United States District Court,
E.D. Texas, Marshall Division.

MORRIS REESE,
Plaintiff.
v.
SAMSUNG TELECOMMUNICATIONS AMERICA, L.P., et al,
Defendants.

Civil Action No. 2:05-CV-415-DF

Dec. 5, 2006.

Edward W. Goldstein, Christopher M. Faucett, Corby R. Vowell, Holly H. Barnes, Goldstein Faucett & Prebeg, Houston, TX, Thomas John Ward, Jr., Bruce A. Smith, Ward & Smith Law Firm, Longview, TX, Franklin Jones, Jr., Jones & Jones, Marshall, TX, Otis W. Carroll, Jr., Ireland Carroll & Kelley, Tyler, TX, for Plaintiff.

Eric William Buether, Greenberg Traurig, Eric Sean Tautfest, Gruber Hurst Johansen & Hail, Patrick Talman Farley, Todd Eric Landis, Akin Gump Strauss Hauer & Feld, Dallas, TX, Wayne Alan Jones, Kenneth Sangjunshyn Korea, Greenberg Traurig, Amy R. Schofield, Elizabeth I Rogers, Wilmer Cutler Pickering Hale & Dorr LLP, Palo Alto, CA, Eric M. Albritton, James Scott Hacker, Albritton Law Firm, Longview, TX, Mark D. Flanagan, Wilmerhale, New York, NY, for Defendants.

CLAIM CONSTRUCTION ORDER

DAVID FOLSOM**, District Judge.**

Plaintiff brings this cause of action alleging infringement of Claims 14, 16, 17, 18, and 20 of United States Patent Number 6,427,009 (the "'009 Patent"). Dkt. No. 36. The remaining defendants, Nokia, Inc., Sony Ericson Mobile Communications, Siemens Communications, and Palm, Inc. (collectively, the "Defendants"), deny all allegations of infringement and assert counterclaims and defenses of non-infringement, invalidity, misuse, estoppel, laches, and unclean hands. *See* Dkt. Nos. 89, 140, 141 & 142.

Before the Court is Plaintiff's Opening Claim Construction Brief. Dkt. No. 147. Also before the Court are Defendants' brief in response and Plaintiff's reply. Dkt. Nos. 150 & 154, respectively. The Court conducted a claim construction hearing on September 21, 2006. After considering the patent, arguments of counsel, and all other relevant pleadings and papers, the Court finds that the claims of the '009 Patent should be construed as set forth herein.

I. LEGAL PRINCIPLES OF CLAIM CONSTRUCTION

A determination of patent infringement involves two steps. First, the patent claims are construed, and,

second, the claims are compared to the allegedly infringing device. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1455 (Fed.Cir.1998) (en banc).

The legal principles of claim construction were recently reexamined by the Federal Circuit in Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005) (en banc). Reversing a summary judgment of non-infringement, an en banc panel specifically identified the question before it as: "the extent to which [the court] should resort to and rely on a patent's specification in seeking to ascertain the proper scope of its claims." Id. at 1312. Addressing this question, the Federal Circuit specifically focused on the confusion that had amassed from its recent decisions on the weight afforded dictionaries and related extrinsic evidence as compared to intrinsic evidence. Ultimately, the court found that the specification, "informed, as needed, by the prosecution history," is the "best source for understanding a technical term." Id. at 1315 (quoting Multiform Dessicants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1478 (Fed.Cir.1998)). However, the court was mindful of its decision and quick to point out that *Phillips* is not the swan song of extrinsic evidence, stating:

[W]e recognized that there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence.

Phillips, 415 F.3d at 1324 (citations omitted). Consequently, this Court's reading of *Phillips* is that the Federal Circuit has returned to the state of the law prior to its decision in Texas Digital Sys. v. Telegenix, Inc., 308 F.3d 1193 (Fed.Cir.2002), allotting far greater deference to the intrinsic record than to extrinsic evidence. "[E]xtrinsic evidence cannot be used to vary the meaning of the claims as understood based on a reading of the intrinsic record." Phillips, 415 F.3d at 1319.

Additionally, the Federal Circuit in *Phillips* expressly reaffirmed the principles of claim construction as set forth in Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576 (Fed.Cir.1996), and Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111 (Fed.Cir.2004). Thus, the law of claim construction remains intact. Claim construction is a legal question for the courts. Markman, 52 F.3d at 979. The claims of a patent define that which "the patentee is entitled the right to exclude." Innova, 381 F.3d at 1115. The claims are "generally given their ordinary and customary meaning" as understood by "a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Vitronics, 90 F.3d at 1582; *Phillips,* 415 F.3d 1313. However, the Federal Circuit stressed the importance of recognizing that the person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313.

Advancing the emphasis on the intrinsic evidence, the *Phillips* decision explains how each source, the claims, the specification as a whole, and the prosecution history, should be used by courts in determining how a skilled artisan would understand the disputed claim term. *See, generally, id*. at 1314-17. The court noted that the claims themselves can provide substantial guidance, particularly through claim differentiation. Using an example taken from the claim language at issue in *Phillips,* the Federal Circuit observed that "the claim in this case refers to 'steel baffles,' which strongly implies that the term 'baffles' does not inherently mean objects made of steel." *Id*. at 1314. Thus, the "context in which a term is used in the asserted claim can often illuminate the meaning of the same term in other claims." *Id*. Likewise, other claims of the

asserted patent can be enlightening, for example, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id*. at 1315 (citing Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed.Cir.2004)).

Still, the claims "must be read in view of the specification, of which they are part." Markman, 52 F.3d at 978. In *Phillips,* the Federal Circuit reiterated the importance of the specification, noting that "the specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.' " Phillips, 415 F.3d at 1315 (quoting Vitronics, 90 F.3d at 1582). To emphasize this position, the court cited extensive case law, as well as "the statutory directive that the inventor provide a 'full' and 'exact' description of the claimed invention." *Id*. at 1316 (citing Merck & Co., v. Teva Pharms. USA, Inc., 347 F.3d 1367, 1371 (Fed.Cir.2003)); *see also* 35 U.S.C. s. 112, para. 1. Consistent with these principles, the court reaffirmed that an inventor's own lexicography and any express disavowal of claim scope is dispositive. *Id*. at 1316. Concluding this point, the court noted the consistency with this approach and the issuance of a patent from the Patent and Trademark Office and found that "[i]t is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." *Id*. at 1317.

Additionally, the *Phillips* decision provides a terse explanation of the prosecution history's utility in construing claim terms. The court simply reaffirmed that "the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id*. (citing Vitronics, 90 F.3d at 1582-83). It is a significant source for evidencing how the patent office and the inventor understood the invention. *Id*.

Finally, the Federal Circuit curtailed the role of extrinsic evidence in construing claims. In pointing out the less reliable nature of extrinsic evidence, the court reasoned that such evidence (1) is by definition not part of the patent, (2) does not necessarily reflect the views or understanding of a person of ordinary skill in the relevant art, (3) is often produced specifically for litigation, (4) is far reaching to the extent that it may encompass several views, and (5) may distort the true meaning intended by the inventor. *See id*. at 1318. Consequently, the Federal Circuit expressly disclaimed the approach taken in *Texas Digital*. While noting the *Texas Digital* court's concern with regard to importing limitations from the written description, "one of the cardinal sins of patent law," the Federal Circuit found that "the methodology it adopted placed too much reliance on extrinsic sources such as dictionaries, treatises, and encyclopedias and too little on intrinsic sources, in particular the specification and prosecution history." *Id*. at 1320. Thus, the court renewed its emphasis on the specification's role in claim construction.

Many other principles of claim construction, though not addressed in *Phillips,* remain significant in guiding this Court's charge in claim construction. The Court is mindful that there is a "heavy presumption" in favor of construing claim language as it would be plainly understood by one of ordinary skill in the art. Johnson Worldwide Assocs., Inc. v. Zebco Corp., 175 F.3d 985, 989 (Fed.Cir.1999); *cf. Altiris, Inc., v. Symantec Corp.,* 318 F.3d 1364, 1372 (Fed.Cir.2003) ("[S]imply because a phrase as a whole lacks a common meaning does not compel a court to abandon its quest for a common meaning and disregard the established meaning of the individual words.") The same terms in related patents are presumed to carry the same meaning. *See* Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1334 (Fed.Cir.2003) ("We presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.") "Consistent use" of a claim term throughout the specification and prosecution history provides "context" that may be highly probative of meaning and may counsel against "[b]roadening of the

ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad meaning was intended ...." Nystrom v. TREX Co., 424 F.3d 1136, 1143-1146 (Fed.Cir.2005).

Claim construction is not meant to change the scope of the claims but only to clarify their meaning. Embrex, Inc. v. Serv. Eng'g Corp., 216 F.3d 1343, 1347 (Fed.Cir.2000) ("In claim construction the words of the claims are construed independent of the accused product, in light of the specification, the prosecution history, and the prior art.... The construction of claims is simply a way of elaborating the normally terse claim language[ ] in order to understand and explain, but not to change, the scope of the claims.") (citations and internal quotations omitted). Regarding claim scope, the transitional term "comprising," when used in claims, is inclusive or open-ended and "does not exclude additional, unrecited elements or method steps." CollegeNet, Inc. v. ApplyYourself, Inc., 418 F.3d 1225, 1235 (Fed.Cir.2005) (citations omitted). Claim constructions that would read out the preferred embodiment are rarely, if ever, correct. Vitronics, 90 F.3d at 1583-84.

The Court notes that a patent examiner's "Reasons for Allowance," where merely summarizing a claimed invention and not specifically noting that patentability is based on a particular feature, do not limit the scope of the claim. *See* Apex Inc. v. Raritan Computer, Inc., 325 F.3d 1364, 1375 (Fed.Cir.2003). Similarly, an examiner's unilateral statements in a "Notice of Allowance" do not result in the alteration of claim scope. *See id.; see also* Salazar v. Procter & Gamble Co., 414 F.3d 1342, 1346-47 (Fed.Cir.2005). "[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." Omega, 334 F.3d at 1326. The Federal Circuit has "declined to apply the doctrine of prosecution disclaimer where the alleged disavowal of claim scope is ambiguous." Omega Eng'g, 334 F.3d at 1324.

The doctrine of claim differentiation is often important in claim construction. Phillips, 415 F.3d at 1315 (citing Liebel-Flarsheim Co., 358 F.3d at 910). "Claim differentiation" refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. Curtiss-Wright Flow Control Corp. v. Velan, Inc., 438 F.3d 1374, 1380 (Fed.Cir.2006). This is in part because "reading an additional limitation from a dependent claim into an independent claim would not only make that additional limitation superfluous, it might render the dependent claim invalid." *Id.; see also* SRI Int'l. v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1122 (Fed.Cir.1985) ("It is settled law that when a patent claim does not contain a certain limitation and another claim does, that limitation cannot be read into the former claim in determining either validity or infringement.") This doctrine is based in part on the presumption that each claim has a different scope. 35 U.S.C. s. 282; Curtiss-Wright, 438 F.3d at 1380. The difference in meaning and scope between claims is presumed to be significant to the extent that the absence of such difference in meaning and scope would make a claim superfluous. Free Motion Fitness, Inc. v. Cybex Int'l, 423 F.3d 1343, 1351 (Fed.Cir.2005). Although a validity analysis is not a regular component of claim construction, if possible claims should be construed to preserve their validity. Phillips, 415 F.3d at 1327; *see also* Rhine v. Casio, Inc., 183 F.3d 1342, 1345 (Fed.Cir.1999).

II. TECHNICAL BACKGROUND

The claims must be interpreted as they would be understood by a person of ordinary skill in the art upon reading the entire patent. Phillips, 415 F.3d at 1313. The relevant art is therefore highly probative when construing claim terms. The "Background of the Invention" of the '009 Patent identifies "Caller ID" and "call-waiting" as part of the relevant art. *See* ' 009 Patent at 1:10-34.

"Caller ID" is a commonly known feature offered by many telephone companies to provide a called party with the telephone directory number ("DN"), commonly referred to as the "phone number," of a calling party. An early form of Caller ID provided the called party with the DN of the calling party and did so while the called party's telephone was still ringing. *See, e.g.,* U.S. Pat. No. 4,551,581. An improved form of Caller ID in common use today also provides the called party with the date and time of the call as well as a string of text, such as the name of the caller as listed in the telephone company's directory. *See, e.g.,* U.S. Pat. Nos. 4,242,539, 4,582,956 & 4,924,496. This information is commonly sent and received using an analog technique for communicating digital data known as frequency shift keying ("FSK"), which involves communicating the low and high logic levels of a serial data message (the "1's" and "0's" of digital data) by shifting between two frequencies. FN1 *See* U.S. Pat. No. 4,582,956. The called party's telephone service provider uses a modulator to transmit the data in analog form, and the called party telephone set has a demodulator to convert the analog signals back into digital data. Id.

FN1. A device for implementing this technique is commonly referred to as a "modem," which is an abbreviation for "modulator-demodulator."

"Call Waiting" is a feature that alerts a called party who is already in conversation (i.e. their phone is "busy") that a calling party is attempting to reach the called party. *See, e.g.,* U.S. Pat. No. 4,661,975. This feature commonly uses tone signals that repeat periodically until either the called party accepts the incoming call, the called party rejects the incoming call, or the calling party hangs up. Id.

The features of Caller ID and Call Waiting have been combined to create another feature, "Caller ID Call Waiting," wherein a called party already engaged in a call can receive information about a calling party, such as the DN and name of the calling party. *See* U.S. Pat. No. 5,263,084. This feature improves Call Waiting by helping the called party make an informed decision about whether to interrupt his or her ongoing conversation to answer the incoming call. Id.

With this context in mind, the Court turns to the '009 Patent.

III. THE '009 PATENT

The '009 Patent, entitled "Enhanced Apparatus for Use with Caller ID System," issued on July 30, 2002. The inventor of the patent is Morris Reese (the "Inventor"). The Abstract states:

An apparatus and method are disclosed for accessing originating central office equipment to control the disclosure of a calling party directory telephone number and/or name (hereinafter sometimes referred to as "DN" or "directory telephone number with a corresponding name") to a called party who subscribes to Caller ID service or to any other Custom Local Area Switching System (hereinafter sometimes referred to as "CLASS") service which discloses the calling party DN to the called party by performing a desired one of a plurality of automatic and/or manual calling operations. The apparatus and method are also for receiving, displaying and storing to memory a calling party DN sent from terminating central office equipment via a voice channel of a called party busy or idle telephone line in response to the receipt of the calling party flagged "public" DN sent from originating central office equipment to which the calling party telephone line is connected. In furtherance, the apparatus and method disclosed permit recalling a stored DN from memory to be displayed in an LED or LCD display counter, and permit automatically dialing a stored DN to return a missed call. A method is also disclosed for sending to an apparatus at a called station during

a silent interval of a ringing signal cycle or a call-waiting tone signal cycle an incoming caller DN sent from terminating central office equipment responsively to the receipt of the DN sent from originating central office equipment indicating that the DN is to be disclosed at the called station.

The application leading to the issuance of the '009 Patent was filed on March 13, 1996. This patent is a continuation of an application filed on April 25, 1991, which was a continuationin-part of an application filed January 3, 1990.

IV. CLAIM CONSTRUCTION

The parties request that the Court construe thirteen terms appearing in the patent-in-suit. These terms are: (a) "telephone station;" (b) "receiving said DN of said third party from a terminating central office serving said busy telephone station;" (c) "terminating central office;" (d) "generating;" (e) "assigning;" (f) "identifier;" (g) "in conjunction with said identifier;" (h) whether steps of claim 14 must be performed in the order recited; (i) "said third party's DN identifies a cellular mobile telephone;" (j) "means for receiving said DN of said third party from a terminating central office serving said busy telephone station;" (k) "means for generating and assigning an identifier to said received DN;" (l) "means for displaying said received DN of said third party in a display;" and (m) "means for storing said received DN of said third party in memory in conjunction with said assigned identifier."

The asserted claims, Claims 14, 16, 17, 18, and 20, are reproduced below with the disputed claim terms highlighted in italics:

14. A method for receiving at a busy *telephone station* of a first party in conversation with a second party an incoming caller telephone directory number (DN) of a third party calling said first party, comprising the steps of:

(a) *receiving said DN of said third party from a terminating central office* serving said busy telephone station;

(b) *generating* and *assigning* an *identifier* to said received DN of said third party;

(c) displaying said received DN of said third party in a display; and

(d) storing said received DN of said third party in memory *in conjunction with said assigned identifier*.

...

16. A method as set forth in claim 14, wherein said telephone station is a cellular mobile telephone.

17. A method as set forth in claim 14, wherein *said third party's DN identifies a cellular mobile telephone*.

18. A method as set forth in claim 14, wherein said identifier comprises a numeric digit.

...

20. Apparatus for receiving at a busy *telephone station* of a first party in conversation with a second party

an incoming caller telephone directory number (DN) of a third party calling said first party, comprising:

(a) *means for receiving said DN of said third party from a terminating central office serving said busy telephone station;*

(b) *means for generating and assigning an identifier to said received DN;*

(c) *means for displaying said received DN of said third party in a display;* and

(d) *means for storing said received DN of said third party in memory in conjunction with said assigned identifier*.

A. Telephone Station

1. The Parties' Positions

Plaintiff proposes this term "does not require construction and should be given its ordinary meaning." Dkt. No. 155 at 3. Defendants propose this term means "a communication device that can recognize conventional caller [ID] signals and call waiting signals during an analog voice call." *Id*.

Plaintiff argues that nothing in the intrinsic evidence or Defendants' arguments suggests that the term "should take on anything other than the broad scope of its ordinary meaning." Dkt. No. 147 at 31. Further, Plaintiff argues that the Inventor "clearly anticipated this term to be expansive as evidenced by his inclusion of cellular mobile telephones, found in [C]laim 16, as a subset of the 'telephone station' recited in [C]laim 14." *Id*.

Defendants respond that the patent describes "conventional caller ID" and that "[t]he only type of call waiting and caller ID signals identified ... are the conventional ones provided ... over telephone lines to telephone stations during analog voice calls." Dkt. No. 150 at 17. Defendants also cite prosecution history purportedly evidencing that the Inventor specified that the invention used "conventional" caller ID in use at the time of filing in 1991. *Id*. at 18. Defendants argue that the Inventor "distinguished his invention from digital systems ... [which are] not capable of interacting with or operating in conjunction with conventional telephone and call-waiting ..." *Id*. at 20 (quoting Exh. 15 at 8). Defendants further argue that the '009 Patent only covers analog technology because the Inventor distinguished the Blakely prior art reference, which used Integrated Services Digital Network ("ISDN") technology "rather than analog technology ..." Id. (quoting Exh. 21 at 6).

Plaintiff replies that "the word 'analog' does not appear anywhere in the ' 009 [P]atent." Dkt. No. 154 at 8. Plaintiff argues that the Blakely prior art reference was distinguished because in Blakely "caller ID information was transmitted over a completely separate channel than the channel carrying the voice information." *Id*. at 9. (citing Dkt. No. 150, Exh. 23 at 6-7).

2. Construction

The Court must give the term its ordinary meaning as read in light of the intrinsic evidence. Phillips, 415 F.3d at 1313; Vitronics, 90 F.3d at 1582. The term "telephone station" does not appear outside of the claims, so the Inventor has not been his own lexicographer. Phillips, 415 F.3d at 1316.. However, the specification teaches that the called party apparatus may be a "telephone set or separate stand alone unit." '009 Patent at

6:8-9. Further, the specification describes Figure 3 as "a simplified diagram of the principal components of an apparatus (telephone set or other receiving and sending devices)." These descriptions inform a person of ordinary skill in the art that a "telephone station" includes a telephone as well as a device capable of receiving the DN. Claim 14 states that the "telephone station" is "of a first party in conversation with a second party," which teaches that if the "telephone station" is a stand-alone unit, then it must be somehow connected to a telephone that enables the first party to have a conversation with the second party, i.e. a telephone that carries voice information. '009 Patent at 9:30-31.

The prosecution history also teaches that any stand-alone device capable of receiving the DN must be connected to the same voice channel that carries the voice information to the called party's telephone. In an amendment to overcome an anticipation rejection, the Inventor distinguished the Morihiro and Nonami references on the basis that the invention of the '009 Patent received the calling party DN "via the voice channel of the telephone line of the telephone station." Dkt. No. 150, Exh. 15 at 4. In particular, the Nonami reference disclosed a cellular phone that received the calling party's DN in "a separate paging signal channel." *Id.; see* U.S. Pat. No. 5,054,052. Because the Inventor distinguished the use of a separate channel to overcome the Examiner's rejection, the prosecution history favors requiring that the device that receives the calling party's DN do so on the same voice channel that the telephone uses for voice.

The Inventor distinguished the Blakely prior art because the invention of the '009 Patent carries the caller ID signals on "the channel carrying the voice information" rather than on a separate channel. Dkt. No. 154 at 9 (citing Dkt. No. 150, Exh. 23 at 6-7). However, this statement by the Inventor is of limited weight because the Inventor emphasized that Blakely used a "text-to-speech announcement of the calling party name" rather than data that could be displayed, as in the '009 Patent. Id.

Nonetheless, a construction that requires the telephone station receive the DN on the same channel as the voice finds further support in the Inventor's statement to the Examiner that the "signals [used to transmit the DN to the called party's telephone set] will interfere with voice signals." Dkt. No. 151, Exh. 25 at 3. As a solution to this potential problem, the Inventor suggested that "it is conceivable for the provider of the service to (i.e. telephone or cellular company) to mute the voice channels of both conversing parties during the transmission of the directory telephone number with the corresponding name to the called party apparatus." *Id.* at 4. Also of note, requiring that the device that receives the DN be on the same channel as the voice information comports with the descriptions of Figures 2 and 2A, which describe a "method for sending [a DN of a calling party] via a voice channel" ' 009 Patent at 4:32-34 & 4:39-44.

The Court construes the term "telephone station" to mean "a device comprising a telephone and a device that receives the DN of a calling party on the same channel as the voice data."

B. Terminating Central Office

1. The Parties' Positions

Plaintiff originally proposed this term "does not require construction and should be given its ordinary meaning." Dkt. No. 155 at 5. Plaintiff now agrees this term requires construction. Hr'g Tr., Dkt. No. 166 at 26:10-11. Plaintiff proposes this term means "a telephone or cellular switch" or "the central office switch." *Id.;* Dkt. No. 154 at 8. Defendants propose this term means "an office to which the called telephone line is connected as a local loop." Dkt. No. 155 at 5.

Plaintiff argues that a "terminating central office" need not be "physically connected by telephone lines"

because it is "understood by those of skill in the art to be merely a switching unit." Dkt. No. 147 at 26. Plaintiff incorporates its arguments as to "telephone station" that the '009 Patent "contemplates the use of cellular telephones with the claimed method and apparatus ." Id.; *see* s. IV. A., *supra*.

Defendants respond that the use of the word "terminating" limits the term "terminating central office" to an office connected to the called telephone by a local loop because "local telephone lines end in the central office, [which] is said to 'terminate' those lines." Dkt. No. 150 at 12-13. Defendants argue that the specification's repeated use of the word "connected" in association with "telephone lines" shows that connection with the called telephone must be a wired connection. *Id*. at 13-14. Defendants also cite descriptions given by the Inventor during the prosecution history. *Id*. at 14-15. Defendants argue that passing references to cellular technology in the specification are insufficient to justify including a cellular system in the claim scope because the specification "does not mention any aspect of cellular technology." *Id*. at 15. Defendants conclude by citing technical dictionaries purportedly showing that a "central office" is a part of a traditional, wired system. *Id*. at 16-17.

Plaintiff replies that the "terminating central office" is "the switch that connects the calling party to the called party." Dkt. No. 154 at 5. Plaintiff argues that the central office need not be wired to the telephone stations because the term "terminating central office" is described by the specification as both a "telephone switching office" and as a "terminating central office switch." *Id*. at 6. Plaintiff argues that the specification's focus is therefore on what a "terminating central office" does rather than on what it is connected to. *Id*. Plaintiff argues that "Defendants have not even offered a definition, but instead have attempted to limit the manner in which telephone stations may be connected to the central office or switch." *Id*. at 7. Plaintiff argues that the "terminating central office" need not be wired to a telephone station because, for example, "claim 16 ... explicitly recites that the telephone station is a cellular mobile telephone." *Id*. Plaintiff also emphasizes that "[t]here is no mention of a local loop in the patent specification or file history." *Id*.

2. Construction

Defendants' argument that the word "terminating" refers to the termination of physical wires (the local loops) at the central office fails. Dkt. No. 150 at 12-13. First, the specification does not use the term "local loop," and the description of "telephone lines" is part of a preferred embodiment, which cannot be imported into the claims. Phillips, 415 F.3d at 1320 (noting that importing limitations from the written description into the claims is "one of the cardinal sins of patent law"). Second, the specification uses the word "terminating" to distinguish the "terminating central office" from the "originating central office ." An "originating central office" is the central office of a party making a call. '009 Patent at 7:67-8:1. In other words, the originating central office "serves" the third party who calls the first party. *Id*. at 8:38-40. This originating central office sends a "public flagged DN" to the "terminating central office." *Id*. at 7:63-8:5 & 8:38-40. This progression teaches that the word "terminating" refers not to the termination of wires but rather to the role of the terminating central office as the last place to which the "public flagged DN" travels before being sent to the "first party" who is in a phone conversation. In other words, it is the path of the "public flagged DN" through the phone system that is "originating" and "terminating," not the wires in a local loop, as Defendants argue.

A person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313. The specification describes a "method and apparatus for accessing

telephone or cellular company originating central office equipment so as to control the disclosure of a calling party's DN to a called party ...." *Id*. at 2:18-21. Further, the specification describes a

method and apparatus for receiving, displaying, and storing to memory a calling party's DN sent from telephone or cellular company terminating central office equipment responsively to the calling party's flagged "public" DN received to the terminating central office equipment from originating central office equipment to which the calling party telephone line is connected.

'009 Patent at 2:24-30. The specification thus demonstrates that an originating central office is a central office associated with a calling party and a terminating central office is a central office associated with a called party. *See also* Figs. 2, 2A & 3. Therefore, the words "originating" and "terminating" inform the reader to whom the central office is connected, i.e. the "first party" receiving the call or the "third party calling said first party." *Id*. at 9:30-33.

The Court turns to extrinsic evidence to supplement the intrinsic evidence and facilitate the Court's understanding of the meaning that would be understood by a person of ordinary skill in the art. Phillips, 415 F.3d at 1319 (finding that "extrinsic evidence may be useful to the court" so long as it is "considered in the context of the intrinsic evidence"). Defendant provides extrinsic evidence that a "central office" refers only to wired technology. See Dkt. No. 150, Exhs. 17 at 4 & 18 at 4-5. However, extrinsic evidence cannot be used to narrow claim scope that is otherwise supported by the specification because "the patent applicant did not create the dictionary to describe the invention." Phillips, 415 F.3d at 1321.

The preferred embodiment uses "telephone lines" that are physical wires because those telephone lines use "a RJ11 jack," which is a wired device. ' 009 Patent at 4:52-53. However, this preferred embodiment cannot be imported into the claims to limit claim scope, especially where the claims and written description specifically refer to a "cellular mobile telephone." *See* Phillips, 415 F.3d at 1320. Further, the Inventor's references in the prosecution history to "an analog line" and "frequency shift keying-FSK" do not exclude wireless or cellular technology because Defendants have not shown that the same techniques cannot be used in such systems. Dkt. No. 151, Exh. 25 at 3 & Exh. 37 at 3. Defendants therefore do not identify a "clear and unmistakable" waiver of wireless technology. Omega, 334 F.3d at 1326.

The intrinsic evidence supports, in at least three ways, rejecting Defendants' proposed requirement that the central office be wired to the telephone station. First, the recitation in the claims of "a cellular mobile telephone" requires that the central office communicating therewith do so wirelessly. Second, the specification specifically discloses that the "central office" may be "cellular." '009 Patent 1:23-24, 2:25-27 & 3:10-11. Third, at least one statement by the Inventor during the prosecution history specified that the provider of the service could be a "cellular company," which implies that the central office of that provider would be providing wireless cellular service. Dkt. No. 151, Exh. 25 at 4.

The Court construes the term "terminating central office" to mean "the telephone switching office corresponding to the called party."

C. Receiving Said DN of Said Third Party from a Terminating Central Office Serving Said Busy Telephone Station

1. The Parties' Positions

Plaintiff proposes this term "does not require construction separate and apart from the construction of the

terms contained therein." Dkt. No. 155 at 4. Defendants propose this term means "obtaining the DN during an analog voice call via conventional caller ID signals." *Id*.

Plaintiff argues "[t]his phrase is simply worded and is clear without construction." Dkt. No. 147 at 32. Defendants respond by incorporating its arguments as to "telephone station" in arguing that "receiving" must occur during an analog call via conventional caller ID signals. Dkt. No. 150 at 21; *see* s. IV. A., *supra*. Plaintiff replies by incorporating its arguments as to "telephone station" that the claims ought not be limited to "telephones that process only analog calls." Dkt. No. 154 at 9.

2. Construction

The Court has construed the constituent terms "terminating central office" and "telephone station" above. *See* s.s. IV. A. & B., *supra*. However, this term involves receiving the DN.

The Federal Circuit has found that a claim term may be limited by the "context" of the intrinsic evidence where that context is "consistently used." Nystrom v. TREX Co., Inc., 424 F.3d 1136, 1143-44 (Fed.Cir.2005). This comports with the teaching of *Phillips* that a person of ordinary skill in the art does not read the claim terms in isolation but rather "in the context of the entire patent," which also includes the prosecution history. 415 F.3d at 1313. In *Nystrom,* the inventor consistently used the term "board" to "describe wood decking material cut from a log." 424 F.3d at 1144. The Federal Circuit excluded other materials from the scope of that term "even though [the Background of the Invention] acknowledge[d] that other materials exist." *Id*. at 1443.

The concept of consistent use applied in *Nystrom* applies in the present case because the specification of the '009 Patent teaches that when a telephone station receives a DN, it does so during "a silent interval of a ringing signal cycle or a call-waiting tone signal cycle." '009 Patent at 1:30-33, 2:54-57 & 3:44-45. The prosecution history supports such a reading. During the prosecution history, the Inventor described how a telephone station would receive a DN either "during a silent interval of a conventional ringing signal cycle" if idle or "during a silent interval of a conventional call-waiting tone signal cycle" if busy. Dkt. No. 151, Exh. 23 at 3-4. The Inventor also explained to the Examiner that the invention sends the DN to the telephone station "during a silent interval of a ringing cycle" or "during a silent interval of a call-waiting tone signal." Dkt. No. 151, Exh. 25 at 3. In distinguishing prior art, the Inventor explained "none of the cited references, neither separately nor in combination, taught, implied or suggested transmitting the third party's DN to the busy station via an analog line during the silent interval of the call waiting tone signal ...." Dkt. No. 151, Exh. 37 at 3. This consistent context for the invention teaches a person of ordinary skill in the art that the claimed invention receives the DN "during a silent interval of a ringing signal cycle or a call-waiting tone signal cycle."

As discussed above, the DN must be received on the same channel as the voice data. *See* s. IV. A., *supra*.

The Court therefore construes the term "receiving said DN of said third party from a terminating central office serving said busy telephone station" to mean "receiving, on the same channel as the voice data and during a silent interval of a ringing signal cycle or a call-waiting tone signal cycle, said DN of said third party from a terminating central office serving said busy telephone station."

D. Generating

1. The Parties' Positions

Plaintiff proposes that this term means "creating." Dkt. No. 155 at 5. Defendants propose this term means "creating an identifier upon receipt of the DN." *Id*.

Plaintiff argues that adopting Defendants' proposed construction would add a superfluous limitation because the claim would read as follows: "creating an identifier upon receipt of the DN and assigning an identifier to said received DN of said third party." Dkt. No. 147 at 21-22. Plaintiff also argues that "the claims, specification, and prosecution history do not teach that the identifier can only be generated 'upon receipt of the DN.' " *Id*. at 22. Plaintiff proposes that "an identifier may be generated and then assigned to the next incoming caller's telephone number rather than only generating the identifier upon receipt." *Id*.

Defendants respond that the " 'generating and assigning' step occurs *after* the DN is received ...." Dkt. No. 150 at 22. (quoting '009 Patent at 10:1-2). Defendants also argues that the Inventor "joined *generating and assigning* together in a single step, indicating that these functions are directly and temporally related." *Id*. Defendants cite Figure 2 of the '009 Patent and argue that the "consistent use of the past tense adjective 'received' indicates that the DN has already been received when the 'generating' occurs." Id. at 12.

Plaintiff responds that "[t]here are no ordinal or transitional words in this description or anywhere in the claim language to imply these tasks must be performed in any specific order." Dkt. No. 154 at 10. Plaintiff also incorporates its arguments as to the overall order of the steps in Claim 14. *See* s. IV. H., *infra*. Plaintiff also notes that the preferred embodiment in the specification, including Figure 2, ought not limit the scope of the claims. *Id*. at 10-11 (citing Bayer AG & Bayer Corp. v. Schein Pharms., Inc., 301 F.3d 1306, 1316 (Fed.Cir.2002)).

2. Construction

The specification teaches a preferred embodiment in which "[a] number generator ... connected to the apparatus, generates and assigns a numeric digit to each DN received to the receiver-decoder ...." '009 Patent at 6:12-15. This description does not specify that the identifier be generated before receipt of the DN. Because not even the preferred embodiment is so limited, a person of ordinary skill in the art would understand that the claim scope is not so limited. "Nowhere ... is there any statement that this order is important, any disclaimer of any other order of steps, or any prosecution history indicating a surrender of any other order of steps." *Altiris,* 318 F.3d at 1371. While the "assigning" of the identifier must occur after receipt of the DN, *see* s. IV. H., *infra,* neither grammar nor logic require that the "generating" must so occur.

The Court therefore construes the term "generating" to mean "creating."

E. Assigning

1. The Parties' Positions

Plaintiff proposes this term means "associating." Dkt. No. 155 at 6. Defendants propose this term means "fixing the identifier in relationship to the DN." *Id*.

Plaintiff argues that its proposed construction is consistent with the dictionary definitions of "assign" and "associate." Dkt. No. 147 at 22. Plaintiff also argues that Defendants' proposed construction "does not makes sense when read within the claim language: 'generating and fixing the identifier in relationship to the DN an

identifier.' " *Id*.

Defendants respond that "the term 'associating' does not appear anywhere in the '009 Patent, was not used in arguments to the Examiner during the prosecution history, and is not even listed in any of the dictionary definitions for 'assign' cited to by [Plaintiff] as relevant extrinsic evidence." Dkt. No. 150 at 23-24. Defendants argue that an identifier must be "fixed" because "[w]ithout a fixed relationship, the DN and its assigned digit cannot serve to uniquely identify a given DN to enable later recall and display." Defendants also cite prosecution history purportedly indicating a fixed relationship. *Id*. at 24-25.

Plaintiff replies by reurging its opening arguments as well as by arguing that Defendants' construction "is ambiguous and requires further explanation." Dkt. No. 154 at 11.

2. Construction

The parties disagree as to whether an identifier must be permanently assigned ("fixed," according to Defendants) or may be temporarily assigned ("associated," according to Plaintiff).

The intrinsic evidence does not support requiring permanence. The claims require that the identifier be assigned at the time of "storing" but specify no other requirement. '009 Patent at 9:30-10:34. The written description does not indicate that the assignment of an identifier cannot be changed. As part of the preferred embodiment, the Inventor described that a "[m]emory unit is for storing [the DN] to memory for later recall, display and automatic or manual dialing ...." *Id*. at 7:4-6. The Inventor also described how a user of the invention recalls the received DN by "press[ing] the digit or digits assigned to the stored DN on a keypad ...." *Id*. at 6:39-40. While these descriptions require the ability to recall a DN using an assigned identifier, they doe not require that the identifier used to recall be the same identifier originally assigned. Also, once the user recalls the received DN, the purpose of the assignment could be deemed achieved and the union between the identifier and the received DN changed or eliminated. The intrinsic evidence thus does not preclude the user of the invention, or the invention itself, from changing the identifier assigned to a received DN.

As to extrinsic evidence, "assign" has many definitions, such as "to point out" or "to ascribe, attribute, or refer, as belonging to or originating in," that do no require permanence. *See Oxford English Dictionary* (Second Edition 1989).

Because nothing prohibits the user of the invention or the invention itself from assigning a new identifier to a received DN before the user recalls that received DN, "assigning" need not be permanent. Because the word "fixed" proposed by Defendants would suggest that an identifier is "definitely and permanently" assigned to a DN, the Court rejects this proposed construction. *Id*. The Court therefore adopts the word "associating" proposed by Plaintiff because the common meaning of that word, "uni[ting] for a common purpose," does not imply a permanent relationship. *Id.; see also* Dkt. No. 151, Exh. 32 at 5 (Webster's Ninth New Collegiate Dictionary (1989) (defining "conjunction" as "the act or an instance of conjoining" and defining "conjoin" as "to join together for a common purpose)).

The Court construes the term "assigning" to mean "associating."

F. Identifier

1. The Parties' Positions

Plaintiff proposes this term means "something such as a number, marker, flag, character, or pointer used to distinguish or set apart ." Dkt. No. 155 at 7. Defendants propose this term means a "numeric digit or digits capable of being entered on the keypad of the telephone station." *Id*.

Plaintiff begins by citing a technical dictionary that defines "identifier" as "the name address, label, or distinguishing index of an object." Dkt. No. 147 at 23 (quoting *Authoritative Dictionary of IEEE Standards and Terms* 529 (Seventh Edition 2000)). Plaintiff argues that while the specification of the ' 009 Patent "exemplifies the claimed identifier as a numeric digit," the claim scope should not be limited to this specific example. Id. Plaintiff also argues that the claim language does not show an intent to limit the broad ordinary meaning of identifier. Id. at 23-24. Plaintiff suggests the Court apply the doctrine of claim differentiation in light of Claim 18, which claims: "A method as set forth in claim 14, wherein said identifier comprises a numeric digit." '009 Patent at 10:15-16; Dkt. No. 166 at 65:25-66:7.

Defendants respond by noting that the specification teaches that the "identifier" is created by a "number generator connected to the apparatus." Dkt. No. 150 at 25-26. Defendant further argues that the identifier must be a numeric digit because of "the sole stated purpose of the identifier-to provide one or more digits that can be entered on the telephone keypad to return a missed call. *Id*. at 26. Defendant also argues that the continuation-in-part application filed in 1991 "recited only numeric digit or digits and did not use the term 'identifier.' " *Id*. at 27. Defendant argues that the introduction by amendment of the term "identifier" in 1995 limits that term to numeric digits because to construe the term "in a manner more broadly than supported by [the Inventor's] priority application is both inconsistent with that priority claim and violates the prohibition against new matter contained in 35 U.S.C. s. 132." *Id*. Defendant argues that this prosecution history bars construing "identifier" to be broader than a numeric digit because Plaintiff stated that the changing of "digit" to "identifier" in 1995 did not add new matter. At the claim construction hearing, Defendants argued:

The term identifier was introduced into the claims by an amendment in may of 1995. Identifier ... cannot be read to be broader than a numeric digit because plaintiff in the prosecution history could not and, in fact, represented to the patent office that he did not introduce new matter when he changed the term from digit to identifier. And if the term identifier doesn't add new matter, new disclosure, new material, it cannot broaden what was there before, and the only thing that was there before was a numeric digit.

Dkt. No. 166 at 68:3-13. Finally, Defendant argues that the doctrine of claim differentiation should not be applied because disregarding that doctrine is "justified by the intrinsic evidence." Dkt. No. 150 at 27.

Plaintiff replies that the term "identifier" should not be limited by the preferred embodiment's use of numeric digits. Dkt. No. 154 at 12.

2. Construction

"Claim differentiation" refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. Curtiss-Wright, 438 F.3d at 1380. The relevant portions of Claim 14 of the ' 009 Patent read: "(b) generating and assigning an identifier to said received DN of said third party; ... and (d) storing said received DN of said third party in memory in conjunction with said assigned identifier." '009 Patent at 9:29-10:6. Claim 18 reads: "A method as set forth in claim 14, wherein said identifier comprises a numeric digit ." *Id*. at 10:15-16. Defendants' proposed construction of "identifier" to mean "numeric digit or digits" would add to Claim 14 the limitation contained in Claim 18. Although a validity analysis is not a regular component of claim construction, if possible claims should be construed to

preserve their validity. Phillips, 415 F.3d at 1327; *see also* Rhine v. Casio, Inc., 183 F.3d 1342, 1345 (Fed.Cir.1999). Defendants' construction is accordingly disfavored.

Plaintiff does not address Defendants' argument that a broad construction violates the prohibition against amending claims to add new matter. *See* Dkt. Nos. 154 at 11-13 & 166 at 69:18-20. Title 35 U.S.C. s. 132 provides, in relevant part, "No amendment shall introduce new matter into the disclosure of the invention." The 1991 specification, from which the '009 Patent claims priority, disclosed that "[a] number generator ... connected to the apparatus generates and assigns a different numeric digit or digits to each DN received to the receiver-decoder." Dkt. No. 150, Exh. 7 at 8-9. The 1991 specification claimed "generating a numeric digit and assigning said digit to the received said DN." *Id*. at 12. In 1995, the Inventor introduced the term "identifier." Dkt. No. 151, Exh. 28 at 3. Nonetheless, the term "identifier" does not appear in the written description of the '009 Patent just as it does not appear in the 1991 written description. In either case, a person of ordinary skill in the art must interpret the term "identifier" without a definition in the written description. Defendants' argument is therefore insufficient to overcome the powerful doctrine of claim differentiation. *See, e.g.,* SRI Int'l, 775 F.2d at 1122; *see also* 35 U.S.C. s. 282 ("The burden of establishing invalidity of a patent or any claim rest[s] on the party asserting such invalidity.")

A person of ordinary skill in the art upon reading the claims would understand that the purpose of the "identifier" is to enable "the received DN" to be "recall[ed], display[ed,] and automatic or manual[ly] dial[ed]." '009 Patent at 7:4-6. This purpose demonstrates that an identifier must distinguish each received DN from other received DN's.

The Court therefore construes the term "identifier" to mean a "distinguishing device."

G. In Conjunction with Said Identifier

1. The Parties' Positions

Plaintiff proposes this term means "in association with said assigned identifier." Dkt. No. 155 at 7. Defendants propose this term means "together with said assigned identifier for later recall and display of the DN and assigned identifier." *Id*.

Plaintiff argues that its proposed construction is supported by at least one dictionary definition. Dkt. No. 147 at 24 (citing *Webster's New World Dictionary* 295 (Third Edition 1994). Plaintiff argues its construction is "most consistent with the context of the claim ...." *Id*. Plaintiff argues that Defendants' proposed construction impermissibly uses an example provided in the specification to limit claim scope. *Id*. at 25.

Defendants respond that the specification refers to the identifier and the DN being stored together. Dkt. No. 150 at 28. Defendants also argue that the Inventor's statements during the prosecution history also indicate that the identifier must be stored together with the DN. *Id*. (citing Exhs 29-31). Defendants also cite two dictionaries that define "conjunction" to mean "occurrence together." *Id*. at 29 (citing *Webster's Collegiate Dictionary* 277-78 (9th Edition 1989) & *Webster's Third New Int'l Dictionary* 2558 (1993)).

Plaintiff replies that Defendants' proposed construction "inserts unnecessary ambiguity into the claims and imports limitations from the specification." Dkt. No. 154 at 13. Plaintiff also argues that the dictionary definitions cited by Defendants could equally support Plaintiff's proposed construction. *Id*.

2. Construction

The specification discusses this part of the invention in several places. First, the specification discloses that at "a memory unit of the apparatus stores the received DN and the generated digit(s) to memory for later recall and display." '009 Patent at 2:38-40. Second, the specification describes that the apparatus "stores the received DN to memory so as to allow the called party to later recall the stored DN from the memory ...." *Id*. at 3:48-50. Third, the specification discloses that "[a] memory unit ... connected to the apparatus, stores the DN and its assigned digit or digits for later recall and display." *Id*. at 6:17-19.

This consistent reference in the specification to "the DN *and* its assigned digit or digits" teaches that the Inventor used the constituent term "conjunction" in its broadest sense to mean simply that both are stored. *Id*. at 2:38-40, 3:48-50 & 6:17-19 (emphasis added). The specification teaches a person of ordinary skill in the art that both the DN and the assigned identifier must be stored, but it does not teach that they must be stored together. The use of the word "together" would itself introduce unnecessary ambiguity and require further construction, as would the word "association." The Court instead construes "in conjunction with" to mean "and," as is plain on the face of the specification.

The Court therefore construes the term "in conjunction with said identifier" to mean "and storing said identifier in memory."

H. Whether Steps of Claim 14 Must Be Performed in the Order Recited

Claim 14 is a method claim comprising four steps:

A method for receiving at a busy telephone station of a first party in conversation with a second party an incoming caller telephone directory number (DN) of a third party calling said first party, comprising the steps of:

(a) receiving said DN of said third party from a terminating central office serving said busy telephone station;

(b) generating and assigning an identifier to said received DN of said third party;

(c) displaying said received DN of said third party in a display; and

(d) storing said received DN of said third party in memory in conjunction with said assigned identifier.

1. The Parties' Positions

"Plaintiff does not believe that steps (a), (b), (c), and (d) are required to be performed in the order in which they are recited." Dkt. No. 155 at 8. Defendants argue that these steps "must be performed in the order recited." *Id*.

Plaintiff argues that the steps are neither explicitly nor logically required to be performed in the order recited. Dkt. No. 147 at 25-26. However, Plaintiff acknowledges that "the DN must be received before it can be displayed or stored." *Id*. at 25.

Defendants first respond that the language of the claims requires that step (a) be performed before any other step and that step (b) be performed before step (d). Dkt. No. 150 at 33. Defendants cite the use of "receiving

said DN" in step (a) followed by the use of "said received DN" in steps (b), (c), and (d) because the actions in those latter steps "require a received DN on which to act." *Id*. As to the performance of step (a) before step (d), Defendants argue that step (d)'s reference to "said assigned identifier" requires that step (d) occur after "generating and assigning an identifier" occurs in step (b). Second, Defendants argue that the specification supports its proposed construction because "[e]very time the specification lists those steps or a portion thereof, it lists them in the identical order that appears in the claim, and no variation is mentioned in the specification or figures." *Id*. at 34. Third, Defendants argue that the prosecution history limits the order of the steps to the order recited because the Examiner rejected the Inventor's attempt to present a different order of steps by amendment. *Id*. (citing Exhs. 29 & 7). Defendants conclude that the Inventor's "acquiescence to the Examiner's rejection of any rearrangement of the order of the steps precludes [Plaintiff's] attempts to recapture that surrendered material now. *Id*. at 36 (citing Lemelson v. General Mills, Inc., 968 F.2d 1202, 1207-08 (Fed.Cir.1992).

Plaintiff first replies that "there are no ordinal or transitional words in the claim language or in the descriptions of the steps in the specification that would imply that these tasks must be performed in any order." Dkt. No. 154 at 15. Plaintiff argues that there are no similar grammatical or logical requirements. *Id*. Plaintiff proposes that step (c) could be split such that "[t]he elements contained in claim 14 could be performed as follows: an identifier is generated, the DN is received and simultaneously displayed, and the DN is then stored in a position that assigns it to the previously generated identifier." *Id*. Plaintiff argues that the order recited in the specification is merely a preferred embodiment and cannot limit claim scope. *Id*. Finally, Plaintiff argues that "[a]lthough [the Inventor] did attempt to change the order of the steps in a figure that was ultimately rejected by the [E]xaminer, there are no statements showing [the Inventor's] intention to disclaim any particular order." *Id*. at 16.

2. Construction

The Federal Circuit has established "a two-part test for determining if the steps of a method claim that do not otherwise recite an order, must nonetheless be performed in the order in which they are written." *Altiris,* 318 F.3d at 1369. "First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written. *Id*. "[W]e next look to the rest of the specification to determine whether it "directly or implicitly requires such a narrow construction." *Id*. at 1370.

The Federal Circuit's applications of this test in *Altiris* and *Mantech* provide guidance. *Altiris,* 318 F.3d 1364; Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc., 152 F.3d 1368.

The steps of the method claim at issue in *Altiris* comprised, in relevant part:

testing automatically for automation boot sequence data, said test including reading a boot selection flag and comparing said boot selection flag with a known flag setting; ...

setting said boot selection flag; and

booting normally, if said testing automatically step indicates a normal boot sequence.

318 F.3d at 1367. The Federal Circuit found that "nothing in the intrinsic evidence indicates that the 'setting' step must be performed before the 'booting normally' step." *Id*. at 1370. This situation is analogous to that of steps (b) and (c) of the present case. "Nowhere ... is there any statement that this order is important, any

disclaimer of any other order of steps, or any prosecution history indicating a surrender of any other order of steps." *Id*. at 1371. The specification does not teach that an identifier must be generated and assigned to the received DN before the received DN is displayed, nor does grammar or logic require this. Therefore, steps (b) and (c) need not be performed in a particular order.

As to Defendants' proposal that step (a) precede all steps and that step (b) precede step (d), the present case is analogous to *Mantech,* where the Federal Circuit limited a method claim to performance of the steps in the order recited in the claim. The method claim at issue in *Mantech* read as follows:

1. A method for remediating a hydrocarbon-contaminated region of a subterranean body of groundwater to destroy or reduce the initial concentration levels of hydrocarbon contaminants, comprising the steps of:

(a) providing a plurality of mutually spaced wells intersecting said groundwater region;

(b) providing a treating flow of acetic acid from one or more of said wells into said groundwater region, to establish acidic conditions therein;

(c) introducing a turbulent flow of an aqueous solution of ferrous ion into said groundwater region, for mixing with said acidified groundwater, thereby providing a catalyst for disassociation of hydrogen peroxide; and

(d) providing a treating flow of hydrogen peroxide solution from one or more of said wells into said groundwater region, said hydrogen peroxide undergoing a Fenton-like reaction in the presence of said acidic conditions and said ferrous ion to generate hydroxyl free radicals for oxidizing said contaminants.

Mantech, 152 F.3d at 1376. The Federal Circuit reasoned as follows:

Step (a) provides the wells. No monitoring or injecting of the groundwater can occur until wells are provided; hence, step (a) must be performed first. Step (b) introduces acetic acid, via the wells provided in step (a), into the groundwater of the contaminated region. Hence, in order to accomplish step (b), the wells of step (a) must already have been provided. Step (c) introduces an aqueous solution of ferrous ion into said groundwater region for mixing with "*said acidified groundwater*" (emphasis added). In order for the aqueous solution to mix with the acidified groundwater, the acid must have already mixed with the groundwater to form acidified groundwater. Hence step (b) necessarily comes before step (c). Step (d) introduces a treating flow of hydrogen peroxide solution into the groundwater. The hydrogen peroxide solution undergoes a Fenton-like reaction "in the presence of said acidic conditions and said ferrous ion." Because the acidic conditions and the ferrous ion must be present before the hydrogen peroxide can undergo the Fenton-like reaction, step (d) must come after both steps (b) and (c). We hold, therefore, that the sequential nature of the claim steps is apparent from the plain meaning of the claim language and nothing in the written description suggests otherwise.

152 F.3d at 1375-76.

As in *Mantech,* the possible ordering of the steps of Claim 14 of the ' 009 Patent has limits. Steps (b), (c), and (d) all refer to "said received DN." '009 Patent at 10:1-6. Grammar and logic thus require that the "receiving said DN" in step (a) occur before the remaining steps can then act on "said received DN." *Id*. at 9:34-10:6. Having so found, the Court finds that steps (c) and (d), as well as the "assigning" in step (b),

must occur after step (a). Plaintiff agrees. Dkt. No. 147 at 25. The "generating" in step (b), on the other hand, need not occur after step (a). *See* s. III. D., *supra*. Finally, step (b) must precede step (d) because the storing of "said assigned identifier" cannot occur before "assigning an identifier" occurs in step (b). '009 Patent at 10:1-6.

The Court finds the above construction "apparent from the plain meaning of the claim language and nothing in the written description suggests otherwise." Mantech, 152 F.3d at 1376.

I. Said Third Party's DN Identifies a Cellular Mobile Telephone

1. The Parties' Positions

This term appears in Claim 17, which depends from Claim 14. Plaintiff proposes this term "does not require construction separate and apart from the construction of the terms contained therein." Dkt. No. 155 at 8. Defendants propose this term means "the displayed DN includes an indication that the call originates from a cellular phone." *Id*.

Plaintiff argues that "the plain meaning of the term ... merely requires that the DN identify a cellular telephone" and that Defendants propose adding an "additional requirement" on a term that is already "easily understood by a person of ordinary skill in the art without construction ...." Dkt. No. 147 at 33.

Defendants argue that "[c]onstruing the claim in a manner that does not require an indication that the DN corresponds to a cellular mobile telephone would render meaningless the concept of 'identifying' a cellular mobile telephone." Dkt. No. 150 at 29.

Plaintiff replies that "[t]he claim language merely requires that the incoming DN be that of a cellular mobile telephone" and opposes requiring that the there must be an "indication that the call originates from a cellular telephone." Dkt. No. 154 at 13-14.

2. Construction

The Court finds no support for requiring that the displayed DN indicate that the call originates from a cellular mobile telephone. Rejecting this construction does not render the concept of "identifying" meaningless, as Defendants argue. Dkt. No. 150 at 29. A person of ordinary skill in the art would understand that the third party's DN would "identify" a cellular mobile telephone where the third party's DN is the DN of a cellular mobile telephone. The invention need not display an "indication" of that fact for a user of the invention to know that a particular DN belongs to a cellular mobile telephone, such as one belonging to a friend or family member with whom the user often converses. This comports with the specification's silence as to any "indication." Whether or not the user of the invention acknowledges that a particular DN belongs to a cellular mobile telephone, a cellular mobile telephone's DN nonetheless "identifies" that cellular mobile telephone as such.

The Court therefore construes the term "said third party's DN identifies a cellular mobile telephone" to mean "said third party's DN is the DN of a cellular mobile telephone."

J. Means for Receiving Said DN of Said Third Party from a Terminating Central Office Serving Said Busy Telephone Station

1. The Parties' Positions

The parties agree that this is a "means-plus-function" term under 35 U.S.C. s. 112, para. 6 (" s. 112, para. 6"). Dkt. No. 155 at 8. The parties agree that the function is "receiving said DN of said third party from a terminating central office serving said busy telephone station." *Id*. Plaintiff proposes the corresponding structure "consists of a receiver decoder or its equivalent that receives signals representing the calling party DN." *Id*. Defendants propose as structure "the combination of a receiver-decoder, an RJ11 jack,FN2 and a telephone line." *Id*.

FN2. An RJ11 jack is a device commonly used to connect a telephone to a pair of telephone wires in a home or office.

Plaintiff argues that the RJ11 jack and telephone line proposed as part of the structure by Defendants are "additional limitations" that "could be used with a receiver-decoder in receiving the DN from the terminating central office [but] are not required." Dkt. No. 147 at 27. Plaintiff argues that the receiver-decoder must be connected to a "called party apparatus" but the RJ11 jack and telephone line shown in Figure 3 are "the connection between the telephone set and the terminating central office but are not required for receiving the DN of the third party." *Id*.

Defendants respond that in order to receive a DN from a terminating central office, there must be a connection to a terminating central office. Dkt. No. 150 at 30. Defendants argue that this connection is "via telephone lines and a RJ11 jack ... to originating or terminating central office equipment ...." *Id*. (quoting '009 Patent at 6:47-49). Defendants thus conclude that "the receiver-decoder cannot perform the corresponding function" without the RJ11 jack and a telephone line. *Id*. Defendants emphasize that because the recited function includes "from a terminating central office serving said busy telephone station," the structure must include structure to carry the DN from the terminating central office to the busy telephone station. Dkt. No. 166, 84:17-85:14.

Plaintiff responds by opposing Defendants' purported attempt to "further import improper limitations into the claim language." Dkt. No. 154 at 9.

2. Construction

A patentee may set out the elements of a claim in a so-called means-plus-function format. 35 U.S.C. s. 112, para. 6. The patentee may recite in the claim a "means for" achieving a certain function. In exchange for this convenience in claim drafting, the patentee must disclose a corresponding structure in the specification. If the patentee fails to provide corresponding structure sufficient to enable a person of ordinary skill in the art to make and use the invention, then the claim is invalid. *See* id. at s. 112, para. 1. If the patentee provides sufficient corresponding structure, then the claim scope encompasses that structure "and its equivalents." Id. at s. 112, para. 6. Accused devices employing the same or equivalent structure will be found to literally infringe the claim. WMS Gaming, Inc. v. Int'l Game Technology, 184 F.3d 1339, 1350 (Fed.Cir.1999) (noting that "to establish literal infringement of a means-plus-function claim, the patentee must establish that the accused device employs structure identical or equivalent to the structure disclosed in the patent and that the accused device performs the identical function specified in the claim").

The issue is whether the corresponding structure for this means-plus-function claim element is simply a "receiver-decoder" or whether it must also include "telephone lines and a RJ11 jack." '009 Patent at 6:8 &

6:47-49. The description of the preferred embodiment teaches that the [r]eceiver-decoder ... is for receiving and decoding signals representing a calling party's DN sent from terminating central office equipment ...." *Id*. at 6:57-59. However, the specification teaches that the receiver-decoder does not function in isolation. Figure 3 shows that the receiver-decoder is part of the telephone set, and the telephone set is connected to the "originating or terminating central office" by an RJ11 jack and unlabeled lines. The specification's brief description of the drawings clarifies that the telephone set is "connected via telephone lines and a RJ11 jack to originating or terminating central office equipment .... " *Id*. at 4:50-54.

Because the receiver decoder that performs the agreed upon function of "receiving said DN of said third party from a terminating central office serving said busy telephone station" is part of the telephone set, and the telephone set is connected to the terminating central office equipment by "telephone lines and a RJ11 jack," the corresponding structure for means-plus-function purposes includes the "telephone lines an a RJ11 jack." *Id*. at Fig. 3 & 4:50-54. The specification provides no corresponding structure other than the "telephone lines and a RJ11 jack" to carry the DN from the terminating central office to the busy telephone station.

Therefore, the Court finds that the corresponding structure of the "means for receiving said DN of said third party from a terminating central office serving said busy telephone station" is "a receiver decoder, telephone lines, and a RJ11 jack, as well as equivalents thereof."

K. Means for Generating and Assigning an Identifier to Said Received DN

1. The Parties' Positions

The parties agree that this is a means-plus-function term under s. 112, para. 6. Dkt. No. 155 at 9. The parties agree that the function is "generating and assigning an identifier to said received DN." *Id*. Plaintiff proposes the corresponding structure "consists of a number generator or its equivalent that creates and associates an identifier with the DN." *Id*. Defendants propose the corresponding structure is a "number generator and a microprocessor programmed to perform the algorithm in the specification." *Id*.

Plaintiff argues that the corresponding structure "is specifically depicted in Figure 3 as 'NUMBER GENERATOR 303E" connected to "MICROPROCESSOR 303B." Dkt. No. 147 at 27 (citing '009 Patent, Fig. 3). Plaintiff proposes that "[t]he specification teaches that 'the number generator ... generates and assigns a numeric digit(s) to each DN received' and that the microprocessor 'is for interacting with and controlling the above function or functional devices by any known technique.' " *Id*. at 27-28 (quoting '009 Patent, 2:34-36, 6:12-14 & 7:17-19).

Defendants respond that "the microprocessor must also be programmed to perform the assigning algorithm disclosed in the specification." Dkt. No. 150 at 31 (citing WMS Gaming, 184 F.3d at 1348-49.

2. Construction

A patentee cannot use the means-plus-function format without providing structure. *See* 35 U.S.C. s. 112, para. 6; *see also* s. IV. J. 2, *supra*. In the context of microprocessors, the algorithm carried out by the microprocessor is a necessary part of the structure. WMS Gaming, 184 F.3d at 1348. As a corollary to this rule, disclosure of a microprocessor as structure, by itself, is insufficient. "[T]he disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." Id. at 1349.

The specification discloses that "[a] number generator ... connected to the apparatus, generates and assigns a numeric digit or digits to each DN received to the receiver decoder ...." '009 Patent at 6:12-14. The Court must "limit the claim to the algorithm disclosed in the specification." WMS Gaming, 184 F.3d at 1348. Here, the algorithm for the number generator disclosed in the specification is simply "generating and assigning a numeric digit(s) to each DN received via [the] receiver-decoder ...." '009 Patent at 6:62-64.

The Court therefore finds the corresponding structure of the "means for generating and assigning an identifier to said received DN" to be "a number generator programmed to generate and assign a numeric digit or digits to each DN received via the receiver-decoder ."

L. Means for Displaying Said Received DN of Said Third Party in a Display

1. The Parties' Positions

Plaintiff proposes this is not a means-plus-function term covered by s. 112, para. 6. Dkt. No. 155 at 9. Defendants propose that it is. *Id*. The parties agree that if the Court finds the term to be in means-plus-function form, then the function is "displaying said received DN of said third party in a display." *Id*. Plaintiff proposes, if the Court finds the term to be a means-plus-function term, that the corresponding structure "consists of a display unit such as an LED or LCD display counter or any equivalent thereto that is capable of displaying the received DN." *Id*. Defendants propose that the corresponding structure is "a display unit with an LED or LCD display and other circuitry." *Id*.

Plaintiff argues that this term "is not in means-plus-function format due to the recitation of structure within the claim language." Dkt. No. 147 at 28. Plaintiff asserts that "the term 'display' is a reference to structure, a device designed to visually represent data." *Id*. Plaintiff argues that this disclosure of structure "rebuts the means plus function presumption." *Id*. (citing *Envirco,* 209 F.3d at 1365).

Alternatively, Plaintiff proposes that the specification discloses corresponding structure consisting of "a display unit such as an LED or LCD display counter." *Id*. at 29 (citing '009 Patent at Fig. 2, Fig. 3, 2:36-38, 3:45-51, 6:14-16, 6:31-36 & 6:65-7:3). Plaintiff also refers to the specification's purported teaching that an "alphanumeric display unit ... displays the received DN in an LED or LCD." Id. (quoting '009 Patent at 2:36-38). As to Defendants' indefiniteness argument, Plaintiff argues that Defendants cannot meet their burden of showing lack of requisite structure by clear and convincing evidence. *Id*. Plaintiff argues that Defendants' indefiniteness argument fails because "the claims 'when read in light of the specification reasonably apprise those skilled in the art of the scope of the invention.' " *Id*. at 30. (quoting S3, Inc. v. Nvidia Corp., 259 F.3d 1364, 1367 (Fed.Cir.2001)). Plaintiff also argues that the Inventor "is not required to teach a person of skill in the art how to attach the display means to the apparatus." *Id*.

Defendants respond that "the word 'display' is simply too broad to disclose a specific structure sufficient to rebut the presumption. Dkt. No. 150 at 32 (citing *Altiris,* 318 F.3d at 1375-76). Defendants also argue that because the specification only discloses an LED or LCD, Plaintiff's "addition of 'such as' is therefore inappropriate." *Id*.

2. Construction

A patentee's use of the phrase "means for" gives rise to a presumption that the patentee intended to use the means-plus-function format for that particular element. *Al-* Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1318

(Fed.Cir.1999). However, this presumption may be rebutted where there is sufficient structure recited in the claim to enable that element. *Id*.

Step (c) of Claim 20 of the '009 Patent begins with the phrase "means for." '009 Patent at 10:31-32. Thus, the Inventor must be presumed to have intended to use means-plus-function format. *Al-* Site, 174 F.3d at 1318. The issue is whether the Inventor disclosed sufficient structure within the claim element to overcome the presumption. Step (c) describes a "display," but this is too general to satisfy the corresponding structure requirement of s. 112, para. 6 because a display could be anything that displays, and displaying is the function claimed. In essence, Plaintiff attempts to claim the function itself, which is not permitted. *Id.; see also* 35 U.S.C. s. 112, para. 6.

Figure 3 discloses a "display unit," but that phrase by itself would be an insufficient description to satisfy the corresponding structure requirement of the means-plus-function format, as discussed above. '009 Patent at Fig. 3. However, the specification describes this display unit as "for displaying in an LED or LCD display counter ... the DN received ... and for displaying in the LED or LCD display counter a stored DN when recalled ...." Id. at 6:65-7:2. The acronyms "LED" and "LCD" correspond to "light-emitting diode" and "liquid crystal display," respectively, and their disclosure is sufficient corresponding structure to satisfy s. 112, para. 6.

The Court therefore finds that the corresponding structure to the "means for displaying said received DN of said third party in a display" is "an LCD or LED display, as well as equivalents thereof ."

M. Means for Storing Said Received DN of Said Third Party in Memory in Conjunction with Said Assigned Identifier

1. The Parties' Positions

Plaintiff proposes this is not a s. 112, para. 6 term. Dkt. No. 155 at 9-10. Defendants propose that it is. *Id*. at 9. The parties agree that if the Court finds the term to be a means-plus-function term, then the function is "storing said received DN of said third party in memory in conjunction with said assigned identifier." *Id*. at 9-10. Plaintiff proposes that if the Court finds the term to be a in means-plus-function form, then the corresponding structure "consists of a memory unit or an equivalent that is capable of storing the DN." *Id*. Defendants propose the corresponding structure is a "memory unit and a microprocessor, programmed to perform [the] algorithm in the specification." *Id*.

Plaintiff argues that "the term 'memory' is well understood to refer to a structure for storing information." Dkt. No. 147 at 30. Alternatively, Plaintiff argues that the corresponding structure is a memory unit, which "is specifically depicted in Figure 3 at "MEMORY UNIT 303G." *Id*. at 31 (citing ' 009 Patent at Fig. 3).

Defendants respond that "[t]he agreed function requires not only a device that provides a storage location-a memory unit-but also a device to interact with the memory unit and control the process of storing the data." Dkt. No. 150 at 32. Defendants conclude that this claim term "requires not only a memory unit, but also a microprocessor programmed to interact with the memory unit and control the data storage process." *Id*.

2. Construction

Step (d) of Claim 20 of the '009 Patent begins with the phrase "means for." Thus, the Inventor must be presumed to have intended to use means-plus-function format. *Al-* Site, 174 F.3d at 1318. The issue is

whether the Inventor disclosed sufficient structure within the claim element to overcome the presumption. The claim describes the function of "storing" data "in memory." ' 009 Patent at 10:33-34. The use of the word "in" before "memory" suggests that something is doing the "storing" besides the memory itself.

Plaintiff's argument that memory is "well understood to refer to a structure for storing information" fails to overcome the presumption. Dkt. No. 147 at 30. Even if "memory" is a sufficient description of "a structure for storing information," a person of ordinary skill in the art would understand that something must interact with the memory to perform the function of "storing."

As to the corresponding structure, the specification teaches that a "[m]icroprocessor ... is for interacting with and controlling the above functions of functional devices ...." *Id*. at 7:17-19. One of these "functional devices" is a "[m]emory unit ... for storing [the received DN] to memory for later recall, display, and automatic or manual dialing ...." *Id*. at 7:18 & 7:4-5. The specification thus teaches that the "microprocessor" controls the "memory unit," and the "memory unit" acts upon "memory" to perform the function recited in step (d) of Claim 20. *Id*. at 7:4-5 & 7:17-19. The corresponding structure for step (d) therefore includes a microprocessor and a memory unit. However, a microprocessor by itself is insufficient corresponding structure to satisfy s. 112, para. 6. WMS Gaming, 184 F.3d at 1349. The corresponding structure must include an algorithm that the microprocessor carries out to perform the claimed function. *Id*. A person of ordinary skill in the art would understand how to program a microprocessor to achieve the "storing to memory" disclosed in the specification. '009 Patent at 7:4-5.

The Court therefore finds that this term is in means-plus-function format, that the function is "storing said received DN of said third party in memory in conjunction with said assigned identifier," and that the corresponding structure is "a memory unit and a microprocessor programmed to store said received DN to said memory unit, as well as equivalents thereof."

V. CONCLUSION

Accordingly, the Court hereby **ORDERS** the disputed claim terms construed consistent herewith.

E.D.Tex.,2006.
Morris Reese v. Samsung Telecommunications America, L.P.

Produced by Sans Paper, LLC.