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

800 ADEPT, INC,
Plaintiff.
v.
AT & T MOBILITY, LLC, et al,
Defendants.
800 Adept, Inc,
Plaintiff.
v.
Enterprise Rent-A-Car, Company, et al,
Defendants.

Nos. 5:07CV23, 5:07CV57

July 23, 2008.

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CLAIM CONSTRUCTION ORDER CONSTRUING U.S. PATENT NO. 5,805,689 **and** U.S. REISSUE PATENT NO. 36,111

CAROLINE M. CRAVEN**, United States Magistrate Judge.**

This Opinion construes terms in U.S. Patent No. 5,805,689 ("the '689 patent") and U.S. Reissue Patent No. 36,111 ("the '111 patent") (collectively "the Patents" or "patents-in-suit"). Plaintiff 800 Adept, Inc. ("Plaintiff" or "800 Adept") brought two separate cases regarding the Patents. The cases have been consolidated for purposes of claim construction only. In *800 Adept, Inc. v. AT & T Mobility, LLC, et al.* (5:07cv23), Plaintiff brings this cause of action against AT & T Mobility LLC, Cellco Partnership, Sprint Nextel Corporation, Sprint Spectrum L.P., Nextel of California, Inc., Nextel Communications of the Mid-Atlantic, Inc., Nextel of New York, Inc., Nextel South Corp., Nextel of Texas, Inc., Nextel West Corp., Nextel Operations, Inc., and T-Mobile USA, Inc. (collectively "the E911 Defendants"), alleging the E911

Defendants infringe the Patents.

In *800 Adept, Inc. v. Enterprise Rent-A-Car, et al.* (5:07cv57), Plaintiff brings this cause of action against Enterprise Rent-A-Car Company, The Goodyear Tire & Rubber Company, Jenny Craig, Inc., Boston Market Corp., Domino's Pizza LLC, Budget Rent-A-Car System, Inc., Federal Express Corporation, Sylvan Learning, Inc., DHL International, Ltd., LA Weight Loss, Showtime Networks, Inc., Tellme Networks, Inc., Vail Systems, Inc., Farmer Group, Inc., McLeodUSA Telecommunications Services, Inc., and United Parcel Service of America, Inc. (collectively "the ERAC Defendants"), alleging the ERAC Defendants infringe the Patents.

I.

Background

A. Summary of the invention

The invention relates to systems for routing telephone calls and more particularly to a system for automatic direct routing of telephone calls from customers to the nearest or best provider of desired goods or services. At the time of the invention, organizations who advertise products or services were faced with the dilemma of how to directly connect those who have need of the advertiser's product or service and those who can provide the advertiser's product or service, while at the same time ensuring that the caller can be serviced from within the provider's designated territory of interest. The invention met the needs for a system that can directly route a customer's call to a provider of the advertiser's product in whose territorial limits the call originates, and do so by providing the caller with a direct connection to the provider, without human intervention after dialing, and without need of a computer to redial and place the call.

The invention accomplished this without need for intervention by a computer or human being by providing a direct-routing system having location determining means, the parameters of which can be established by a provider of specific goods or services. In the system, a caller's geographic location is identified by an Automatic Number Identification which is then correlated with a database established according to criteria of a second party, usually an advertiser or provider of goods or services. The routing is accomplished based on the assignment of latitude and longitude coordinates to a potential caller's location.

B. Background of the issuance of the Patents

The '111 patent and '689 patent both originated from a patent application filed by Daniel E. Neville ("Neville") on July 31, 1992, directed to geographic call routing systems and methods in which a company advertises an 800-type or 900-type telephone number in order to directly route calls made to that number to a particular store location that serves the caller. ('111 Patent Abstract & 1:17-41). The original application, after multiple rejections and amendments, issued on December 24, 1996 as U.S. Patent No. 5,588,048. The '111 patent reissued from the '048 patent on February 23, 1999 with original claims 1-16 and new claims 17-52. The '689 patent is a divisional of the original application.

The original application included 42 claims for the "direct routing of a telephone call." (ERAC Defendants' Ex. C at 52-53). FN1 The original claims lacked many of the claim terms now in dispute. The specification disclosed a variety of ways to determine the location of a telephone caller-including coordinate systems like

"vertical and horizontal" and "latitude and longitude" (id. at 34, 41, 42, 46, 47), and the original claims recite only generic "location determining means" for identifying the caller's geographic location. (Id. at 52-60). None of the original claims expressly recited the use of "latitude and longitude coordinates." By comparison, all issued claims were limited to "allocating latitude and longitude coordinates to ... all potential first parties."

FN1. Because the '111 and '689 patents have substantially the identical specification, references to the specification throughout this brief will be made only to the '111 patent (Exhibit A hereto). For this reason as well, the same terms appearing in the various claims of both patents should be given the same meaning. *See* Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc., 389 F.3d 1370, 1377 (Fed.Cir.2004).

The Examiner rejected all of the original claims, primarily as anticipated by the Finucane patent. In response, 800 Adept argued that Finucane "is not location specific in determining the geographic area of an originating call as the smallest geographical area it utilizes is the intersection of the Number of Plan Area (NPA) also known as the area code and the Local Access Transport Area (LATA) [.]" (*Id*. at 120). 800 Adept described its invention as follows:

On the other hand, the Direct Routing Telephone System disclosed in Applicant's patent is location specific in that it creates as few as 26 different Customer Response Zones (CRZs) in NPA 212, each corresponding to a tightly defined, geographically correct area.... For instance, in NPA 212, while it would be impossible for the Finucane, *et al*. patent to distinguish between a call originating in South Manhattan and a call originating in Harlem, Applicant's system could, if necessary, pinpoint the actual address from where the call originated. The distinctive feature of Applicant's invention being location specific is discussed in Applicant's specification and is already claimed in claim 1.

(*Id*. at 122-23). 800 Adept further explained:

A second major distinction between the Finucane, *et al*. patent and Applicant's system is that Finucane, *et al*. requires that a computer perform 'point of origin' to 'point of termination' calculations while a caller is on the line, thereby increasing the processing time....

On the other hand, Applicant's Direct Routing Telephone System performs all such calculations prior to the call even being made and, in fact, prior to delivery of the data base to the Long Distance Carrier (LDC). Once the LDC accesses the database, the ANI is read and the corresponding termination number is immediately retrieved.

(*Id*. at 123).

The Examiner maintained the rejection of all pending claims in light of Finucane. In response, 800 Adept amended the claims to distinguish over Finucane: "That difference is that in Applicant's system point of origin to point of termination calculations are made according to parameters selected by the second party to yield a database correlating all points of origin to all points of termination." (*Id*. at 156).

The Examiner again rejected all pending claims as anticipated by Finucane. In a subsequent telephone interview, the Examiner identified several prior art patents, including Finucane, Riskin, and Friedes, "which clearly teach the feature of comparing the ANI of a caller to a database." (*Id*. at 167). 800 Adept responded

by canceling all the independent claims and adding two new independent claims including an "element involving a database." (*Id*. at 172). 800 Adept identified its invention's use of a database using latitude and longitude coordinates as an important point of distinction over Finucane:

The major difference [with Finucane] is that with the present invention all point of origin to point of termination calculations have already been performed by determining in which response zone (client-defined polygon) the call originated, and to which corresponding terminating number the call should be routed. The results of these calculations are stored in a database at the service provider's location. Thus, the present invention eliminates the need to perform on-line calculations to determine the appropriate terminating number.

Another major and most critical difference between the present invention and that of Finucane, *et al*. is the finiteness by which an originating geographic area can be defined, known as "granularity." ... [B]y using the intersection of NPAs and LTAs, Finucane, *et al*. can divide the United States into only 450 areas. On the other hand, the present invention, which utilizes specific latitudes and longitudes, enables the United States to be divided in to more than 20,000 geographically predefined areas .... In fact, this invention has the ability to geographically pinpoint the location of a single caller, and treat that caller's ANI different than that of a next-door neighbor calling from within the same polygon.

(*Id*. at 177-78). 800 Adept also distinguished Riskin on the grounds that Riskin involves "multiple database queries," whereas "the present invention determines the terminating number with a single database query[.]" (*Id*. at 178).

After another rejection and another interview, 800 Adept cancelled all pending claims and substituted 25 new claims to systems and methods, which expressly claimed the use of latitude and longitude coordinates. (*Id*. at 214). 800 Adept emphasized its invention's use of latitude and longitude coordinates as a key point of distinction, this time distinguishing the "Vertical-Horizontal" (VH) coordinates disclosed in Riskin, stating:

Applicant's invention uses digital lat/lons (47.584854, -109.969341, for example) to accurately place a potential caller at the actual street address, and can differentiate between neighboring houses, or two different sides of the street.

(*Id*. at 225-26). 800 Adept also emphasized its invention's use of a database at the long distance carrier as another point of distinction over Riskin:

Under Riskin's teachings, an 800 call comes in to the long distance carrier. The call is terminated at a computer while the computer performs a 'shortest distance' algorithm. Once a location has been selected to receive the original call, the computer dials the number and makes the final connection.... On the other hand, Applicant's invention allows the long distance carrier to automatically match the telephone number of the first party to the telephone number of the second party contained in the database, nothing else.

(*Id*. at 225).

After another interview with the Examiner, 800 Adept again cancelled all pending claims and substituted 16 new claims, which ultimately issued as claims 1-16 of the '048 patent. 800 Adept also substituted the original abstract with a new abstract that "more concisely and clearly sets forth an overview of the claimed

invention." (Id. at 61-62, 238, 241). Finally, the Examiner insisted that 800 Adept amend original Figure 1 to add the claimed invention's "direct routing" database, labeled "NCP 5A" and located at the LDC (Long Distance Carrier) (original Fig. 1 on left; new NCP 5A highlighted in the amended Fig. 1 on right). (Id. at 69, 243, 253).

The claims of the Neville patents fall into three categories: (1) methods for "directly routing" a telephone call ('111 patent, claims 9 and 29); (2) systems for "directly routing" a telephone call written in means-plus-function format under 35 U.S.C. s. 112, para. 6 ('111 patent, claims 1 and 17); and (3) methods for constructing a database ('111 patent, claim 41; '689 patent, claim 1). Representative claim 29 of the '111 patent describes a five-step method for direct routing a telephone call to a service location of a second party assigned to receive calls originating from within the geographic area of the caller:

29. A method for direct routing a telephone call from a first party who has an originating telephone number at a physical location and who dials a telephone number including digits uniquely characteristic to a second party having a plurality of service locations, said method comprising the steps of:

allocating latitude and longitude coordinates to the physical location of all potential first parties;

defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates;

assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie;

determining the originating telephone number of the first party from which said telephone call is to be routed; and

directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said step of assigning.

Claim 17 mirrors claim 29, except that it is written in means-plus-function format under 35 U.S.C. s. 112, para. 6. Likewise, claim 9 mirrors claim 1 except for claim 1 being written in means-plus-function format. Claims 1 and 9 recite "allocating latitude and longitude coordinates to **each originating telephone number** of all potential first parties"; claims 17 and 29 recite allocating latitude and longitude coordinates to **the physical location** of all potential first parties." Claim 41 is to a method for constructing a database and essentially mirrors the first three steps of Claim 29 above. Claim 1 of the ' 689 patent also is to a method of constructing a database.

C. Procedural background of the current proceeding

The parties filed claim construction briefs and respective responses thereto, and on May 29, 2008, the Court held a claim construction hearing. After considering the parties' submissions, arguments of counsel, and all other relevant pleadings and papers, the Court finds that the claims of the Patents should be construed as set forth herein.

II.

The 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 claims of a patent define the invention to which the patentee is entitled the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005) (*en banc*). In claim construction, courts examine the patent's intrinsic evidence to define the patented invention's scope. C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 861 (Fed.Cir.2004); Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc., 262 F.3d 1258, 1267 (Fed.Cir.2001).

The legal principles of claim construction were recently examined by the Federal Circuit in Phillips v. AWH Corp., 415 F.3d 1303 (Fed.Cir.2005) (*en banc*). Reversing a 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 scattered decisions on the weight afforded dictionaries and related extrinsic evidence as compared to the intrinsic record. 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. 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. And the claims are "generally given their ordinary and customary meaning" as the term would mean "to a person of ordinary skill in the art in question at the time of the invention, *i.e.,* as of the effective filing date of the patent application." Vitronics, 90 F.3d at 1582. 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.' " 415 F.3d at 1315 (*quoting* Vitronics, 90 F.3d at 1582). To emphasize this position, the court cites 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, 1143-46 (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. Apply Yourself, 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.

"[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 Eng'g, 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." Id. at 1324.

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. O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1583 (Fed.Cir.1997). 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 35 U.S.C. 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; *see also* Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1298 (Fed.Cir.2005). A corresponding structure need not enable the claimed invention, rather it need only "include all structure that actually performs the recited function." Default Proof Credit Card Sys., 412 F.3d at 1298. A structure disclosed is only a "corresponding structure" if the "specification or prosecution history clearly links or associates that structure to the function recited in the claim." Med. Instrumentation & Diagnostics Corp. v. Elekta, 344 F.3d 1205, 1210 (Fed.Cir.2003). 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 Court notes that while it construes the terms as a matter of law, the Court is not required to provide a new definition or rewrite a term, particularly when it finds that the term has its plain and ordinary meaning.

The Federal Circuit recently addressed this issue in *O2 Micro International Ltd v. Beyond Innovation Technology Co.,* 2008 U.S.App. LEXIS 7053, at (Fed. Cir. April 3, 2008). In *O2 Micro,* the Federal Circuit considered the term "only if" in independent claim 1 which requires "a DC/AC converter circuit comprising: a feedback control loop circuit ... adapted to generate a second pulse signal ... only if said feedback signal is above a predetermined threshold." *Id*. at *6-*7. The defendant asserted that its controllers did not satisfy the limitation of claim one because there were circumstances where the feedback signal controlled power to the load "even though the feedback signal falls below the predetermined threshold." *Id* . at *8. Two defendants had asked the district court to construe the term "only if" to mean "exclusively or solely in the event that," another defendant argued the term to mean "never except when," and the plaintiff argued that no construction was needed. *Id*. at 10. The district court had noted that there was a dispute as to whether "only if" would have an exception but chose to rule that the term needed no construction. *Id*. at *11.

The Federal Circuit noted that "[a]t trial, the 'only if' limitation was a key issue disputed by the parties." *Id*. at *12. The Federal Circuit stated that the "purpose of claim construction is to 'determin[e] the meaning and scope of the patent claims asserted to be infringed." *Id*. at (citing Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed.Cir.1995) (en banc)). The Federal Circuit clarified that "[w]hen the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute." *Id*. (*citing* Markman, 52 F.3d at 979). The primary dispute, as acknowledged by the district court, was whether the "only if" limitation applied during the"the steady state operation of the switching circuit" or at all times without exception. *Id*. at *20-*21. The Federal Circuit noted that the parties had agreed to the "meaning" of the term but not the "scope." *Id*. at *22-*23. The Federal Circuit stated that "[a] determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute." *Id*. at *22. The Federal Circuit found that the district court's failure to construe "only if" allowed the jury to construe the term. *Id*. at *24.

The Federal Circuit recognized that "district courts are not (and should not be) required to construe *every* limitation present in a patent's asserted claims." *O2 Micro,* 2008 U.S.App. LEXIS 7053 at *25-*26 (emphasis in original) (*citing* Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc., 249 F.3d 1341, 1349 (Fed.Cir.2001); U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed.Cir.1997)). This Court and many of the other courts in this district have often found that no construction was necessary for a contested term. *See, e.g., Cooper Techs. Co. v. Thomas & Betts Corp.,* 2008 U.S. Dist. LEXIS 11457, at *20-*21 (E.D.Tex. Feb. 15, 2008) (finding the terms "radial distance / radial spacing / radially spaced" did not need construction); *911EP v.* Whelen Eng'g Co., 512 F.Supp.2d 713, 725 (E.D.Tex.) (finding the term "visible exterior surface" did not need construction even though both parties proposed a construction for the phrase); Konami Corp. v. Roxor Games, Inc., 445 F.Supp.2d 725, 733 n. 7 (E.D.Tex.2006) (declining to provide a construction for the term "matching relationship" and determining that a party's proposed construction of "corresponding relationship" was unhelpful because it merely restated the term "relationship"). The Court notes that other districts also frequently do not construe terms. *See, e.g.,* Adco Prods. v. Carlisle Syntec, Inc., 110 F.Supp.2d 276, 286 (D.Del.) (holding that no additional construction is necessary for the terms "a rubbery polymer comprising a blend of ... and polyisobutylene" or "substantially equal amounts"). As one district court in Delaware noted, "only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy." Biovail Labs. Int'l SRI v. Impax Labs., 433 F.Supp.2d 501, 505 (D.Del.2006) (quoting Vivid Techs., Inc. v. American Science & Eng'g, Inc., 200 F.3d 795, 803 (Fed.Cir.1999)). As explained by another district court, there is a heavy presumption that a claim term carries its ordinary meaning. *Bd. of Trustees of the Leland Stanford Junior University v. Roche Molecular Sys.,* 2007 U.S. Dist. LEXIS 87219, at (N.D.Cal.

Nov. 27, 2007) (*citing* Phillips, 415 F.3d at 1314). The court further explained that some terms, such as "therapeutically effective," are commonplace terms that a juror could understand without further direction from the court. *Id*. The court found that the terms "do not need to be construed because they are neither unfamiliar to the jury, confusing to the jury, nor affected by the specification or prosecution history." *Id*. at *19-*20 (*citing* Ethicon, 103 F.3d at 1568 ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.")). However, the Federal Circuit held that "[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it." *O2 Micro,* 2008 U.S.App. LEXIS 7053, at *26.

Therefore, the Court concludes that when two parties offer different constructions, or if one side argues for ordinary meaning, then the Court must first determine whether it has a duty to resolve the meaning and the scope. While a district court's role is to construe the claims as matter of law, part of this role is to determine the extent of which to construe the claims or whether construction is even necessary. With regard to meaning, where additional language may be unduly limiting, confusing, or redundant, it is in the court's power to determine that no construction is necessary. A court may decline to adopt constructions that violate claim construction doctrine, such as improperly importing limitations, and may still construe terms to have their ordinary meaning. *See id*. at *19. Similarly, with regard to scope, a Court may have a duty to determine the scope of a claim, but need not provide a construction that is redundant or is prohibitively limiting.

Guided by these principles of claim construction, this Court directs its attention to the patent-in-suit and the disputed claims terms.

III.

Claim Construction Analysis

A. Background

Claims 1, 9, 11, 17, 19, 29, 41, and 43, of the '111 patent are asserted against the ERAC Defendants as well as claims 1 and 3 of the '689 patent. Claims 17, 24, 28, 29, 36, 40, 41, 48, & 52 of the '111 patent are asserted against the E911 Defendants. Additionally, claims 1, 4, and 5 of the '689 patent are asserted against the E911 Defendants

B. The Claim Terms

1. Undisputed Claim Terms

The parties have agreed on the construction of the following claim terms. FN2 The parties agree "all potential first parties" and "potential first party" should be construed as "all individuals who can place a telephone call but who have not yet done so." The parties agree the terms "physical location" and "originating telephone number" do not need construction; they should be given their ordinary meaning. The parties agree the terms "directly routing" and "direct routing" should be construed as "routing a telephone call to another party without a human or computer redialing, or otherwise placing a second call." The parties further agree the term "a second party" should be construed as "an entity having multiple service locations."

FN3 The parties agree the term "a service location of the second party" should be construed as "a service location of an entity having multiple service locations." The E911 Defendants and Plaintiff agree the term "a designated response zone" should be construed as "the area from which an advertiser wishes to have telephone inquiries about the advertiser's product or service directed to the local provider of the advertiser's good or service." FN4 The Court agrees with the parties' proposed constructions.

FN2. By agreeing to any construction set forth herein, the parties do not waive any argument as to the meaning of the constructions as applied to the facts.

FN3. The parties agree that this construction does not require that there be a relationship among the various service locations other than that each must be associated with the same common entity (*i.e* . the "second party having multiple service locations") and does not require that there be a corporate relationship (such as common ownership) between the second party and the various service locations.

FN4. The relevant claims have not been asserted against the ERAC Defendants.

2. Overview of Disputed Claim Terms

Plaintiff and all Defendants agree the term "predetermined criteria" requires construction, but they disagree as to the proper construction of the term. The parties also agree the disputed terms "assigning" and "allocating" should be construed. The term "assigning" has been the subject of litigation in a prior case, *800 Adept v. Murex,* Cause No. 6:02-CV-1354 (M.D.Fl.) ("the Florida Lawsuit"). In this case, Plaintiff requests the Court adopt the construction issued to the jury in the Florida Lawsuit by the Florida court for "assigning" as well as for the term "allocating." As to the remaining disputed terms at issue, Plaintiff contends each is easily understood by one of ordinary skill in the art as used in the claims, and no construction is necessary.

Defendants take issue with the fact that Plaintiff does not submit any claim constructions for most of the disputed terms and instead proposes that claim terms having an "ordinary" meaning may be decided by a jury and do not require construction. Defendants correctly point out the Federal Circuit has made clear that when the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it." O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co., Ltd., 521 F.3d 1351, 2008 WL 878924, (Fed.Cir. April 03, 2008).FN5

FN5. In *O2 Micro,* the Federal Circuit rejected the district court's ruling that the term "only if" "needs no construction" because it "has a well-understood definition, capable of application by both the jury and this court in considering the evidence submitted in support of an infringement or invalidity case." *Id*. at *8-9 ("A determination that a claim term ... has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's ordinary meaning does not resolve the parties' dispute.").

Pursuant to the *O2 Micro* decision, Defendants have proposed constructions for the following additional disputed terms or groups of terms: (1) "allocating latitude and longitude coordinates to the physical location

of all potential first parties"/ "assigning individual latitude and longitude coordinates to the physical location of all potential first parties" / "assigning individual latitude and longitude coordinates to each telephone number of all potential first parties;" (2) "one or more geographic(al) areas" / "geographic area(s)" / "geographic territory; (3) "an 800-type, 900-type or other special access code telephone number;" (4) "a telephone number including digits uniquely characteristic to a second party;" (5) "a telephone call;" and (6) "latitude and longitude coordinates."

3. Overview of Means Plus Function Claim Terms

Independent claims 1 and 17 of the '111 Patent each contain five terms that the parties agree are means plus function terms to be construed under 35 U.S.C. s. 112 para. 6. The five terms are means for allocating, means for defining, means for assigning, means for determining and direct routing means for direct routing. The language of the means plus function terms in claims 1 and 17 are not identical, however, the arguments of the parties do not distinguish the claims based upon any claim language differences. Claim 1 is not asserted against the E911 Defendants while claims 1 and 17 are both asserted against the ERAC Defendants. (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 3). For the functional aspect of the terms, the parties agreed to function constructions that correspond to the claim language itself.

For each of the five means plus function terms, both sets of defendants assert that "there is no disclosed structure linked to the claimed function as required under 35 U.S.C. s. 112 para. 6, which renders the claims invalid." (Id. at 3-7). In general, Defendants assert that no structure is disclosed for accomplishing the particular claimed functions, that the claimed function is accomplished by human interaction, or that the claimed function is accomplished by corporate entities such as the long distance carrier ("LDC") or local exchange carrier ("LEX"). For the direct routing means, the ERAC Defendants proposed an alternative minimum required structure. (Id. at 7).

C. Claim construction

1. "allocating/assigning" ('111 Patent: Claims 1, 9, 17, 29, 41) ('689 Patent**: Claim 1)**

a. The Parties' Proposed Constructions

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
No position expressed by the E911 Defendants	A designation made prior to the telephone call of the first parties.	A designation made prior to the telephone call of the first parties, not excluding calculations made during the call.

b. Discussion

Plaintiff and the ERAC Defendants disagree over whether "assigning" and "allocating" can happen during a telephone call or only prior to a telephone call. Plaintiff asserts the term itself does not include a temporal limitation, and the '111 Patent (col. 6, line 59 through col. 7, line 2) discusses "assignment of a vertical/horizontal coordinate" to mobile phones "via a navigational or similar satellite communications system" to "direct route calls from non-stationary telephones to the appropriate territorial location." According to Plaintiff, such a process could not occur through preassigning the location of mobile phones

because the ability to relocate a mobile phone would prevent the system from routing to the appropriate location.

The ERAC Defendants propose the construction as utilized in the Florida Lawsuit claim construction order. There, the Florida court construed the term to mean "a designation made prior to the telephone call of the first parties." The Florida court then noted that "the specification contemplates further processing where the call is placed from a mobile phone," and the prosecution history "does not expressly unambiguously disclaim all calculations made after a call is placed." Later, in the jury instructions, the Florida court instructed the jury that the term " 'assigning' as used in the third element of the claims of the '111 and '689 Patents refers to '*a designation made prior to the telephone call of the first parties*.' However, the '111 and '689 patents **do not exclude calculations made during the telephone call."** (Second emphasis added).

Plaintiff proposes that, should any construction of "assigning" or "allocating" be necessary, the Court adopt the construction adopted by the Florida court without the temporal limitation. Plaintiff argues in its reply brief that "[n]othing in the claimed inventions requires that the allocating steps occur prior to the telephone call." (Plaintiff's Reply at 3). In support of its argument, Plaintiff relies on the deposition testimony of Dr. Acampora in which he acknowledges that the specific word "time" does not appear in the claims.

The absence of the word "time" from the claims does not resolve the issue. As urged by Defendants, the claim language refers to allocating latitude and longitude coordinates to the location of ***potential*** first parties, indicating those latitude and longitude coordinates must be determined before a call is placed. "[P]otential first parties" are not the same as first parties; potential first parties are parties that can, but have not yet, placed a call. According to the ERAC Defendants, the latitude and longitude coordinates of those potential first parties must be determined in the period of time prior to a call being made- *i.e.,* before the potential callers become actual callers.

Defendants also focus on the patent specification which describes assigning latitude and longitude coordinates to a potential caller's location before the call, asserting the specification supports a temporal limitation. For example, the Abstract states that: "Once all such assignments have been made, a database is assembled to be used by a long distance carrier for direct routing of telephone calls[.]" (*See, e.g.,* '111 patent, Abstract). The word "once" and the specification's use of tense ("have been made" and "to be used") indicate an assignment. Therefore any prior allocation of latitude and longitude is made before, not during, a call.

Also, Figure 1 shows a database in which each potential caller (identified in the first three columns by area code and phone number) is allocated a digital latitude and longitude coordinate (represented in the fourth and fifth columns) and is assigned a "service location telephone number" (shown in the last column). (*See* id., Fig. 1). The specification further explains that the database is created and then located at the long distance carrier for use in routing telephone calls.FN6 (Id. at 5:6-12, 38-44).

FN6. Plaintiff incorrectly argues that a statement regarding "the integrity of a caller's information" supports its proposed construction that the allocation and assignment can occur after a call, but before routing. According to Plaintiff, an individual is a potential caller up until the time that the call routing is completed and the potential caller is connected to the call recipient. (Plaintiff's Reply at 6). The cited statement relied upon by Plaintiff expressly refers to a "caller," not a *potential* caller.

In addition to the foregoing, Defendants assert Neville disavowed "allocating" and "assigning" during an actual call. (*See* Ex. 6 to Acampora Decl. at 13 ("Applicant's Direct Routing Telephone System performs all ['point of origin' to 'point of termination'] calculations prior to the call even being made and, in fact, prior to delivery of the data base to the Long Distance Carrier (LDC)."); (*see also* Ex. 7 to Acampora Decl. at 7 ("The major difference is that with the present invention all point of origin to point of termination calculations have already been performed[.]")). Defendants assert, despite Plaintiff's suggestion to the contrary, that Dr. Acampora, one skilled in the art, rejected Plaintiff's contention that the allocation of latitude and longitude could occur after the call is placed but before it is routed:

Q: Wouldn't you agree with me ... that a more accurate construction would be a determination made prior to routing the call? Isn't that the requirement, the *apriori,* the determination has to be made before routing the call, but it doesn't necessarily have to occur before the telephone call?

* * *

A: Let me see if I can at least articulate the thrust of your question. Which is to the effect, would I agree that a change in construction that would be placed [sic] prior to the telephone call to prior to routing of the call be appropriate, *I don't think so. In my opinion the answer to that is no, this [the E911 Defendants'] construction is correct.*
(Acampora Dep. at 54:17-56:20) (objections omitted) (emphasis added).
Plaintiff relies on the Florida court's finding that "the specification contemplates further processing where the call is placed from a mobile phone." Although the Court agrees with the Florida court that the specification contemplates "further processing" where a call is placed from a mobile phone, the Court is not convinced that "further processing" equates with "allocating." Plaintiff ignores the Florida court's specific finding that the language of the claims, when read in light of the specification, confirms that "assigning" designations and therefore necessarily, "allocation" designations, are made prior to the telephone call. Nothing in either the decision of the Florida court or the specification on which the Florida court relied is inconsistent with the requirement that the "allocation" designation take place prior to the telephone call. However, the '111 and '689 patents do not, in certain circumstances, exclude further processing during the telephone call as indicated by the Florida court in its jury instructions.

c. Court's Construction

Accordingly, the Court construes the terms "allocating" and "assigning" to mean: **"a designation made prior to the telephone call of the first parties however such does not exclude further processing during the telephone call."**

2. "allocating latitude and longitude coordinates to the physical location of all potential first parties" ('111 Patent: Claims 17, 29); "assigning individual latitude and longitude coordinates to the physical location of all potential first parties" ('111 Patent**: Claim 41); "assigning individual latitude and longitude coordinates to each telephone number of all potential first parties"** ('689 Patent**: Claim 1)**

a. The Parties' Proposed Constructions

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
Prior to a telephone call, determining the "latitude and longitude coordinates" of the physical location	Prior to a telephone call, determining the "latitude and longitude coordinates" of the physical location	These phrases as a whole do not need to be construed. Any terms

of "all potential first parties" in a manner capable of sufficient precision so as to distinguish between neighboring houses or two different sides of the street.	of "all potential first parties" in a manner capable of sufficient precision so as to distinguish between neighboring houses or two different sides of the street.	within these phrases that the Plaintiff believes require construction have been addressed separately.

b. Discussion

These terms describe the step in which the claimed system determines the latitude and longitude coordinates of the potential first parties that are used to determine to which service location a call should be routed based upon the geographic area in which the caller's coordinates are located. There are essentially two issues raised by the parties' briefing. According to Plaintiff, Defendants seek to improperly import the following two limitations into the construction of these terms: "prior to a telephone call" and "sufficient precision...."

Regarding Defendants' proposed temporal limitation ("prior to a telephone call"), the E911 Defendants assert the claims require that the latitude and longitude coordinates of the caller be used to assign a particular service location to which a call will be routed when it is placed. By referencing the assigning step in the routing step, the E911 Defendants argue the claims make clear that the assigning step (in which a particular service location is assigned to a caller based on the caller's location) must take place before the call is routed (*i.e.,* the next step). According to the E911 Defendants, all the steps prior to the routing step, including the "allocating latitude and longitude coordinates" and the "assigning" steps, are prerequisites to the call routing step. According to Defendants, the Florida court arrived at the same conclusion, stating "[a] review of the specification also supports the conclusion that the assignment occurs prior to the placement of the call." (Aug. 3, 2006, Fl. Ct. Order at 20). Second, the E911 Defendants assert the plain language of the claims- which refers to allocating latitude and longitude coordinates to the location of ***potential*** first parties- establishes that those latitude and longitude coordinates must be determined before a call is placed.

The Court agrees the claim language demonstrates that the latitude and longitude coordinates must be determined before a call is placed. As urged by Defendants, "potential first parties" are not the same as first parties; they are parties that can but have not yet placed a call. The Florida court acknowledged this, stating the "use of the term 'potential first parties' strongly suggests that the assignment occurs prior to the caller placing a telephone call." (Id.). The latitude and longitude coordinates of those potential first parties must be determined in the period of time prior to a call being made- *i.e.,* before the potential callers become actual callers.

Turning to the precision issue, Defendants argue Plaintiff is precluded as a matter of law from arguing that "sides of the street" precision is not required because Plaintiff specifically overcame prior art during prosecution by arguing that the very precision required by Defendants' construction was an essential aspect of Neville's invention. In order to distinguish the claimed invention over Finucane, which was cited by the Examiner in rejecting its claims, Plaintiff asserted that its invention would allow a customer to create "whatever geographic boundaries it wants down to having one side of the street go to one terminating number and the other side of the street going to a second terminating number." Later in the prosecution, in distinguishing the same prior art, Plaintiff asserted that its invention had the ability to **"geographically pinpoint the location of a single caller,** and treat that caller's ANI [phone number] **different than that of a next-door neighbor** calling from within the same polygon." (Ex. 7 of the Acampora Decl., U.S.S.N. 08/623,051, Sept. 1, 1995, Response and Amendment at 8) (emphasis added). During subsequent prosecution, after the examiner had maintained his initial rejections, Plaintiff again argued:

On the contrary, as set forth in Applicant's claims, the second party has complete freedom to define whatever area he wishes, no matter how small.... ***Applicant's invention uses digital lat/lons ... to accurately place a potential caller at the actual street address, and can differentiate between neighboring houses, or two different sides of the street.***

(Ex. 8 of the Acampora Decl. at 14) (emphasis added); (*see also* Ex. F, March 17, 2006 800 Adept Expert Report of Arthur Brody (Florida Litigation), at 21-22).

Defendants assert each of Neville's statements, individually, constitutes a clear and unmistakable disclaimer that the patents-in-suit relate to a system capable of precision sufficient to distinguish between neighboring houses or two different sides of the street. Taken together, Defendants assert the statements make clear that Plaintiff surrendered claim scope in order to obtain its patent claims.

Plaintiff argues statements made by Neville during the prosecution of 800 Adept's Patents are subject to more than one reasonable interpretation and are thus not a clear disavowal of claim scope. Even when a patentee distinguished prior art in multiple ways, each distinction must nonetheless be clear and unmistakable. *See* Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1377 (Fed.Cir.2008). Furthermore, "[t]here is no 'clear and unmistakable' disclaimer if a prosecution argument is subject to more than one reasonable interpretation, one of which is consistent with a proffered meaning of the disputed term." SanDisk Corp. v. Memorex Products, Inc., 415 F.3d 1278, 1287 (Fed.Cir.2005); *see also* Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1332 (Fed.Cir.2004) ("Because the statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term 'rotating.' "); Cordis Corp. v. Medtronic AVE, Inc., 339 F.3d 1352, 1359 (Fed.Cir.2003) ("The statement is amenable to multiple reasonable interpretations and it therefore does not constitute a clear and unmistakable surrender of" claim scope.).

Here, the prosecution history clearly demonstrates that Neville sought to overcome the Risken and Finucane prior art by arguing that the invention had the capability of a certain level of precision to avoid the less precise prior art. One such statement indicated his invention, unlike the Finucane prior art, would allow a customer to create "whatever geographic boundaries it wants down to having one side of the street go to one terminating number and the other side of the street going to a second terminating number." Finucane described a direct routing system where the caller's location could be determined by area code and by the intersection of area code and Local Transport Area (LATA). According to Neville, a critical difference between his invention and that of Finucane is "the finiteness by which an originating geographic area can be defined, known as 'granularity.' " Neville stated there were approximately 450 intersections of LATAs and area codes, and Finucane could thus divide the United States into only 450 areas. Neville indicated his invention, which utilizes latitude and longitude, enabled the United States to be divided into more than 20,000 geographically predefined areas. Neville then stated that the "invention has the ability to geographically pinpoint the location of a single caller, and treat that caller's ANI different than that of a next-door neighbor calling from within the same polygon." (Ex. 7 of the Acampora Decl ., U.S.S.N. 08/623,051, Sept. 1, 1995, Response and Amendment at 8).

Neville also distinguished the Vertical-Horizontal ("VH") coordinates of the Riskin prior art by the invention's use of latitude and longitude. Riskin assigned the caller the VH coordinates of the central office, which meant a large area could receive the same coordinates. According to Neville, all callers in Manhattan would receive the same coordinates, making it impossible to differentiate between callers at different

locations in Manhattan. Neville distinguished Riskin by arguing his invention could differentiate calls originating from the Financial District, Times Square, or even one city block. Neville then stated his "invention uses digital lat/lons *... to accurately place a potential caller at the actual street address, and can differentiate between neighboring houses, or two different sides of the street*. (Ex. 8 of the Acampora Decl. at 14) (emphasis added).

Based on the Court's review of Neville's statements made during the prosecution history, the Court finds the allocation or assignment of latitude and longitude coordinates of the physical location of potential first parties does require the capability of precision sufficient to overcome the prior art. However, the Court declines to limit the precision capability to the examples provided by Neville of distinguishing between neighboring houses or two different sides of the street.

In other statements made during the prosecution history, Neville's invention was capable of producing more than 20,000 geographically predefined areas as compared to Finucane's 450 areas. Regarding Riskin, Neville indicated his invention could differentiate between calls in a certain area or a city block. Neville distinguished the prior art by using numerous examples of the type of precision his invention is capable of (*i.e*. Times Square, the Financial District, city block, geographically predefined areas, next door neighbors, two sides of the street). Thus, while the Patents require sufficient geographic precision to locate a specific geographic location, the Court will not construe that precision as limited to one or more of the examples given, namely being capable of going down to one house or two sides of a street.

In sum, the Court finds any disclaimers made by Neville during the prosecution regarding neighboring houses or two different sides of the street are not clear and unmistakable and thus do not limit the scope of Plaintiff's Patents to the capability of precision sufficient to distinguish between neighboring houses or two different sides of the street. Instead, the Court finds the Patents require that the determination of the latitude and longitude coordinates be done in a manner capable of precisely pinpointing the geographic location of a single party.

c. The Court's construction

The Court is of the opinion the terms "allocating latitude and longitude coordinates to the physical location of all potential first parties;" "assigning individual latitude and longitude coordinates to the physical location of all potential first parties;" and "assigning individual latitude and longitude coordinates to each telephone number of all potential first parties" should be construed as: **"Prior to a telephone call, determining the 'latitude and longitude coordinates' of the physical location of 'all potential first parties' in a manner capable of precisely pinpointing the geographic location of a single party."**

3. "predetermined criteria" ('111 Patent: Claims 1, 9, 17, 29, 41) ('689 Patent**: Claim 1)**

a. The Parties' Proposed Constructions

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
Requirements of the second party, which are determined before creation of the call routing database.	Requirements of the second party, which are determined before creation of the call routing database.	Requirements of the second party, which are determined before the call is placed.

b. Discussion

The parties agree that "predetermined criteria" are requirements the second party establishes to determine the precise boundaries of the geographic areas used to route calls. The parties disagree over when such "predetermined" criteria must be determined. According to Defendants, Plaintiff's proposed construction would allow the "predetermined" criteria to be changed long after the routing database is completed and even up to the moment a call is placed. Defendants argue the boundaries of the geographic areas are used in creating the database at issue, and the criteria used to determine those boundaries must be available not just before the call is placed, but also before the database is created. In reply, Plaintiff argues that in practice a database is often *created* using the second party's criteria, but nothing in the claims, specification, or file history precludes the "predetermined" criteria from being determined, changed, or updated after the database is created.

The language of the claims indicates that the "predetermined criteria" used to establish the boundaries of the geographic areas used in creating the call routing database must be determined prior to the creation of the database. The claims deal with methods for building a database or using a database for call routing, where the database contains the assignments of potential callers to service locations of the second party based upon the geographic areas in which the callers are located. The criteria used to establish the boundaries of the geographic areas must be determined prior to the creation of the database or assignments to be entered into the database could not be made. The Patents state, for example, that "[o]nce all such assignments have been made, a database is assembled to be used by a long distance carrier for direct routing of telephone calls from callers to an assigned second party." '689 and '111 Patent Abstract. Likewise, the inventor stated during prosecution that the "[a]pplicant's Direct Routing Telephone System performs all such calculations prior to the call even being made and, in fact, prior to the delivery of the data base to the Long Distance Carrier (LDC)."

Plaintiff argues in its reply brief that Defendants' construction could lead to the "absurd result that, once created, a database could never be altered or updated," (Plaintiff's Reply brief at 7). However, Defendants' construction does not prohibit the database from later being altered or updated nor could it properly do so. The specification states that "the data base can be self-updating." '111 Patent 3:36. Even though the Court agrees with Plaintiff that the database can be updated after the database is created, the Court will not go so far as to agree that such alterations or updates can occur dynamically as the call is in progress.

The Court is of the opinion the term "predetermined criteria" should be construed as "requirements of the second party, which are determined before *delivery* of the call routing database." By changing the word "creation," as proposed by Defendants, to "delivery" the construction of "predetermined criteria" allows for repeated updating of the contents contained in the database.

c. Court's construction

The Court is of the opinion the term "predetermined criteria" should be construed as **"requirements of the second party, which are determined before delivery of the call routing database."**

4. "one or more geographic(al) areas" ('111 Patent: Claims 1, 9, 17, 29, 41) ('689 Patent**: Claim 1), "geographic area(s)" ('111 Patent: Claims 1, 9, 17, 29)** ('689 Patent**: Claim 1), "geographic territory"** ('111 Patent**: Claim 41)**

a. The Parties' Proposed Constructions

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
One or more non-overlapping regions.	One or more non-overlapping regions.	No construction necessary.

b. Discussion

Here, Plaintiff asserts Defendants improperly seek to import "non-overlapping" into their construction of the terms "geographic area," "geographical area," and "geographic territory" (for simplicity, hereinafter, "Geographic Areas"). Defendants assert these terms refer to one of the geographic regions, established by the second party, from which calls will be routed to a particular service location associated with that region. Defendants assert those Geographic Areas cannot overlap.

Plaintiff asserts in its reply that the term "time frame" in the Summary of the Invention discloses "criteria that support[ ] the possibility of overlapping regions." (Plaintiff's Reply at 10-11). Defendants disagree, asserting the single reference to a "time frame" is not in connection with the advertiser's call routing criteria. Rather, when placed in context, the reference refers to the quick connection of the caller to an appropriate service location during the time frame (*i.e.* at the time) that the caller is exhibiting his interest in the advertiser's product by placing a call. *See* ' 111 Patent, 3:15-20 (stating that an object of claimed invention is "to provide a reliable and cost-effective manner of directly connecting callers interested in an advertiser's product with providers of the advertiser's product in the area that the call originates during the time [sic] frame in which the caller has the highest degree of interest in the advertiser's product."). According to Defendants, there is no disclosure in the patents-in-suit of "time frame" criteria or that the criteria supplied by the second party for call routing could be anything other than geographic. The specification makes clear that the routing is based "on a wide variety of *territorial* criteria ." '111 Patent, 2:63-64. Likewise, the claims require that the second party's criteria be used in "defining the boundaries of one or more geographic[al] areas." '111 Patent, claims 17, 29, 41; '689 Patent, claim 1.

Defendants further assert the Patents make clear calls must be routed to a single destination (*i.e.,* ***one*** of a plurality of service locations) based on the physical location of the caller and the area from which the call originates. (*See, e.g.,* '111 patent, 3 :15-20). If the Geographic Areas could overlap, Defendants assert a potential first party could be in more than one Geographic Area at once and would not be assigned to any one particular service location.

Although Plaintiff's expert presents various examples involving routing calls in the same area to different service locations at different times of day (*see* Brody Decl. para. 8), Defendants assert that if the Geographic Areas are allowed to overlap, the claims would be invalid because the full scope of the claims would not be enabled as required by 35 U.S.C. s. 112. *See* Liebel-Flarsheim Co. v. Medrad, Inc., 481 F.3d 1371, 1378 (Fed.Cir.2007). According to Defendants, the second party's criteria are "open ended," (Brody Decl., para. 9)-the criteria could include, apparently, time of day, the number of callers that have already recently been routed to a particular location, current weather conditions, etc.-and these non-geographic criteria could be used to determine the appropriate service location to which a caller who is simultaneously in multiple geographic areas (each with a single associated service location) should be routed. Defendants assert this example is described nowhere in the specification, and there is no disclosure of how different, potentially competing, criteria would be handled in order to determine the appropriate service location.

Simply stated, Defendants assert the specification indicates that geographic areas do not overlap and the

alleged invention would not be enabled otherwise; thus the Court should construe geographic areas to be non-overlapping. As to the enablement issue, Plaintiff argues that claim scope covering overlapping geographic regions is enabled, and that in this case, routing calls in instances where geographic areas overlap has actually been implemented by the inventor of the patents-in-suit. Plaintiff further asserts that one of ordinary skill in the art would know, without undue experimentation, how to implement the invention with overlapping geographic areas through the use of a simple decision tree. (Brody Decl. para. 9).

The Court is not convinced the Geographic Areas cannot overlap and therefore declines to impose such a limitation. To the extent potentially overlapping Geographic Areas make the Patents non-enabling, Defendant may file an enablement motion. The Court is of the opinion the terms "one or more geographic(al) areas," "geographic area(s)," and "geographic territory" do not need to be construed. The terms shall be given their ordinary meaning.

c. Court's Construction

For the reasons discussed above, the Court is of the opinion the terms "one or more geographic(al) areas," "geographic area(s)," and "geographic territory" do not need to be construed. The terms shall be given their ordinary meaning.

5. "an 800-type, 900-type or other special access code telephone number" ('111 Patent**: Claim 41)** ('689 Patent**: Claim 1)**

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
A 10-digit telephone number, the first three digits of which are not indicative of geographic location (*i.e.,* are not geographic area codes), such as 8-0-0 or 9-0-0	No position expressed by the Enterprise Defendants.	No construction necessary.

b. Discussion

Plaintiff asserts this phrase is used according to its ordinary meaning, and the AT & T Defendants seek to substitute "lengthy legal wordsmithing for plain language." (Plaintiff's Opening Brief at 25). In its reply, Plaintiff argues that 9-1-1 and other three-digit service codes are similar to 800-type and 900-type access codes because they, like 800 and 900 access codes, have three digits and are not tied to a geographic location. Plaintiff's argument lacks merit.

As urged by the E911 Defendants, 800-type and 900-type telephone numbers are ten-digit telephone numbers that start with a three-digit 800-type or 900-type access code followed by a seven-digit NXX-XXXX. In contrast, 9-1-1 and 4-1-1 are three digit codes known as "N 11 codes," or more formally, "service codes," that provide three-digit access to special services. Plaintiff does not dispute the existence of "N11 codes" or "service codes." Examples from Plaintiff's own extrinsic evidence confirm both that N11 service codes exist and that N11 service codes are different from ten-digit 800-type special access code telephone numbers:

Based on its analysis, the IMG recommends that the toll-free One Call abbreviated dialing mandated by the Pipeline Safety Act be implemented using an *N11 code,* specifically 811.

* * *

While the IMG understands that an 811 solution reduces the quantity of remaining *N11 codes* assignable for other purposes, 811 satisfies the legislative mandate which reflects a judgment about the importance of a 3-digit number for pipeline safety.

* * *

Absent the statutory requirement for a *three-digit code,* many of the IMG members would have recommended use of a *single ten digit toll-free number* to implement uniform access to individual State One Call Centers. For example, five states use a single ten digit mnemonic toll-free number, *888-DIG-SAFE*-Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
(Ex. 3 to Brody Decl. at 3) (emphasis added). More generally, information today maintained by the North American Numbering Plan confirms the distinct identity of N11 codes/service codes as widely recognized by those skilled in the art. *See generally* North American Numbering Plan at h ttp://www.nanpa.com/number_infor/n11_codes.html.
In this instance, a ten-digit 800 number is used in every single embodiment, example, and figure of the patents. Although known by those of ordinary skill in the art at the time of the invention, the Patents do not mention the routing of any other types of calls or telephone numbers with fewer than ten digits. The Federal Circuit has confirmed that where a disputed term is a technical term of art, "[t]he best source for understanding [it] is the specification from which it arose, informed, as needed, by the prosecution history." AquaTex Indus., Inc. v. Techniche Solutions, 419 F.3d 1374, 1380 (Fed.Cir.2005). It is entirely proper to refer to the examples and statements in the specification, including the notable omission of known terms from the specifications and examples, to define the technical term "special access code." *See id*. at 13 80-81 (finding that the term "fiberfill" referred exclusively to synthetic fiber where all references in specification referred to synthetic fibers, without any discussion regarding the possibility of using natural fibers).

Considering the claim language, the word "other" in the phrase "800-type, 900-type, or ***other*** special access code telephone number" requires that special access code telephone numbers be similar to 800-type and 900-type numbers. According to the E911 Defendants, the critical characteristic of 800-type and 900-type telephone numbers is that they are Wide Area Telecommunications Services (WATS) numbers. Thus, the phrase "other special-access codes telephone number" must refer to similar WATS-type numbers. (Acampora Decl. para.para. 105-12). The inclusion of the term "other" in the phrase establishes the special access code numbers as a genus of which "800-type" and "900-type" numbers are a species. *See* In re Smythe, 480 F.2d 1376, 1383 (C.C.P.A.1973) (noting that in the phrase "air or other inert gas," the phrase "or other inert gas" is the genus to the species "air"); Fujikawa v. Wattanasin, 93 F.3d 1559, 1570-71 (Fed.Cir.1996). In fact, this is exactly how this phrase would be construed using the principles of statutory construction, which the Federal Circuit has said is an "appropriate analogy for interpreting patent claims." Markman, 52 F.3d at 987.

The E911 Defendants provide the following example to illustrate their point here. If the claim term was "a 903-type, 214-type, or other area-code telephone number," Defendants assert there would be no argument that "other area-code telephone number" must be like the examples 903 and 214 given, and must refer to a ten-digit number the first three digits of which are an area code. Similarly, the E911 Defendants argue "other special-access code telephone number" must be like the two examples given (*i.e.,* 800 and 900 numbers) and must refer to a 10-digit number, the first three digits of which are ***not*** an area code (*i.e.,* not a geographic specific number).

Another critical characteristic of 800-type and 900-type phone numbers is that the first three digits do not relate to geographic location. As explained by Dr. Acampora, 800-type and 900-type numbers are (and, at the time of the invention, were) 10-digit phone numbers, the first three digits of which are assigned to generic services and which, unlike area codes, are not indicative of geographic location. (Acampora Decl., para.para. 106-07). Similarly, the broader family of "special-access code" telephone numbers must also be 10-digit, non-geographic telephone numbers.

As urged by the E911 Defendants, the specification also compels Defendants' construction. An 800 number is used in every embodiment, example, and figure of the Patents. The Patents do not mention the routing of any other types of calls nor would it have been obvious to one of ordinary skill in the art to use the Patents for that purpose. (Acampora Decl., para. 108). The E911 Defendants' construction is consistent with and compelled by the examples detailed in the specification.

The prosecution history also demonstrates that a "special-access code telephone number" must be similar to 800-type and 900-type numbers. During prosecution, Plaintiff distinguished two pieces of prior art because, among other things, they did not deal with 800 or 900 calling. Specifically, Plaintiff repeatedly characterized its invention as related to 800 or 900 numbers and distinguished prior art on the basis that, among other things, the art did not provide for 800 or 900 call routing. (Docket Entry # 147 in 5:07cv23, Acampora Decl., Exh. 7 at 9). Plaintiff also stated in the previous litigation that its Patents relate to 800-type numbers. (*Id.,* Exh. H at 2-4).

The extrinsic evidence also supports Defendants' construction. Both 800 and 900 numbers are WATS numbers, handled by long-distance carriers in a consistent manner. (Acampora Decl., para.para. 64-65). 800/900 numbers and other geographically independent ten-digit numbers are carried on special trunk lines. And consistent with Defendants' construction of this term, the trunk lines that carry 800/900 and similar numbers are known as "special-access lines." (Acampora Decl., para. 41). One of ordinary skill in the art would understand that "special-access code telephone numbers" are telephone numbers that would be carried on these same special access lines, such as 800-type and other WATS phone numbers. (*Id.*).

The E911 Defendants' proposed construction of "special-access code" is consistent with how that term was used in the prior art. For example, U.S. Patent No. 4,611,094, which is cited on the face of the patents-in-suit, uses the term "special-access code" to denote a 3-digit prefix to a 10-digit number that, like 800 numbers, is not indicative of geographic area. (Acampora Decl. para. para. 106). This usage of the term in the prior art is therefore consistent with the E911 Defendants' construction because it shows that "special-access code telephone numbers" refers to other non-geographically indicative 10-digit numbers.

As a fall-back position, Plaintiff states this term is not a claim limitation because it appears in the preambles of the claims at issue. However, as discussed above, Plaintiff argued during prosecution that the claims of its patent applications were distinguishable over the prior art because they were directed solely to 800/900 service. "[C]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such reliance indicates use of the preamble to define, in part, the claimed invention." Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed.Cir.2002).

What's more, the law is clear that a preamble is limiting if it includes the "essence of the invention," Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 320 F.3d 1339, 1345 (Fed.Cir.2003), or if it is "necessary to give life, meaning, and vitality" to the claim, Pitney Bowes, Inc. v. Hewlett-Packard Co.,

182 F.3d 1298, 1305 (Fed.Cir.1999). Here, the patents-in-suit are all about routing a call placed to one geographically independent number of a second party to a geographically specific telephone number of one of multiple local or regional service locations. As stated, every example of a called number in the patents is an 800 number. 800 and 900 calling is the essence of the invention, and the term "800-type, 900-type or other special-access code telephone number" is clearly a limitation.

c. Court's Construction

Based on the foregoing, the Court construes "an 800-type, 900-type or other special access code telephone number" to mean: **"a 10-digit telephone number, the first three digits of which are not indicative of geographic area."**

6. "a telephone number including digits uniquely characteristic to a second party" ('111 Patent: Claims 1, 9, 17, 29)

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
A 10-digit telephone number identifying only one second party.	No position expressed by the Enterprise Defendants.	No construction necessary.

b. Discussion

Again, Plaintiff asserts this phrase does not require construction by the Court. On the other hand, the E911 Defendants assert a "telephone number including digits uniquely characteristic to a second party" is a number that identifies one particular entity: the second party. According to the E911 Defendants, the claim language, specification, and prosecution history as well as the telephone system in operation in this country all require the number to have 10 digits in order to uniquely identify a single party.

The Court agrees with the E911 Defendants that the only telephone numbers in the United States ***uniquely*** characteristic to a single entity are 10-digit numbers, and more particularly, numbers made up of a three-digit area or special access code and seven additional digits that are reused. (Acampora Decl., at para. 119). For example, one person may have the telephone number (903) 435-8140, another the number (214) 435-8140, and still another (800) 435-8140. Thus, the seven-digit telephone number 435-8140 is not uniquely characteristic to a single party, and it is only with the addition of the three-digit area or special-access code that each number becomes uniquely characteristic of a single party.

The Court agrees with the E911 Defendants that telephone numbers with fewer than 10 digits are not uniquely characteristic to a second party. For example, three-digit numbers, such as "4-1-1," known as directory assistance, are not uniquely characteristic to one party. Anyone dialing 4-1-1 will be connected to some provider of directory assistance, but the actual entity reached that provides directory services will vary depending upon the caller's telecommunication provider. Callers dialing 4-1-1 can reach any number of second parties, and thus, 4-1-1 does not uniquely identify a single entity.

The specification supports the E911 Defendants' construction as well. Aside from ten-digit numbers, no other types of numbers are discussed or even alluded to in the specification. Every single example identified in the patents that recites a telephone number of a second party is a ten-digit telephone number that

identifies only one second party: 1-800-DIAMOND, 1-800-POTHOLE; 1-800-EXPRESS; 1-800-DISPLAY; 1-800-VOTE4NY; and 1-800-9BETTER.

The prosecution history also strongly supports Defendants' construction. As discussed above, Neville repeatedly distinguished prior art because the references did not deal with 800 or 900 calling. (Docket Entry # 147 in 5:07cv23, Acampora Decl., Exh. 7 at 9). Plaintiff has repeatedly stated, during prosecution as well as in the previous litigation (id., Exh. H at 2-4), that its Patents relate to 800 numbers, which are ten-digit numbers.

However, Defendants have failed to convince the Court that the plain term "a" second party should be construed to mean "only one" second party. The meaning of "a" is clear, and as urged by Plaintiff, there is no need to substitute Defendants' proposal for the clear words of the term.

c. Court's Construction

Accordingly, the Court construes the claim term "a telephone number including digits uniquely characteristic to a second party" to mean: **"a 10-digit telephone number including digits uniquely characteristic to a second party."**

7. "a telephone call" ('111 Patent: Claims 1, 9, 17, 28, 29, 41) ('689 Patent**: Claim 1)**

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
No position expressed by the E911 Defendants.	A telephone to telephone connection.	No construction necessary.

b. Discussion

Plaintiff asserts this term has a clear, ordinary meaning that any juror can understand. Plaintiff argues the ERAC Defendants' proposed construction, a "telephone call" going from a telephone to *another telephone,* is a limitation found nowhere in the claims. Plaintiff states this proposed construction would exclude calls made from a telephone but received by an interactive voice response unit ("IVR"), the automated, so-called "phone mazes" used by large corporations to handle millions of incoming calls a day.

As support for their proposed construction, the ERAC Defendants argue that "[n]othing in the claims, specification, or file history suggests that a 'call' or a 'telephone call' is anything other than" their proposed construction. (ERAC Response brief at 23). However, as noted by Plaintiff, Defendants must cite to evidence in the claims, specification, or prosecution history that compels a limitation. Defendants' attempt to vary the plain meaning and scope of this term is unsupported. Specifically, Defendants have not provided any support to assert for example that a telephone call which is answered with a corporate automated system is not a telephone call.

c. Court's Construction

The claim term "a telephone call" shall be given its plain meaning and does not require any further construction.

8. "latitude and longitude coordinates" ('111 Patent: Claims 1, 9, 17, 29, 41) ('689 Patent: Claim 1)

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
latitude: the angular distance north or south from the equator of a point on the earth's surface, measured on the meridian of the point.	latitude: the angular distance north or south from the equator of a point on the earth's surface, measured on the meridian of the point.	No construction necessary.
longitude: angular distance east or west on the earth's surface, measured by the angle contained between the meridian of a particular place and some prime meridian, as that of Greenwich, England, and expressed either in degrees or by some corresponding difference in time.	longitude: angular distance east or west on the earth's surface, measured by the angle contained between the meridian of a particular place and some prime meridian, as that of Greenwich, England, and expressed either in degrees or by some corresponding difference in time.	

b. Discussion

Plaintiff asserts these terms are commonly understood, and Defendants' dictionary-derived constructions seek to replace two commonly-understood terms with sixty-four words. Should the Court decide to construe these terms, Plaintiff argues a simpler definition should be used.

The Court agrees with Defendants that the proper construction of the claim term "latitude and longitude coordinates" does not encompass other coordinate systems-including "Vertical-Horizontal" (VH) coordinate systems used in the prior art (*e.g.,* Riskin). According to Defendants, Plaintiff's suggestion that the Court not construe "latitude and longitude" would either allow Plaintiff to argue an implicit construction of "latitude and longitude coordinates" that is not "commonly understood" but encompasses VH, or defer this claim construction dispute to the jury. Neither is proper. O2 Micro, 521 F.3d 1351, 2008 WL 878924, at *8-*9. Because the parties' dispute over the scope of "latitude and longitude" is implicated in the parties' infringement dispute, the Court must construe the term. *Id*.

The Court construes "latitude and longitude coordinates" consistent with its ordinary meaning and rejects Plaintiff's implicit construction of the term as including "VH coordinates." The use of VH coordinates in geographic call routing was known years before Plaintiff filed its first patent application in 1992. VH coordinates were developed in the late 1950s for use in telecommunications. (ERAC Defendants' Response brief at Ex. F at 1:52-62); (*id*. at Ex. O); (*id*. at Ex. H para. 29). The Riskin patent-which issued in 1988, was cited in Plaintiff's 1992 application, and was repeatedly relied on by the Examiner to reject Plaintiff's claims-describes the novel use of VH coordinates for geographic call routing. (*Id*. at Ex. F at 2:61-3:13; 8:31-47; 23:33-27:2).

Plaintiff admitted in its verified complaint filed in the Florida Litigation-in which Riskin was asserted as invalidating prior art against the Neville patents-that VH is not the same as "latitude and longitude" and cannot be used with latitude and longitude coordinates. (*Id*. at Ex. I para. 13) (admitting that "V-H

coordinates are not equivalent to latitude and longitude and do not account for the curvature of the earth").

Latitude and longitude are spherical coordinates that measure angular distances determined by the angle between a ray from the center of the Earth and two predetermined reference lines, the Prime Meridian (running through Greenwich, England) and the Equator. (ERAC Defendants' Response brief at Ex. N); (*id*. at Ex. H at para.para. 19-22); (*see also id*. at Exs. J-N). By contrast, VH is not a spherical coordinate system but a flat grid projected onto the Earth's surface derived from "a complex transformation of latitude and longitude coordinates." (*Id*. at Ex. F at 3:8-1); (*see also id*. at Ex. H para. 29). VH does not measure angular distances or degrees, but measures units, with each unit equivalent to approximately the square root of a 1/10th of a square mile. (*Id*. at Ex. F at 23:33-27:2); (*id*. at Ex. H para.para. 31-43); (*id*. at Ex. O).

The fundamental differences between latitude and longitude and VH result in a multitude of practical differences in application. (*Id*. at Ex. H. para.para. 33-48); (*id*. at Ex. O). Since lines of longitude trace a path along the surface of the Earth, they converge as they approach the poles and the distance represented by each degree of longitude generally decreases from 69 miles (at the Equator) to 0 miles (at the poles). (*Id*. at Ex. H para.para. 33, 34). In contrast, each unit of VH is constant and does not vary. (*Id*. at Ex. F at 23:33-27:2); (*id*. at Ex. H para. 33); (*id*. at Ex. O). Latitude and longitude is a global system and can measure any point on the Earth's surface. (*Id*. at Ex. H para. 36); (*id*. at Ex. N). VH is essentially limited to North America. (*Id*. at Ex. H para.para. 36, 37); (*id*. at Ex. O). Latitude and longitude and VH use different algorithms, and calculations done in VH result in different measurements than calculations in latitude and longitude. (*Id*. at Ex. H para.para. 38-43). VH, however, uses simpler algorithms than "latitude and longitude." (*See, e.g.,* id. at para.para. 38-39, 521 F.3d 1351).

Having specified the use of "latitude and longitude," Plaintiff cannot argue that "latitude and longitude" encompasses other coordinate systems, including VH. The fact that "latitude and longitude" can be translated into VH (and back again) is irrelevant.

c. Court's Construction

The claim term "latitude and longitude coordinates" shall be construed to mean: **"latitude: the angular distance north or south from the equator of a point on the earth's surface, measured on the meridian of the point." "[L]ongitude: angular distance east or west on the earth's surface, measured by the angle contained between the meridian of a particular place and some prime meridian, as that of Greenwich, England, and expressed either in degrees or by some corresponding difference in time."**

9. "means for allocating individual latitude and longitude coordinates to each originating telephone number of all potential first parties" ('111 Patent**: Claim 1)/ "means for allocating latitude and longitude coordinates to the physical location of all potential first parties"** ('111 Patent**: Claim 17)**

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
(First term) Not asserted against E911 Defendants	(First term) Identified by the parties as Section 112, Paragraph 6 term. The function is "allocating individual latitude and longitude coordinates to each	(First term) Identified by the parties as Section 112, Paragraph 6 term. The function is "allocating individual latitude and longitude coordinates to each originating telephone number of all potential first parties."

	originating telephone number of all potential first parties."	
	Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* GIS and non-GIS computer programs; manual plotting or allocation; database; data sources that include vertical/horizontal coordinates, such as but not limited to latitude and longitude coordinates; database including ANI; and navigational or similar satellite communications systems.
(Second term) Identified by the parties as Section 112, Paragraph 6 term. The function is "allocating latitude and longitude coordinates to the physical location of all potential first parties"	(Second term) Identified by the parties as Section 112, Paragraph 6 term. The function is "allocating latitude and longitude coordinates to the physical location of all potential first parties"	(Second term) Identified by the parties as Section 112, Paragraph 6 term. The function is "allocating latitude and longitude coordinates to the physical location of all potential first parties"
Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* GIS and non-GIS computer programs; manual plotting or allocation; database; data sources that include vertical/horizontal coordinates, such as but not limited to latitude and longitude coordinates; database including ANI; and navigational or similar satellite communications systems.

b. Discussion

The agreed function of the means for allocating in claim 1 is "allocating individual latitude and longitude coordinates to each originating telephone number of all potential first parties." (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 3-4). The agreed function of the means for allocating in claim 17 is "allocating latitude and longitude coordinates to the physical location of all potential first parties." (*Id*. at 4). Plaintiff asserts that the corresponding structure is "GIS and non-GIS computer programs; manual plotting or allocation; database; data sources that include vertical/horizontal coordinates, such as but not limited to latitude and longitude coordinates; database including ANI; and navigational or similar satellite communications systems." (*Id*.).

The E911 Defendants assert that no structure is disclosed for the allocating means, except possibly a human being consulting unnamed data sources. The E911 Defendants cite Default Proof Credit Systems, Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1300 (Fed.Cir.2005) for the proposition that a human being cannot constitute a "means." The E911 Defendants also state that the database does not allocate latitude and longitude coordinates but rather contains the results of the allocating and assigning elements. Further, the

E911 Defendants state that it is only after the allocation has been performed that the coordinates and telephone number are input to the database. (Docket Entry # 159 at 8) (*citing* '111 Patent at 9:39-45).

The ERAC Defendants assert that the patent disclosure teaches at most a predominance method to approximate caller locations by looking at the first six digits of a number (NPA area code and NXX exchange), consulting undisclosed third party data sources, or utilizing future satellite systems such as LORAN. (Docket Entry # 255 in 5:07cv57 at 27). The ERAC Defendants assert that these disclosures do not disclose structure.

Plaintiff counters by citation in its briefing and oral argument to a number of references in the specification. With regard to the ANI and a database, Plaintiff cites to the portions of the specification which state "a caller's geographic location is identified by an Automatic Number Identification (ANI) which is then correlated with a database established according to criteria of a second party" and "[i]n capturing the ANI, it is possible to correlate the actual vertical/horizontal coordinates of that ANI, using third party or in house data sources. ('111 Patent at 3:26-30 and 9:39-41) (*see also* '111 Patent at 36-41). Plaintiff also cites to the "invention's database" in the NCP. ('111 Patent at 5:3-13, 9:37-60, 10:36-11:32, Fig. 8). Plaintiff further cites to portions of the specification describing a geographic information system ("GIS") including a citation that states "FIGS. 3 through 7 illustrate application of the invention with respect to various geographic and demographic criteria as provided with various GIS programs." ('111 Patent at 9:61-10:3). In addition, Plaintiff cites to language that states manual and automated plotting may be used "by plotting these ZIP Code Plus 4 locations against any desired geographic boundary, either manually or with a Geographic Information System (GIS)." ('111 Patent at 7:12-14). Plaintiff also asserts that data sources are also disclosed for correlating coordinates and an ANI including "third party or in-house data sources." ('111 Patent at 9:39-43) (*see also* '111 Patent at 10:51-55). Finally, Plaintiff cites to the passages discussing the identification of mobile phone locations through a satellite communications system such as LORAN. ('111 Patent at 6:61-65, 3-9-12).

The Court finds Plaintiff has cited to numerous examples within the specification in which structural elements are utilized in the process of allocating coordinates to a telephone number. Data sources, databases, computer programs, and satellite systems are structural elements. As noted by Plaintiff, the Federal Circuit has stated that

Overcoming the presumption of validity requires that any facts supporting a holding of invalidity be proved by clear and convincing evidence. Thus, a challenge to a claim containing a means-plus-function limitation as lacking structural support requires a finding, by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.

Intellectual Prop. Dev., Inc. v. UA-Columgbia Cablevision of Westchester, Inc., 336 F.3d 1308, 1319 (Fed.Cir.2003) (internal citation omitted). The Court is also mindful that the Federal Circuit reiterated in *Phillips* that 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. The specification citations listed by Plaintiff above describe sufficient structural elements to satisfy this standard. The Court, however, does not adopt Plaintiff's proposed construction in its entirety. Plaintiff has not cited adequate support for inclusion of non-GIS computer programs. In addition, the phrase "manual plotting or allocation" included in Plaintiff's proposal is not structure language but rather functional language. Further, the agreed function is "latitude and longitude coordinates" so the corresponding structure identified in the specification should be structure

that is latitude and longitude related structure.

c. Court's Construction

Accordingly, the Court construes the structure of the "means for allocating" term to be: **"GIS computer programs and databases or data sources that correlate latitude and longitude coordinates with the ANI or the NPA-NXX (area code and exchange); or navigational or similar satellite communications systems which can identify the latitude and longitude coordinates of mobile phones."**

10. "means for defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates" ('111 Patent: Claims 1, 17)

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
Identified by the parties as Section 112, Paragraph 6 term. The function is "defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates."	Identified by the parties as Section 112, Paragraph 6 term. The function is "defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates."	Identified by the parties as Section 112, Paragraph 6 term. The function is "defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates."
Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* GIS and non-GIS computer programs; manual plotting or allocation; database; data sources that include vertical/horizontal coordinates, such as but not limited to latitude and longitude coordinates.

b. Discussion

The agreed function of the means for defining in claims 1 and 17 is "defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates." (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 4-5). Plaintiff asserts that the corresponding structure is "GIS and non-GIS computer programs; manual plotting or allocation; database; data sources that include vertical/horizontal coordinates, such as but not limited to latitude and longitude coordinates." (Id. at 5).

Plaintiff cites much of the same portions of the specification as identified above with reference to the "means for allocating." In addition, Plaintiff references a portion of the specification which states "determine, for each location where the advertiser wishes calls to be received, the boundary of the recipient's Desire Response Zone ("DRZ"). Assign ... vertical and horizontal coordinates to each point along

the boundary of the DRZ." ('111 Patent at 11:36-42). Plaintiff further notes that the specification includes "when an advertiser requests a certain criteria as the boundary of a designated response zone, that response zone is like a transparent layer to the base map containing the corresponding NPA-NXX-XXXX combinations. Those combinations that fall within the boundaries as determined by the advertiser are automatically assigned to the location with that response zone." ('111 Patent at 10:4-10). Plaintiff asserts in its briefing that

[w]hile an initial determination of the boundary requires human interaction, however, such interaction does not render the term indefinite for lack of corresponding structure. Managerial decisions, such as which service locations will receive calls from which geographic areas, are generally performed by people not inanimate objects. Once these decisions are made, however, the GIS as disclosed in the patent is used by the human to define the boundaries of the geographic areas.

(Docket Entry # 257 in 5:07cv57 at 19).

The E911 Defendants assert that the items included in Plaintiff's construction are not linked to the particular "defining" function in any element except arguably the GIS program. The E911 Defendants assert that the GIS program does not define boundaries but only displays boundaries and notes that the specification states "a GIS provides visual interpretation of information." ('111 Patent at 9:62-63). The E911 Defendants further assert that defining boundaries of geographic areas is done by the advertisers citing a portion of the specification which includes the language "advertisers who define territories with major metropolitan markets...." ('111 Patent 11:17-19).

The ERAC Defendants also assert that the function of the means for defining limitation is accomplished by humans. The ERAC Defendants cite to Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc., 296 F.3d 1106, 1118-1119 (Fed.Cir.2002) for the proposition that a means plus function claim is invalid if the disclosed structure is a human operating a system. The ERAC Defendants note language in *Cardiac* that states that "the corresponding structure must include all structure that actually performs the recited function...." Cardiac Pacemakers, 296 F.3rd at 1119. The ERAC Defendants assert that the patent specification expressly contemplates that a person will perform the defining function and that the GIS is merely utilized as a visual interpretation of a coordinate system. ('111 Patent at 4:20-24, 7:12-20, 10:4-9, 11:37-42). Plaintiff counters these arguments by asserting that Cardiac Pacemakers and *Default Proof Credit* involved instances where a human was the only means identified to perform the function.

The Court recognizes there is some merit to the Defendants' assertions of human interaction (such as advertisers) in the means for defining limitation. As noted above, the specification does reference "boundaries as determined by the advertiser" and "advertisers who define territories." ('111 Patent at '111 Patent at 10:4-10, 11:17-19). Looking at the functional claim language provides context to the issues in question.

The language can be viewed in three parts: (1) "defining the boundaries of one or more geographical areas" (2) "which can be of any size and shape according to predetermined criteria" and (3) "each point along said boundaries being defined by latitude and longitude coordinates." The Court finds the specification repeatedly refers to GIS programs for defining latitude and longitude coordinates. ('111 Patent 4:20-24, 7:12-20, 9:61-10:3; 11:34-42). There is no teaching in the specification that indicates humans provide latitude and longitude coordinates.

This third portion of the function provides detail as to the general "defining" in the first portion of the function. The Court agrees with Defendants that humans, such as advertisers, play a role in the defining, however, in the context of how the claim is drafted such a role may be interpreted as providing the "predetermined criteria" in the second portion of the function. While the criteria for the boundaries may be provided by humans, it is still the GIS program that is used to define the boundary according to the claimed required latitude and longitude coordinates.

Defendants have provided no support for an assertion that humans merely providing criteria for which a structure (in this case a GIS computer program) operates upon renders a claim invalid. That a computer program operates upon predetermined criteria set by humans does not change the conclusion that the ultimate function is performed by a structure, the computer program. As noted above, clear and convincing evidence is needed to find a claim invalid and the Federal Circuit reiterated in *Phillips* that 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.

With these standards in mind, the Court finds that the specification discloses GIS programs as the structure that defines boundaries according to the predetermined criteria. That the criteria may be provided to the GIS programs by humans does not render the claim as invalid as a structure for defining is disclosed. In particular, the use of GIS programs is disclosed as a structure of defining. Plaintiff's construction for the structure again includes "manual plotting or allocation." As described above with "means for allocating," such language is not a structure and will not be included in the Court's construction. Plaintiff's construction also refers to "database" and "data sources," however, Plaintiff has not provided citation in the specification that ties the database and data sources to the defining of boundaries. Rather, the specification citations provided are more directed towards the correlation of telephone numbers and coordinates which are directed toward the other means limitations.

c. Court's Construction

Accordingly, the Court construes the structure of the "means for defining" term to be **"GIS computer programs."**

11. "means for assigning to each originating telephone number of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area as defined by said means for defining in which the individual latitude and longitude coordinates of the specific location of each of said potential first parties lie" ('111 Patent**: Claim 1)/ "means for assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie"** ('111 Patent**: Claim 17**)

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
(First term) Not asserted against E911 Defendants.	(First term) Identified by the parties as Section 112, Paragraph 6 term. The function is "assigning to each originating telephone number of said potential first parties a	(First term) Identified by the parties as Section 112, Paragraph 6 term. The function is "assigning to each originating telephone number of said potential first parties a telephone

	telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic are as defined by said means for defining in which the individual latitude and longitude coordinates of the specific location of each of said potential first parties lie."	number of a service location of a second party that will receive calls originating from within the boundary of a geographic are as defined by said means for defining in which the individual latitude and longitude coordinates of the specific location of each of said potential first parties lie."
	Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* GIS and non-GIS computer programs; manual plotting or allocation; database including ANI, WATS and POTS; NCP; client defined criteria; and algorithms.
(Second term) Identified by the parties as Section 112, Paragraph 6 term. The function is "assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie."	(Second term)-Identified by the parties as Section 112, Paragraph 6 term. The function is "assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie."	(Second term) Identified by the parties as Section 112, Paragraph 6 term. The function is "assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie."
Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* GIS and non-GIS computer programs; manual plotting or allocation; database including ANI, WATS and POTS; NCP; client defined criteria; and algorithms.

b. Discussion

The agreed function of the means for assigning in claim 1 is "assigning to each originating telephone number of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area defined by said means for defining in which the individual latitude and longitude coordinates of the specific location of each of said potential

first parties lie." (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 5). The agreed function of the means for assigning in claim 17 is "assigning to the physical location of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie." (*Id*. at 5-6). Plaintiff asserts that the corresponding structure is "GIS and non-GIS computer programs; manual plotting or allocation; database including ANI, WATS and POTS; NCP; client defined criteria and algorithms." (*Id*.).

The E911 Defendants assert that no disclosed structure is provided for the function of the means for assigning element. The E911 Defendants assert that the database and GIS program identified by Plaintiff at best represent an assignment made by other, undisclosed means. (Docket Entry # 147 in 5:07cv23 at 28). The E911 Defendants assert that the database records the assignment, but does not make the assignment. In particular, the E911 Defendants cite to the Abstract which states "[t]he second party's criteria is applied to assign the potential caller to a second party. Once all such assignments have been made, a database is assembled...." ('111 Patent at Abstract).

The ERAC Defendants assert that the structure disclosed in the specification must be more than simply a general purpose computer or microprocessor because in such cases a specific algorithm must be disclosed. (Docket Entry # 147 in 5:07cv23 at 28) (*citing* Aristocrat Technologies Australia Pty Ltd. v. International Game, 521 F.3d 1328, 2008 WL 819764 (Fed.Cir. March 28, 2008). The ERAC Defendants assert that no such specific algorithm is disclosed.

Plaintiff counters these arguments by providing many of the same specification citations as cited above for GIS programs, databases, and data sources. Plaintiff emphasizes that the database provides the structure that is linked to the function. Plaintiff further asserts that the fields in the database may correlate the ANI, the WATS number, and the appropriate POTS number via the database which is populated either manually or with a GIS program. (Docket Entry # 257 in 5:07cv57 at 19) (*citing* the '111 Patent, 7:12-20, 7:45-53, 10:4-10). Plaintiff also cites to a portion of the specification which describes the Network Control Point ("NCP") at the Local Distance Carrier ("LDC") which contains the database as: "[a]t the NCP are all of the direct routing instructions for the WATS number. As previously described, the NCP will provide a POTS number that will connect the caller to a territorial location, or a default phone location." ('111 Patent at 5:3-13).

The Court finds sufficient support in the specification that links the database in conjunction with GIS programs to the claimed assigning function. As described within the specification, these structures are the instrumentality which are used during the assigning of the service location to the originating telephone number. That criteria may be established prior to the assembling of the database does not negate the role the database plays in the assignment process. Again mindful of the standards established by the Federal Circuit, the Court does not find clear and convincing evidence that the specification lacks structural support.

Plaintiff has, however, again included non-structural elements within its proposed structural construction. "Manual plotting and allocation," "client defined criteria" and "algorithms" are not structural limitations. With regard to algorithms, it is noted that algorithms being run on a particular structural element (for example a computer or microprocessor) may qualify as structural limitations. However, here Plaintiff merely points to the predominance processing algorithm but identifies no support in the specification as to any particular structure that runs the described algorithm.

c. Court's Construction

Accordingly, the Court construes the structure of the "means for assigning" term to be **"GIS computer programs and a database including ANI, WATS, and POTS at the NCP."**

12. "means for determining the originating telephone number of the first party from which said telephone call is to be routed" ('111 Patent: Claims 1, 17)

a. Parties' Proposed Construction

E911 Defendants' Proposal	*ERAC Defendants' Proposal*	*800 Adept's Proposal*
Identified by the parties as Section 112, Paragraph 6 term. The function is "determining the originating telephone number of the first party from which said telephone call is to be routed."	Identified by the parties as Section 112, Paragraph 6 term. The function is "determining the originating telephone number of the first party from which said telephone call is to be routed."	Identified by the parties as Section 112, Paragraph 6 term. The function is "determining the originating telephone number of the first party from which said telephone call is to be routed."
Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the claim invalid.	*Structure:* signaling channel, ANI, LDC, NCP, and LEC.

b. Discussion

The agreed function of the means for determining in claims 1 and 17 is "directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning." (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 6). Plaintiff asserts that the corresponding structure is "signaling channel, ANI, LDC, NCP, and LEC." (Id.).

In its briefing, Plaintiff asserts that the "long distance carrier is the structure that performs the function of 'determining the originating telephone number of the first party from which said telephone call is to be routed.' ... The specification indicates that '[w]hen a call is made from individual NPA-NXX-XXXX's the carrier must, for billing purposes, capture that ANI." (Docket Entry # 257 in 5:07cv57 at 20) (*citing* '111 Patent, 9:37-39). Plaintiff also cites to its expert's declaration which states that "one of ordinary skill in the art would understand that in the disclosed embodiments the LDC performs the function of 'determining the originating telephone number...." (Brody Decl. at para. 25) (Docket Entry # 257 in 5:07cv57 at 20). Plaintiff also cites to portions of the specification to assert that a signal channel is used to communicate between the LEC and the LDC and that the ANI is a caller's full number. ('111 Patent at 4:7-8, 5:1-5, 9:2-4).

The E911 Defendants cite to a portion of the specification which describes the signal channel as a channel between the LEC and LDC to support the proposition that the signal channel does not determine the originating telephone. (Docket Entry # 147 in 5:07cv23 at 29) (*citing* '111 Patent at 5:1-5). The E911 Defendants also assert that the ANI is not structure and that the database does not determine the originating number but rather contains a list of ANIs. The E911 Defendants primarily argue, however, that the LDC and LEC can not be structure as they are entities (like Verizon, Sprint or AT & T). (Docket Entry # 159 in 5:07cv23 at 29). The E911 Defendants note that their expert states that the LDC and LEC have thousands of complex structures under their control, including central offices, trunk lines, control networks and so forth, (

id.) (*citing* Acampora Decl. at para.para. 48-51), and that such structure is not sufficiently and specifically disclosed to satisfy a means plus function limitation. The ERAC Defendants did not provide additional arguments.

It is constructive to view the full context of the patent specification. The LEC, LDC, and the communication signal channel between the two are shown in Figure 1 and described within the text at a high level. The focus of the patent specification is not directed toward techniques for determining originating numbers. Rather, in the overall context the specification appears to treat such determining step as being well known technology. Plaintiff's expert's declaration confirms this and Defendants do not appear to dispute this. That the LDC and LEC are comprised of complex and numerous structures does not negate the fact that such structures perform the claimed determining function.

In the context of this particular patent specification which is primarily directed toward disclosing other concepts (as opposed to the well known determining originating numbers), the Court finds that such disclosure is sufficient to meet the standards established by the Federal Circuit described above under which the Court reviews this dispute. The Court, however, does not find that Plaintiff has provided sufficient support in the specification for inclusion of the ANI and the database. The ANI is just described as just being the caller's full telephone number. ('111 Patent at 4:8-9). The ANI is not described as structure that determines the number. Likewise, Plaintiff has not pointed to evidence that links the NCP to the determining function, but rather merely notes that the NCP contains the ANI, WATS, etc.

c. Court's Construction

Accordingly, the Court construes the structure of the "means for determining" term to be: **"LDC, LEC and the signaling channel between the LDC and LEC."**

13. "direct routing means for directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning." ('111 Patent: Claims 1, 17)

a. Parties' Proposed Construction

E911 Defendants' Proposal	ERAC Defendants' Proposal	800 Adept's Proposal
Identified by the parties as Section 112, Paragraph 6 term. The function is "directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning."	Identified by the parties as Section 112, Paragraph 6 term. The function is "directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning."	Identified by the parties as Section 112, Paragraph 6 term. The function is "directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning."
Structure: There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the	*Structure:* There is no disclosed structure linked to the claimed function as required under s. 112, para. 6, which renders the	*Structure:* NCP, LEC, and LDC.

claim invalid. claim invalid.

b. Discussion

The agreed function of the direct routing means in claims 1 and 17 is "directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning." (Docket Entry # 164 in 5:07cv23, Claim Construction Chart at 6). Plaintiff asserts that the corresponding structure for the direct routing means is "NCP, LEC and LDC." (Id. at 7). Both Defendants assert that there is no disclosure in the specification linking the claimed function to structure. Alternatively, the ERAC Defendants assert that at a minimum the "required structure must include the database at the NCP 5A of the long distance carrier." (Id.).

Plaintiff cites to the specification where it is stated that "[a]t the NCP are all of the direct routing instructions for the WATS number." ('111 Patent at 5:40-41). Plaintiff also points to the statement in the specification:

A caller at 1 with the ANI 718-469-4567 dials 1-800-DISPLAY to request information regarding the high-performance video display. The LEC at 2 reads the WATS number and signals the LDC at 3, requesting a POTS number. The LDC at 3 accesses its own NCP that contains the invention's database that corresponds to the ANI and the WATS number. The LDC signals the LEC at 2 with the appropriate POTS number, in this case 914-229-9987. The LEC then direct-connects the caller at 1 with the regional computer service center at 4.

('111 Patent at 8:39-48).

The E911 Defendants assert again their argument that an LDC and LEC cannot serve as structure. The E911 Defendants further state that identifying portions of the specification indicating that the NCP contain the routing instructions is not the same as pointing to structure that performs the function.

The ERAC Defendants state in their alternative argument that if structure is found it must at a minimum contain the NCP database as shown in Fig. 1 element 5A. In particular, the ERAC Defendants assert that the specification uniformly and repeatedly points to direct routing being accomplished with "the invention's database." The ERAC Defendants point to the follow specification language:

The LDC 5 accesses its own Network Control Point (NCP) 5A, containing the invention's database, requesting a POTS number that corresponds to the LEC's WATS number. At the NCP are all of the direct routing instructions for the WATS number. As previously described, the NCP will provide a POTS number that will connect the caller to a territorial location, or a default phone location.

('111 Patent at 5:6-13). The ERAC Defendants also cite to repeated similar references which describe the use of the database for routing. ('111 Patent at 5:37-41, 7:48-53, 8:17-22, 8:43-48, 8:67-9:6, 9:26-32).

The Court has addressed the dispute regarding the LDC and LEC with regard to the "means for determining" and has found that the LDC and LEC may be construed as disclosed structure. The citation provided above by Plaintiff provides sufficient disclosure for the inclusion of the LEC and LDC within the structure that accomplishes the direct routing function.

With regard to the NCP, the Court agrees with the ERAC Defendants that the "invention's database" is consistently referenced as structure that is also utilized to accomplish the direct routing function. It is "the invention's database" that provides to the LDC the data that correlates the WATS number to a particular service location POTS number for a given originating telephone number. The implementation of the direct routing function is intimately tied to the invention's database, and Plaintiff does not provide persuasive support in the specification for accomplishing such routing function without the database.

c. Court's Construction

Accordingly, the Court construes the structure of the "direct routing means" term to be **"LDC, LEC, and the database at the NCP 5A of the LDC."**

IV. CONCLUSION

Accordingly, the Court hereby construes the claim terms consistent herewith. A chart summarizing these constructions is attached as Exhibit B.

EXHIBIT A

Claim Language
U.S. Patent No. RE 36,111 (Neville)
Claim 1-A system for direct routing a **telephone call** from a first party who has an **originating telephone number** at a specific location defined by **latitude and longitude coordinates** who dials **a telephone number including digits uniquely characteristic to a second party** having a plurality of service locations, said system comprising:
Means for **allocating** individual **latitude and longitude coordinates** to **each originating telephone number** of **all potential first parties;**
Means for defining the boundaries of **one or more geographical areas** which can be of any size and shape according to **predetermined criteria,** each point along said boundaries being defined by **latitude and longitude coordinates;**
Means for **assigning** to **each originating telephone number** of **said potential first parties** a **telephone number** of a service location of a second party that will receive **calls** originating from within the boundary of a **geographic area** defined by said means for defining in which the individual **latitude and longitude coordinates** of the specific location of each of **said potential first parties** lie;
Means for determining the **originating telephone number** of the first party from which said **telephone call** is to be routed; and
direct routing means for direct routing said **telephone call** to a service location of the second party assigned to said **originating telephone number** of the first party by said means for **assigning.**
Claim 9-A method for direct routing a **telephone call** from a first party who has an **originating telephone number** at a specific location defined by **latitude and longitude coordinates** who dials **a telephone number including digits uniquely characteristic to a second party** having a plurality of service locations, said method comprising the steps of:
allocating individual **latitude and longitude coordinates** to **each originating telephone number** of **all potential first parties;**
defining the boundaries of **one or more geographical areas** which can be of any size and shape according to **predetermined criteria,** each point along said boundaries being defined by **latitude and longitude**

coordinates;

assigning to each originating telephone number of **said potential first** [panics] parties of a service parties location of a second party that receive **calls** originating from within the boundary of a **geographic area** defined in said step of defining in which the individual **latitude and longitude coordinates** of the specific location of each of **said potential first parties** lie;

determining the **originating telephone number** of the first party from which said **telephone call** is to be routed; and

directly routing said **telephone call** to a service location of the second party assigned to said **originating telephone number** of the first party by said step of **assigning.**

Claim 17-A system for direct routing a **telephone call** from a first party who has an **originating telephone number** at a **physical location** and who dials **a telephone number including digits uniquely characteristic to a second party** having a plurality of service locations, said system comprising:

means for **allocating latitude and longitude coordinates to the physical location of all potential first parties;**

means for defining the boundaries of **one or more geographical areas** which can be of any size and shape according to **predetermined criteria,** each point along said boundaries being defined by **latitude and longitude coordinates;**

means for **assigning** to the **physical location of said potential first parties** a **telephone number** of a service location of a second party that will receive **calls** originating from within the boundary of a **geographic area** in which the **latitude and longitude coordinates** of the **physical location of each of said potential first parties** lie;

means for determining the **originating telephone number** of the first party from which said **telephone call** is to be routed; and

direct routing means for directly routing said **telephone call** to a service location of the second party assigned to said **originating telephone number** of the first party by said means for **assigning.**

Claim 24-The system of claim 17, 18, 19, 20 or 21 wherein said **one or more geographic areas** is defined by a designated response zone.

Claim 28-The system of claim 17 wherein the **originating telephone number** is that of a non-stationary telephone, such as a mobile, cellular or transportable phone.

Claim 29-A method for direct routing a **telephone call** from a first party who has an **originating telephone number** at a **physical location** and who dials **a telephone number including digits uniquely characteristic to a second party** having a plurality of service locations, said method comprising the steps of:

allocating latitude and longitude coordinates to the physical location of all potential first parties;

defining the boundaries of **one or more geographical areas** which can be of any size and shape according to **predetermined criteria,** each point along said boundaries being defined by **latitude and longitude coordinates;**

assigning to the **physical location of said potential first parties** a **telephone number** of a service location of a second party that will receive **calls** originating from within the boundary of a **geographic area** in which the **latitude and longitude coordinates** of the **physical location of each of said potential first parties** lie;

determining the **originating telephone number** of the first party from which said **telephone call** is to be routed; and

directly routing said **telephone call** to a service location of the second party assigned to said **originating**

telephone number of the first party by said step of **assigning.**

Claim 36-The method of claim 29, 30, 31, 32, or 33 wherein said **one or more geographical areas** is defined by a designated response zone.

Claim 40-The method of claim 29 wherein the **originating telephone** is [sic] non-stationary telephone, such as a mobile, cellular or transportable telephone.

Claim 41-A method of constructing a database wherein said database is used by a telephone service provider for direct routing a **telephone call** from a first party who has an **originating telephone number** at a **physical location** and who dials one of **an 800-type, 900-type or other special access code telephone number** assigned to a second party, who has determined specific locations to receive **calls** originating from within pre-determined **geographic areas,** thereby allowing the first party to reach one of a plurality of locations of the second party based on geographic location from which the **telephone call** originate from within one of a plurality of **geographic areas,** said method comprising the steps of:

(a) **assigning individual latitude and longitude coordinates to the physical location of all potential first parties;**

(b) defining the boundaries of **one or more geographic areas** which can be of any size and shape according to **predetermined criteria** each point along said boundaries being defined by **latitude and longitude coordinates;** and

(c) **assigning** to the **physical location of said potential first parties** a **telephone number** of a service location of a second party that will receive **calls** originating from within the boundary of a **geographic territory** in which the **latitude and longitude coordinates** of the **physical location of each of said potential first parties** lies.

Claim 43-The method of claim 41 wherein step (a) comprises the steps of:

(i) determining a ZIP+4 code of the **physical location of each potential first party;**

(ii) determining the **latitude and longitude coordinates** of said ZIP+4 code; and

(iii) correlating the **latitude and longitude coordinates** of each ZIP+4 code to the **telephone number** of each **potential first party.**

Claim 48-The method of claim 41, 42, 43, 44 or 45 wherein said **one or more geographical areas** is defined by a designated response zone.

Claim 52-The method of claim 41, 42, 43, 44 or 45 wherein the **originating telephone number** is [sic] non-stationary telephone, such as a mobile, cellular or transportable telephone.

US Patent No. 5,805,689 (Neville)

Claim 1-In a telephone system, a method of constructing a database wherein said database is used by a telephone service provider for direct routing a **telephone call** from a first party who dials one of **an 800-type, 900-type or other special access code telephone number** assigned to a second party, who has determined specific locations to receive **calls** originating from within pre-determined **geographic areas,** thereby allowing the first party to reach one of a plurality of locations of the second party based on geographic location of the first party from within one of a plurality of **geographic areas,** said method comprising the steps of:

a. **assigning** individual **latitude and longitude coordinates** to each **telephone number** of **all potential first parties;**

b. defining the boundaries of **one or more geographic areas** which can be of any size and shape according to **pre-determined criteria;**

c. **assigning** to the **telephone number** of each **potential first party** a **telephone number** of a specific location of the second party that will receive **calls** originating from within a **geographic area** of each first

party;

d. determining in which **geographic area** a potential call might originate for each **potential first party** in the area encompassed by all **geographic areas;** and

e. **assigning** the specific location of the second party to **all potential first parties** within the boundaries of each **geographic area.**

Claim 3-The method of claim 1 wherein step a. further comprises the steps of:

a. determining a ZIP+4 code of the address of each **potential first party;**

b. determining the **latitude and longitude coordinates** of said ZIP+4 code; and

c. correlating the **latitude and longitude coordinates** of each ZIP+4 code to the **telephone number** of each **potential first party.**

Claim 4-The method of claim 1 whereby the **pre-determined criteria** of step b. precisely defines a **geographic area.**

Claim 5-The method of claim 1 wherein **said criteria** may comprise any criteria selected by the second party.

EXHIBIT B

CLAIM TERM	COURT CONSTRUCTION
"all potential first parties"/ "potential first party"	"All individuals who can place a telephone call but who have not yet done so."
"physical location"	No construction necessary.
"originating telephone number"	No construction necessary.
"allocating/assigning"	"A designation made prior to the telephone call of the first parties however such does not exclude further processing during the telephone call."
"allocating latitude and longitude coordinates to the physical location of all potential first parties"/ "assigning individual latitude and longitude coordinates to the physical location of all potential first parties" / "assigning individual latitude and longitude coordinates to each telephone number of all potential first parties"	"Prior to a telephone call, determining the 'latitude and longitude coordinates' of the physical location of 'all potential first parties' in a manner capable of precisely pinpointing the geographic location of a single party."
"predetermined criteria"	"Requirements of the second party, which are determined before delivery of the call routing database."
"one or more geographic(al) areas"/"geographic area(s)"/ "geographic territory"	No construction necessary.
"an 800-type, 900-type or other special access code telephone number"	"a 10-digit telephone number, the first three digits of which are not indicative of geographic area."
"a telephone number including digits uniquely characteristic to a second party"	"a 10-digit telephone number including digits uniquely characteristic to a second party."
"a telephone call"	No construction necessary.

"latitude and longitude coordinates"	"latitude: the angular distance north or south from the equator of a point on the earth's surface, measured on the meridian of the point." "longitude: angular distance east or west on the earth's surface, measured by the angle contained between the meridian of a particular place and some prime meridian, as that of Greenwich, England, and expressed either in degrees or by some corresponding difference in time."
"directly routing"/ "direct routing"	"Routing a telephone call to another party without a human or computer redialing, or otherwise placing a second call."
"a designated response zone"	"The area from which an advertiser wishes to have telephone inquiries about the advertiser's product or service directed to the local provider of the advertiser's good or service."
"a second party"	"An entity having multiple service locations."
"a service location of the second party"	"A service location of an entity having multiple service locations."
"means for allocating individual latitude and longitude coordinates to each originating telephone number of all potential first parties"/ "means for allocating latitude and longitude coordinates to the physical location of all potential first parties"	Structure = "GIS computer programs and databases or data sources that correlate latitude and longitude coordinates with the ANI or the NPA-NXX (area code and exchange); or navigational or similar satellite communications systems which can identify the latitude and longitude coordinates of mobile phones."
"means for defining the boundaries of one or more geographical areas which can be of any size and shape according to predetermined criteria, each point along said boundaries being defined by latitude and longitude coordinates"	Structure = "GIS computer programs."
"means for assigning to each originating telephone number of said potential first parties a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area as defined by said means for defining in which the individual latitude and longitude coordinates of the specific location of each of said potential first parties lie"/ "means for assigning to the physical location of said potential first parties to	Structure = "GIS computer programs and a database including ANI, WATS, and POTS at the NCP."

a telephone number of a service location of a second party that will receive calls originating from within the boundary of a geographic area in which the latitude and longitude coordinates of the physical location of each of said potential first parties lie"	
"means for determining the originating telephone number of the first party from which said telephone call is to be routed"	Structure = "LDC, LEC and the signaling channel between the LDC and LEC."
"direct routing means for directly routing said telephone call to a service location of the second party assigned to said originating telephone number of the first party by said means for assigning"	Structure = "LDC, LEC, and the database at the NCP 5A of the LDC."

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