

reexaminations. (D.I. 293 at 10-11) "It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, except where the interview was initiated by the examiner and the examiner indicated on the 'Examiner Initiated Interview Summary' form (PTOL-413B) that the examiner will provide a written summary." MPEP § 713.04 (8th Ed., Rev. 7, 2008). The court need not, on SSBG's motion, infer that such an interview took place. Cisco clearly challenges this fact and, taking all reasonable inferences in Cisco's favor, it is equally plausible that DeLuca failed to document the event because no meeting actually took place. On these facts – the similarity of rejected and copending claims in related applications, DeLuca's involvement with both the reexaminations and the '431 application, DeLuca's failure to specifically inform Examiner Qureshi of the rejections on reexamination,[38] and the lack of any indication that Examiner Qureshi excused DeLuca from his duty of disclosure in this respect – an intent to deceive on the part of DeLuca is readily inferrable.

In view of the high level of materiality of the withheld information in this case, an intent to deceive by Schindler, a named inventor on both the rejected patents and new '431 patent application, is also inferrable on the facts of record. Schindler's testimony implies that Schindler was present in the purported interview with Examiner Qureshi.

---

[38]There is more than one way by which DeLuca could have fulfilled his duty of disclosure. Verbally informing Examiner Qureshi and properly documenting that interview in accordance with the MPEP does not appear to be the most straightforward method in this regard. An Information Disclosure Statement seems the most appropriate vehicle. Alternatively, DeLuca could have posited remarks in a response to an office action by Examiner Qureshi; at a minimum, such statements could have accompanied the amendment adding claims 72 and 73.

Schindler stated that he understood that it was important to disclose to the examiner the existence of the reexamination, and he had "no idea" whether Examiner Qureshi ever reviewed any reexamination materials. Schindler did not state that he disclosed anything to Examiner Qureshi in accordance with his duty. (D.I. 217, ex. 7 at 236:21-237:4) In sum, SSBG' motion for summary judgment of no inequitable conduct is denied.

E. Validity of the '431 Patent: 35 U.S.C. § 112

Finally, the court addresses Cisco's motion for summary judgment that certain claims of the '431 patent are invalid under 35 U.S.C. § 112 as indefinite or, alternatively, for lack of a written description.

1. Applicable standards

a. Indefiniteness

The definiteness requirement is rooted in § 112, ¶ 2, which provides that "the specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." "A determination of claim indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *Personalized Media Comm., LLC v. Int'l Trade Com'n*, 161 F.3d 696, 705 (Fed. Cir. 1998).

> Determining whether a claim is definite requires an analysis of whether one skilled in the art would understand the bounds of the claim when read in light of the specification . . . If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more.

Id. (citing *Miles Lab., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875 (Fed. Cir. 1993)).

b. Written description

The statutory basis for the enablement and written description requirements, § 112 ¶1, provides in relevant part:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same . . . .

To satisfy the enablement requirement, a specification must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation. *Genentech*, 108 F.3d at 1365. The written description requirement is separate and distinct from the enablement requirement. *See Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1344-45, 1351 (Fed. Cir. 2010);[39] *Carnegie Mellon Univ. v. Hoffman-LaRoche Inc.*, 541 F.3d 1115, 1121 (Fed. Cir. 2008). It ensures that "the patentee had possession of the claimed invention at the time of the application, i.e., that the patentee invented what is claimed." *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1344-45 (Fed. Cir. 2005).

"[T]he description must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed." *Ariad*, 598 F.3d at 1351 (citations

---

[39]The Supreme Court has previously declined to review the Federal Circuit's (non-panel) decisions in this regard. *See Univ. of Rochester v. G.D. Searle & Co., Inc.*, 543 U.S. 1015 (2004) (denying certiorari). The *Ariad* Court stated that, "[a]lthough the [Supreme] Court did not expressly state that it was applying a description of the invention requirement separate from enablement, that is exactly what the Court did" in cases such as *Schriber-Schroth Co. v. Cleveland Trust Co., Chrysler Corp.*, 305 U.S. 47 (1938), and *O'Reilly v. Morse*, 56 U.S. 62 (1853). *See Ariad*, 598 F.3d at 1346. The Supreme Court also iterated three separate requirements under § 112 in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002). *See Ariad*, 598 F.3d at 1347.

and internal brackets omitted). "In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* (citations omitted). Whether the written description requirement is met is a question of fact. *Martek Biosciences Corp. v. Nutrinova, Inc.*, Nos. 2008-1459 & 2008-1476, 2009 WL 2780367 at *3 (Fed. Cir. Sept. 3, 2009) (citation omitted). Cisco must ultimately prove that the written description fails these standards by clear and convincing evidence. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1307 (Fed. Cir. 2008) (citing *Invitrogen Corp.*, 429 F.3d at 1072-73 (Fed. Cir. 2005)).

2. Prosecution History

The court's conclusion with respect to whether these standards are met by the '431 patent is best framed by a brief discussion of the prosecution history. As noted previously, the '431 patent was filed (on July 10, 2006) as a continuation of the '902 patent; priority was claimed to the German patent applications filed in October 1996. Relevant to this analysis is the fact that, as a continuation application, the disclosure presented was required to be the same as that of the original application; it could not "include anything which would constitute new matter if inserted in the original application." *See* MPEP § 201.07. The '902 patent was itself a division of the '453 patent, which was the first United States filing in the chain.

The originally-filed claims of the application issuing as the '431 patent[40] ("the '549 application") were drawn to a method of maintaining a predetermined quality of service

[40]United States Patent Application No. 11/456,549.

level of data transfer between end terminals by switching the data transfer to a line-switching network when appropriate. Prior to the issuance of an action on the merits, on October 16, 2006, DeLuca filed a preliminary amendment by which thirteen (13) new claims were added, drawn to a data switch apparatus having, *inter alia*, a control signal that transfers data to either a line switch or a packet switch in response to a control signal. (D.I. 277 at JA3447) At that time, the '549 application included twenty-three (23) pending claims.

On July 10, 2006, a second preliminary amendment was filed by which forty-eight (48) new claims were added to the application; DeLuca represented that "[n]o new matter has been added." (*Id.* at JA3463) The new claims were directed to several switching apparatus. Certain dependant claims (e.g., claim 29) were drawn to "mobile communication device[s]" comprising the claimed switching apparatus. Other dependant claims (e.g., claims 37, 38) limited the packet-switching network or line-switching network to a "mobile network." New independent claims relating to methods for transferring data selectively by line-switching or packet-switching were also added wherein the packet-switching network or line-switching networks were "mobile" networks, "interconnected to the Internet," or associated with certain mobile devices (claims 42, 56, 64). Still further dependant claims described a "GSM or CDMA" network (e.g., claim 62).

On February 14, 2008, a first office action was issued by Examiner Qureshi. All (71) claims in the '549 application were cited as "subject to restriction and/or election" – importantly, none were rejected on the merits. Examiner Qureshi stated that claims 1-23 and 24-71 were drawn to distinct inventions: the former to a "method and apparatus

for [the] determination of communication parameters;" and the latter to "combined circuit-switching and packet-switching." (*Id.* at JA3511) On August 19, 2008, DeLuca filed an amendment cancelling claims 1-23,[41] electing the invention of group II, and adding new claims 72-74, discussed in detail *supra*. Certain pending claims were amended to read that the claimed switching apparatus switched data to a "mobile phone" over a "WAN or LAN" network. In the Remarks, DeLuca stated that

> [t]he pending claims are now all directed to configurations of the invention on a mobile network such as [a] GSM mobile phone system [and] are disclosed for example at col. 5, ll. 35-38 of parent U.S. Patent No. 7,145,209; configurations wherein the switching apparatus may be contained within a mobile communication device such as a radiotelephone are disclosed for example at col. 7, ll. 48-55.[42]

(*Id.* at JA3527)

An interview summary by Examiner Qureshi states that agreement to the patentability of the pending claims was reached by a telephonic conference with DeLuca on September 30, 2008. Specifically: "Rejection based on [obvious-type double patenting] was discussed with the applicant's att[orne]y. The applicant agreed to submit a Terminal Disclaimer. Amendments to claim 74 were also discussed to use language better suitable for claimed subject matter. Applicant agreed to amend the claim by Examiner's Amendment." (*Id.* at JA3545) The examiner's amendment deleted the terms "capable of" that originally followed the claim terms of "packet unit," "line unit" and "controller" of claim 74. (*Id.* at JA3562) Examiner Qureshi's "Reasons for

---

[41]Certain other claims from the elected invention were also cancelled.

[42]As discussed previously, this amendment was made after Examiner Escalante issued a final rejection in the '453 patent reexamination and just prior Examiner Escalante's issuance of a right of appeal notice in the '902 patent reexamination.

Allowance" of the '549 application read as follows:

> The current inventions [sic] related to transferring data between end terminals over packet-switching and line-switching networks in response to a control signal generated as [a] result of monitoring of quality of service of communication connection of telephone call over [a] mobile packet-switching [network] **without interrupting said call's communications connection being under establishment while performing the changeover of data transfer** (as commonly claimed in claims 24, 30, 36, 42, 48, 56, 64, 72-74). The closest prior art, Farris et al. (US 6,574,216) and Dillon et al. (US 5,85,721 [sic]), in the same field of endeavor, fail[ ] to disclose the above unique method steps.

(*Id.* at JA3563) (emphasis in original)

3. Discussion

As detailed above, DeLuca amended the '549 application on several occasions to specify that the invention related to mobile networks and mobile devices, yet the claims of the '549 application were never substantively rejected by Examiner Qureshi under 35 U.S.C. §§ 102, 103 or 112. The '431 patent, having duly issued by the PTO, enjoys a presumption of validity. It is the court's opinion, however, that the '431 patent is invalid as a matter of law as indefinite and, alternatively, that clear and convincing evidence supports the conclusion that the written description requirement is not satisfied by the '431 patent disclosure.

a. "Mobile [phone] packet switching network"

Each of the independent claims of the '431 patent recite either a "mobile phone packet switching network" or a "mobile packet switching network." Neither term is specifically defined in the specification, which states only that

> [t]he internet will **now** be considered as [a] packet-switching network without restricting the present invention. Indeed **any** packet-switching network could be used **such as** mobile phone networks within the scope of the present invention.

('431 patent, col. 6:46-48) (emphasis added)[43]

According to the foregoing, "the internet" is an example of a "mobile packet switching network."[44] The specification also generally refers to "a data channel of the GSM mobile phone system." ('431 patent, col. 5:29-31) Certain (GSM and CDMA) line-switched mobile networks are disclosed by claims 27, 35 and 43. There appears to be no disclosure correlating GSM or CDMA to packet-switching.

The question at bar with respect to indefiniteness is whether the patent apprises a person of ordinary skill in the art of the metes and bounds of the invention vis a vis the mobile network claim limitations. On careful consideration, the court must answer this question in the negative. As cited above, the specification specifically provides that "any" known packet-switching network could be used in the invention. ('431 patent, col. 6:46-48) "[M]obile phone networks" are an example. (*Id.*) There is no indication, however, of how many (or what nature of) existing packet-switching networks fall within the scope of the claims. SSBG argues that both parties' experts confirm that there were well-known mobile packet-switched networks in 1996, for example, cellular wireless networks and WiFi.[45] (D.I. 252 at 16) Assuming this to be the case, and the

---

[43]It is readily apparent from the specification that the translation from German to English is less than perfect, adding to the difficulty of a § 112 analysis. The foregoing is the only excerpt from the specification called out by SSBG in its response papers.

[44]The court notes that the phraseology "the internet will **now** be considered . . ." implies that a person of ordinary skill in the art may not have interpreted the internet as a mobile packet-switching network absent this instruction.

[45]Also in support, SSBG cites the entirety of two deposition transcripts. (D.I. 252 at 16 n.60) Insofar as SSBG did not deem their contents important enough to point out, the court declines to comb through transcripts cited in a footnote for general support.

inventors elected to identify any of them, SSBG does not list exactly which packet-switching networks existed in 1996.

SSBG asserts that a "mobile phone packet-switching network" should be defined as a "packet-switching network capable of being accessed wirelessly by a mobile communication device, such as the packet-switching network of a wireless telephone system or WiFi system." (D.I. 277 at 29) This construction is circular and non-helpful. Certainly, a mobile packet-switching network must be a packet-switching network capable of mobile access. The proffered "such as. . ." clause provides no guidance as to the scope of the claims.

The internet is described as "[a] packet-switching network," not a **mobile** packet-switching network.[46] ('431 patent, col. 6:46-48) The only plausible construction of the "mobile [phone] packet switching network" limitations based on the specification is, therefore, any "mobile phone networks." (*Id.*) Indeed, the court can glean no meaningfully precise construction of the mobile network limitations from the disclosure provided by the '431 patent.

Even if the '431 patent were not invalid as indefinite, the court would find it invalid for failing to meet the written description requirement. The specification does not "convey with reasonable clarity" that the inventors were in possession of the full scope of the claimed invention (encompassing all mobile packet-switching networks) as

[46]It is telling that SSBG proposes that "WiFi" be used as an example, rather than simply the "internet." It is the court's understanding that WiFi refers to wireless networking – in other words, a mobile or wireless connection to the internet.

of the priority date.[47] *See Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1564 (Fed. Cir. 1991). The written description "must do more than merely disclose that which would render the claimed invention obvious." *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1377 (Fed. Cir. 2009). As described above, the disclosure regarding the mobile network limitations is redundant to the claims. There is simply no indication of what distinguishes a mobile packet-switching network from other networks or how such a mobile packet-switching network would work with the claimed switching apparatus to carry out the invention.[48]

b. Means-plus-function limitations

It is Cisco's position that the claims of the '431 patent that require a means for connecting to or transferring packets over a "mobile phone packet switching network" (claim 45) or a "device that" provides access by the claimed switching apparatus to a mobile phone packet switching network (claims 1, 6, 11 and 16) also fail for indefiniteness, as there is no structure described in the specification of the '431 patent for performing these functions, in violation of § 112, ¶ 6. Cisco also asserts that claim 47 is invalid for indefiniteness because it is internally inconsistent. Insofar as the court

---

[47]Tangentially, Cisco did not argue on summary judgment that the '431 patent is invalid for failing to disclose the best mode. Without deciding, it is not clear whether the "internet" may constitute the mobile network(s) most preferred by the inventors.

[48]SSBG does not proffer a distinct argument regarding written description, stressing only that packet-switching networks were known in the art. (D.I. 252 at 15-16)

Cisco has not concentrated on non-enablement, and SSBG has presented an enablement argument that is premised on its (rejected) claim construction that the change-over occur during the call set-up procedure. The court is in no position to carefully evaluate the *In re Wands* factors and make a determination on enablement on this limited record.

agrees, providing a tertiary basis for its finding of invalidity with respect to these claims, the court briefly illuminates its reasoning here.

With respect to claim 45, SSBG proffers a claim construction whereby the corresponding structures "include[] an IP switch (e.g. IP switch 72), packet switch [], router [], [and] IP switching device[.]" (D.I. 194 at 36, no. 54) In its papers, SSBG all but abandons its position, stating that sufficient structure is disclosed because the '431 patent "discloses the means for the device and says what it does, that is sufficient to persons of ordinary skill in the art to know what was disclosed. No more was needed in this case[, as] "a means for packet-switching" was widely understood by persons of ordinary skill in the art." (D.I. 252 at 18) No citation to expert testimony (or other evidence) is provided.

With respect to claims 1, 6, 11 and 16, the claim language at issue, "a device that provides access by said switching apparatus . . . through which data packets can be sent for delivery to a destination end terminal," is presumptively not subject to § 112, ¶ 6 because it lacks the term "means." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002). The presumption against means-plus-function treatment may be overcome, however, "if it is shown that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Massachusetts Institute of Technology and Electronics For Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1353 (Fed. Cir. 2006) (citation and internal quotations omitted).

Here, the relevant claims of the '431 patent are directed to switching apparatus comprising a "device" that performs a specific function, or provides access to a mobile

phone packet switching network. The term "device" is generic and typically does not connote definite structure. *Id.* There is no indication that "device" denotes any generally understood meaning in this art, such as would indicate that § 112, ¶ 6 would not apply. *Id.* The court agrees with Cisco that this was "pure functional claiming" and that, insofar as there is no indication of what constitutes the structure of the device performing the access function, claims 1, 6, 11 and 16 are invalid as indefinite.[49]

Finally, Cisco asserts that claim 47 of the '431 patent fails for indefiniteness because the claim language is nonsensical and internally inconsistent.[50] The preamble of claim 47 requires that the claimed apparatus be one for "routing data transfer over a telephone call." At the same time, the claim states that the transfer of data is in response to a control signal, which is a signal generated through monitoring an established "communications connection" of the call. Cisco asserts that the phrase "said call's communication connection being under establishment" is nonsensical since a call must be already established. (D.I. 282 at JA8214) Moreover, the claim fails to

---

[49]The parties did not address enablement with respect to the means-plus-function claims.

[50]Claim 47 reads:

> A data switching apparatus for routing data transfer for a telephone call, comprising: a packet unit having a connection to a mobile packet switching network; a line unit having a connection to a line switching network; and a controller receiving data from an input device and transferring said data to either said packet unit or to said line unit in response to a control signal that is generated as a result of monitoring of quality of service of a communications connection of said telephone call over said mobile packet switching network, without Interrupting said call's communications connection being under establishment or established already by the transfer of data for the call while performing the change-over of the data transfer between the two units.

state what exactly must occur "while performing the change-over of the data transfer between the two units." (*Id.*)

In response, SSBG points only to Stillerman's declaration, which states that "I have reviewed the claim language of claim 47 of the '431 patent and have determined that a person of ordinary skill in the art would find the language consistent and sufficiently clear." (D.I. 252, ex. 1 at ¶ 32) Even if the court were to disagree with Cisco's reading of the plain language of claim 47 (which it does not), such a bare assertion by Stillerman strains credulity.

c. Conclusion regarding § 112

It is the court's overall impression that this is a case where new matter was improperly added to claims in a continuation application (in an effort to retain an early priority date), when the application should have been made as a continuation-in-part. *See* MPEP § 608.04; 37 C.F.R. § 1.121(f). Adding new claims in continuing applications where the specification remains unchanged is, essentially, a gamble with respect to the written description requirement of § 112, ¶ 1. *See, e.g., Aligent Techs. Inc. v. Affymetrix, Inc.*, 567 F.3d 1366 (Fed. Cir. 2009); *ICU Medical*, 558 F.3d at 1377-78. This case presents certain noteworthy, unusual circumstances in this regard: (1) the '431 patent concerns internet telephony, a technology area that undoubtably has experienced rapid development since 1996; (2) a 1996 specification is asserted to support claims to wireless networks filed in 2006 (and issuing in 2009); (3) the '431 patent was filed as a continuation to pursue non-elected claims and, subsequently, dozens of claims were added by preliminary amendments; and (4) certain of the claims

of the '431 patent were added by preliminary amendment following rejections to strikingly similar subject matter during the reexaminations of the parent and grandparent patents. The indefiniteness of the claims and failure of the specification to sufficiently describe the mobile network limitations in this case is perhaps due to the fact that, in 1996, internet telephony was in its infancy.[51] Regardless, the '431 patent is found invalid.[52]

V. CONCLUSION

For the aforementioned reasons: (1) Teles's motion to amend its pleadings is denied in part and denied in part as moot; (2) Cisco's motion to dismiss Teles for lack of subject matter jurisdiction is denied as moot; (3) the court substitutes SSBG as a party pursuant to Rule 25(c); (4) SSBG's motion for partial summary judgment of infringement is denied; (5) Cisco's motion for summary judgment of noninfringement is granted; (6) the court shall stay trial on the validity of the '453 and '902 patents pending final judgment by the Federal Circuit on the pending reexaminations; (7) Cisco's motion for summary judgment of invalidity of the '453 and '902 patents is denied without prejudice to renew should the stay be lifted; (8) Cisco's motion for summary judgment of invalidity of the '431 patent is granted; (9) SSBG's motion for summary judgment of no inequitable conduct is denied; and (10) both parties' motions to exclude expert testimony are denied as moot. An appropriate order shall issue.

---

[51] *See, gen.*, http://ezinearticles.com/?A-Brief-History-of-Internet-Telephony&id=333455; http://www.dtc.umn.edu/~odlyzko/doc/internet.size.pdf (describing "explosive growth" of the internet in 1996 and 1997).

[52] This finding moots the issue of inequitable conduct.

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

SIGRAM SCHINDLER BETEILIGUNGSGESELLSCHAFT mbH, Plaintiff, v. CISCO SYSTEMS, INC., Defendant.	)	Civ. No. 09-72-SLR
CISCO SYSTEMS, INC., Plaintiff, v. SIGRAM SCHINDLER BETEILIGUNGSGESELLSCHAFT mbH, Defendant.	)	Civ. No. 09-232-SLR

ORDER

At Wilmington this 26th day of July, 2010, consistent with the memorandum opinion issued this same date;

IT IS ORDERED that:

1. Sigram Schindler Beteiligungsgesellschaft mbH (hereinafter, "SSBG") is substituted for Teles AG Informationtechnologien;

2. Teles's motion to amend its pleadings (Civ. No. 09-72, D.I. 86; Civ. No. 09-232, D.I. 170) is denied in part and denied in part as moot;

3. Cisco's motion to dismiss for lack of subject matter jurisdiction (Civ. No. 09-72, D.I. 198; Civ. No. 09-232, D.I. 281) is denied as moot;

3. Cisco's motion for summary judgment of noninfringement (Civ. No. 09-72, D.I. 218; Civ. No. 09-232, D.I. 301) is granted;

4. SSBG's motion for partial summary judgment of infringement (Civ. No. 09-72, D.I. 222; Civ. No. 09-232, D.I. 305) is denied;

5. The court stays the issues of the validity of the '453 and '902 patents pending final judgment by the Federal Circuit on the pending reexaminations;

6. Cisco's motion for summary judgment of invalidity (Civ. No. 09-72, D.I. 227; Civ. No. 09-232, D.I. 310) is denied without prejudice to renew should the stay be lifted;

7. Cisco's motion to exclude the opinion of SSBG's expert Christopher Spadea on commercial success (Civ. No. 09-72, D.I. 202; Civ. No. 09-232, D.I. 285) is denied as moot;

8. SSBG's motion to limit the testimony of Cisco's expert Thomas La Porta (Civ. No. 09-72, D.I. 205; Civ. No. 09-232, D.I. 288) is denied as moot;

9. SSBG's motion to limit the testimony of Cisco's expert Kevin Negus (Civ. No. 09-72, D.I. 206; Civ. No. 09-232, D.I. 289) is denied as moot;

10. SSBG's motion for partial summary judgment of no inequitable conduct (Civ. No. 09-72, D.I. 216; Civ. No. 09-232, D.I. 299) is denied;

11. Cisco's motion for partial summary judgment for invalidity of the '431 patent pursuant to 35 U.S.C. § 112 and for confirmation of the priority date for the '431 patent

(Civ. No. 09-72, D.I. 223; Civ. No. 09-232, D.I. 306) is granted in part and denied in part as moot;[53] and

12. SSBG's motion for leave to supplement the record (Civ. No. 09-72, D.I. 377; Civ. No. 09-232, D.I. 460) is denied.

United States District Judge

[53]SSBG indicated in its response brief that it does not contest Cisco's proffered priority date for the '431 patent.