United States District Court, D. Colorado.

CIVIX-DDI, LLC,

Plaintiff.

V.

MICROSOFT CORPORATION, Delorme Publishing Company, Inc., d/b/a Delorme Mapping Company, Infousa, Inc., Zip2 Corporation, Infoseek Corporation, Lycos, Inc., and Excite, Inc, Defendants.

No. CIV.A. 99-B-172

Jan. 24, 2000.

The owner of patents for electronic directory sued mapping software vendors and internet websites for infringement. On cross-motions for summary judgment, the District Court, Babcock, J., held that: (1) street mapping software, sold on CD-ROM disks for installation on personal computers, did not infringe on patent for electronic directory for use in fixed public structures, and (2) street mapping services offered by various internet websites did not infringe on patent for electronic directory, which located items of interest only relative to specified positional coordinates.

Plaintiff's motion denied; defendants' motions granted.

4,974,170, 5,682,525. Not infringed.

John Henry Schlie, Barry Alan Schwartz, David J. Sheikh, Niro, Scavone, Haller & Niro, Basalt, CO, for Plaintiff.

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FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

BABCOCK, District Judge.

Plaintiff, CIVIX-DDI, LLC ("CIVIX"), asserts claims for infringement of United States Patents Nos. 4,974,170 (" '170 patent") and/or 5,682,525 (" '525 patent") against seven remaining Defendants, Microsoft Corporation ("Microsoft"), DeLorme Publishing Company, Inc., d/b/a DeLorme Mapping Company

("DeLorme"), InfoUSA, Inc. ("InfoUSA"), Zip2 Corporation ("Zip2"), Infoseek Corporation ("Infoseek"), Lycos, Inc. ("Lycos"), and Excite, Inc. ("Excite") (collectively "Defendants"). CIVIX moves for summary judgment against each Defendant. Defendants plead the affirmative defenses of non-infringement and invalidity. All Defendants, except Microsoft and Infoseek, cross-move for summary judgment on grounds of non-infringement. Pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), I held a hearing on December 10, 1999, and permitted the parties to brief the interpretation of the claims in question. I have reserved the question of invalidity pending determination on the cross-motions for summary judgment on infringement/non-infringement grounds. Having the benefit of the *Markman* hearing to construe the claims in question, and for the following reasons, I deny CIVIX' motions for summary judgment and grant the moving Defendants' motions for summary judgment. Therefore, the issue of invalidity is moot as to these Defendants. Jurisdiction is proper in this Court pursuant to 28 U.S.C. s. 1338.

I. Background

The following facts are undisputed. The '170 patent, entitled "Electronic Directory for Identifying a Selected Group of Subscribers," was issued November 27, 1990 to Lincoln Bouve and Edward Holmes. The '170 patent matured from an application filed on January 25, 1990, Application No. 470,221 (" '221 application"). The '221 application is a continuation from a parent application, Application No. 07/146,692, filed January 21, 1988, now abandoned. The '170 patent contains seven claims, three of which are at issue in this Order.

As explained in the '170 patent's specification:

Travelers are typically unaware of the locations of businesses or historical sites and must use directories to find such. Commonly, a tourist bureau provides a list of historical sites, or a Chamber of Commerce may provide a directory of businesses. Generally, one must first find a visitor's center or other location which distributes this kind of directory. This is quite time consuming, their having to know where the directories are distributed before they can have access to the information.

('170 Patent, Col. 1 lines 15-24). The '170 patent sought to address this problem by providing publicly accessible "user stations" with electronic directories and methods for locating businesses within the directories. ('170 Patent, Col. 1 lines 25-32). Figures 1 and 2 of the '170 patent illustrate a preferred embodiment of a base or user station. The invention can be used to identify and locate selected "subscribers" within a fixed geographical region surrounding the user station. ('170 Patent, Col. 1 lines 35-42). The user can query the database for the identification and location of subscribers with desired characteristics. ('170 Patent, Col. 1 lines 45-55). For example, a person can query the database for the names and locations of drugstores within a one mile radius of the user station. A map showing the locations of these subscribers is then provided to the user. Figure 6 of the '170 patent is an illustration of a map produced by the user station.

The '525 patent, entitled "System and Methods for Remotely Accessing a Selected Group of Items of Interest from a Database," was issued October 28, 1997 to Lincoln Bouve, William Semple, and Steven Oxman. The '525 patent matured from an application filed on January 11, 1995, Application No. 371,425 ("'425 application"). The '525 patent contains thirty-seven claims, eight of which are specifically at issue in this Order.

As explained in the "Background of the Invention" section of the '525 patent, this newer invention was

created, in part, to overcome limitations inherent in the '170 patent:

Electronic directories for identifying selected subscribers within a city are known in the prior art. For example, U.S. Pat. No. 4,974,170 [the '170 patent] describes one system which includes a fixed kiosk with an internal memory for storing locations such as businesses and historical sites within a predetermined distance from the kiosk....

However, such a system is inflexible. The map generated by the system is predefined; and thus the user cannot access or select information about businesses and historical sites outside of the predefined map. A user of the system must also know the exact location of the kiosk in order to use the system. Tourists and business travelers to the city are unlikely to know of the kiosk; and thus the kiosk system is of little use to such users. Further, a user must be physically present at the kiosk in order to access the information about the businesses and/or sites in the surrounding area.

('525 Patent, Col. 1 lines 19-38). The '525 patent addresses these insufficiencies by allowing remote access to select items of interest from a database, and for displaying the location of items of interests to the user at the remote location. ('525 Patent, Col. 1 lines 48-52). A user can access a common data base from a remote location to generate a map which locates selected items of interest. For example, a user in Denver, from a personal computer with a modem, can select a display of drugstores in the area surrounding the Chicago O'Hara International Airport. ('525 Patent, Abstract). A user can also display locations of items of interest relative to the user's own position.

The Defendants manufacture and sell various types of mapping technology and services. Each Defendant's product and/or service will be discussed, as relevant, in the respective summary judgment sections. CIVIX commenced this action on January 26, 1999, alleging that Defendants' individual products and/or services infringe either the '525 or the '170 patents.

II. Summary Judgment Standards

The purpose of a summary judgment motion is to assess whether trial is necessary. *See* White v. York Int'l Corp., 45 F.3d 357, 360 (10th Cir.1995). Rule 56(c) provides that summary judgment shall be granted if the pleadings, depositions, answers to interrogatories, admissions, or affidavits show that there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. The non-moving party has the burden of showing that issues of undetermined material fact exist. *See* Celotex Corp. v. Catrett, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). A party seeking summary judgment bears the initial responsibility of informing the court of the basis for its motion and identifying those portions of the pleadings, depositions, interrogatories, and admissions on file together with affidavits, if any, that it believes demonstrate the absence of genuine issues for trial. *See* Celotex, 477 U.S. at 323, 106 S.Ct. 2548; Mares v. ConAgra Poultry Co., Inc., 971 F.2d 492, 494 (10th Cir.1992). Once a properly supported summary judgment motion is made, the opposing party may not rest on the allegations contained in the complaint, but must respond with specific facts showing the existence of a genuine factual issue to be tried. Rule 56(e); *see also* Otteson v. United States, 622 F.2d 516, 519 (10th Cir.1980). These facts may be shown "by any of the kinds of evidentiary materials listed in Rule 56(c), except the mere pleadings themselves." Celotex, 477 U.S. at 324, 106 S.Ct. 2548.

Summary judgment is also appropriate when the court concludes that no reasonable juror could find for the non-moving party based on the evidence presented in the motion and response. *See* Matsushita Elec. Indus.

Co., Ltd. v. Zenith Radio Corp., 475 U.S. 574, 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). The operative inquiry is whether, based on all documents submitted, reasonable jurors could find by a preponderance of the evidence that the plaintiff is entitled to a verdict. *See* Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). Summary judgment should not enter if, viewing the evidence in a light most favorable to the non-moving party and drawing all reasonable inferences in that party's favor, a reasonable jury could return a verdict for that party. *See* Anderson, 477 U.S. at 252, 106 S.Ct. 2505; Mares, 971 F.2d at 494. Unsupported allegations without "any significant probative evidence tending to support the complaint" are insufficient, *see White* at 360 (citations omitted), as are conclusory assertions that factual disputes exist. *See* Anderson, 477 U.S. at 247-248, 106 S.Ct. 2505. Where, as here, the parties file cross motions for summary judgment, I assume that no evidence need be considered other than that filed by the parties. Nevertheless, summary judgment is inappropriate if disputes remain as to material facts. *See* James Barlow Family Ltd. Partnership v. David M. Munson, Inc., 124 F.3d 1321, 1323 (10th Cir.1997).

Summary judgment is appropriate in cases alleging patent infringement. "It is no longer debatable that the issues in a patent case are subject to summary judgment." Avia Group Int'l, Inc. v. L.A. Gear California, Inc., 853 F.2d 1557, 1560 (Fed.Cir.1988). As will be explained below, summary judgment of non-infringement employs a two-step approach: construction of claims and comparison of the devices. *See* Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1304 (Fed.Cir.1999). The first step is a question of law and the second is generally a question of fact. *See id*. A mere dispute over the meaning of a phrase or term does not create an issue of fact. *See* Rutgers v. United States, 41 Fed.Cl. 764 (Fed.Cl.1998) (citing Johnston v. IVAC Corp., 885 F.2d 1574, 1579 (Fed.Cir.1989). This is true even when the meaning cannot be determined without resort to extrinsic evidence. *See id*. Thus, summary judgment of non-infringement is properly granted if, "after viewing the alleged facts in the light most favorable to the non-movant, there is no genuine issue whether the accused device is encompassed by the claims." Pitney Bowes, Inc., 182 F.3d at 1304.

III. Claim Construction

[1] CIVIX and most of the Defendants cross-move for summary judgment, on grounds of infringement and non-infringement respectively. However, prior to determining issues of summary judgment, I construe the claims and decide the meaning and scope of any disputed terms in the claims as a matter of law. See, e.g., Blumenthal v. Barber-Colman Holdings Corp., 62 F.3d 1433, 1995 WL 453120 (Fed.Cir.1995). Determining infringement is a two-step process: "First, the claims of the patent must be construed to determine their scope. Second, a determination must be made as to whether the properly construed claims read on the accused device." Pitney Bowes, Inc., 182 F.3d at 1304 (citing Carroll Touch, Inc. v. Electro Mechanical Sys., Inc., 15 F.3d 1573, 1576 (Fed.Cir.1993)). Thus, only after construing the disputed claims do I apply these claims to summary judgment infringement analysis.

A. Standards of Claim Construction

[2] [3] [4] Claim construction is a matter of law exclusively for the court's determination. *See* Markman, 517 U.S. at 379, 116 S.Ct. 1384. In interpreting a patent's claims, I first look to the intrinsic evidence of record, including the claims of the patent, the written description, and the prosecution history. *See* Phillips Petroleum Co. v. Huntsman Polymers Corp., 157 F.3d 866, 870 (Fed.Cir.1998). Such evidence is "the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Only if the intrinsic evidence is ambiguous in delineating the scope of the patent should I resort to extrinsic evidence. *See* Phillips Petroleum, 157 F.3d at 870.

- [5] [6] I must read the claims in the context provided by the patent specification. Two canons of claim construction assist in this reading:
- (a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part. These two rules lay out the general relationship between the claims and the written description.

Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed.Cir.1998); *see also* Burke, Inc. v. Bruno Independent Living Aids, Inc., 183 F.3d 1334, 1341 (Fed.Cir.1999) ("an attribute of the preferred embodiment cannot be read into the claim as a limitation."). The specification contains a written description of the invention which may also act as a dictionary explaining the invention and defining terms in the claims. *See Markman*, 52 F.3d at 979; Process Control Corp. v. Hydreclaim Corp., 190 F.3d 1350, 1357 (Fed.Cir.1999) ("a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning").

[7] Additionally, I consider the prosecution history in construing the claims. See Biodex Corp. v. Loredan Biomedical, Inc., 946 F.2d 850, 862 (Fed.Cir.1991). Although the doctrine of prosecution estoppel applies only to the doctrine of equivalents and not claim construction, reference to prosecution history may be instructive of the meaning of disputed claim language. See id. For example, during prosecution a patentee may disclaim a particular interpretation of claim language to avoid replicating prior art. See id. at 863; see also Alpex Computer Corp. v. Nintendo Co., 102 F.3d 1214, 1220 (Fed.Cir.1996) ("Prosecution history is relevant not only for purposes of prosecution history estoppel but also for construing the meaning and scope of the claims.").

Furthermore, I may receive extrinsic evidence to correctly interpret the true meaning of the patent's language. *See Markman*, 52 F.3d at 980. Nevertheless, the type of extrinsic evidence considered and the extent of its use are circumscribed. In *Vitronics*, the Federal Circuit criticized a district court for relying on expert testimony in interpreting the claim language:

Had the district court relied on the expert testimony and other extrinsic evidence solely to help it understand the underlying technology, we could not say the district court was in error. But testimony on the technology is far different from other expert testimony, whether it be of an attorney, a technical expert, or the inventor, on the proper construction of a disputed claim term, relied on by the district court in this case. The latter kind of testimony may only be relied upon if the patent documents, taken as a whole, are insufficient to enable the court to construe disputed claim terms. Such instances will rarely, if ever, occur.... Even in those rare instances, prior art documents and dictionaries, although to a lesser extent, are more objective and reliable guides. Unlike expert testimony, these sources are accessible to the public in advance of litigation. They are to be preferred over opinion testimony, whether by an attorney or artisan in the field of technology to which the patent is directed. Indeed, opinion testimony on claim construction should be treated with the utmost caution, for it is no better than opinion testimony on the meaning of statutory terms.

Vitronics, 90 F.3d at 1585.

Ultimately, "the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." See

Renishaw, 158 F.3d at 1251. I begin with the language of the claims, specification, and prosecution history and will only resort to extrinsic evidence if the disputed claim terms are not clear in that context.

B. Claim Construction of the '170 Patent

The '170 patent contains the following disputed claims with disputed terms underlined:

[Claim 1] Apparatus for identifying locations within a **predetermined region *1140 of a selected group** of a **set of a plurality of subscribers** relative to the location of a **user station comprising**,

a user station within said predetermined region for interrogating said apparatus,

means for generating a map of said predetermined region,

data base means having data regarding each subscriber of said **set of subscribers**, said data including coordinates of said map identifying the location for each subscriber in said **predetermined region** of said **set of subscribers** and a characteristic for each subscriber, wherein said characteristic is common to a group of said subscribers.

input means at said user station for identifying at least one characteristic of said group,

means responsive to the identification at said user station of said at least one characteristic for searching said data base means with reference to said at least one characteristic to determine the members of said selected group as at least those subscribers having locations in said predetermined region and said at least one characteristic,

and means for displaying said map at said user station with the locations thereon of said members of said selected group relative to the location of said user station.

[Claim 2] Apparatus according to claim 1 wherein said **means for generating said map** comprises an electronic memory element.

[Claim 5] A method for identifying the location within a **predetermined region** of a **selected group** of a **set of a plurality of subscribers** relative to the location of a **user station** comprising,

providing to said user station map electronic information representing a map of said predetermined region around said user station,

providing to said user station subscriber electronic information representing the location and at least one characteristic for each subscriber of said set of subscribers,

said at least one characteristic being common to the members of a group,

selecting at said user station at least one of said characteristics as a group characterization identifying a group of said subscribers,

searching said subscriber electronic information with respect to said group characterization,

and providing said map at said user location displaying the locations of members of said selected group identified by said group characterization relative to the location of said user station.

1. Claims 1 & 5-"User Station"

The term "user station" appears throughout the '170 patent and is a term crucial to the invention. Defendants argue that "user station" is a fixed, public structure and not a non-fixed, non-public structure, such as a personal computer. CIVIX, on the other hand, contends that "user station" should not be so narrowly defined and instead is any computer or other electronic device, available to a user for interrogating a database.

CIVIX bases its interpretation of "user station" on the view that " *work* station," a common computer term, is defined as "a computer terminal or microcomputer connected to a mainframe, minicomputer, or data-processing network." Random House Webster's Unabridged Dictionary, Second Edition 1997. Additionally, CIVIX stresses that the '170 patent itself explains that the "user station" is designed to interrogate a database containing a map and subscriber electronic information. ('170 Patent, Col. 1 lines 46-55). Furthermore, CIVIX looks to the prosecution history where the applicants added the phrase "user station, such as" before the word "kiosks" to emphasize the fact that a kiosk is merely a type of user station. ('170 Patent, Col. 1 line 31) ('170 Prosecution History File, CIV000015, CIV 000058). Finally, CIVIX argues that the terms "kiosk" and/or "fixed" never appear in the claims themselves and, therefore, I should not read this limitation into them. Instead, a fixed kiosk is merely one embodiment of a user station.

I first address Defendants' means-plus-function argument surrounding the term "user station." Defendants urge that the term "user station" appears as part of a functional term and is thus limited to the kiosk specification. Claim 1 of the '170 patent teaches, "a user station within said predetermined region for interrogating said apparatus." Defendants argue that this phrase denotes only a place for interrogating the apparatus, recites no structure and, accordingly, must be construed as limited to the corresponding structure disclosed in the patent specification. 35 U.S.C. s. 112 para. 6. I disagree that this phrase implies a means-plus-function limitation.

[8] Paragraph 6 of 35 U.S.C. s. 112 provides that limitations "expressed as a means ... for performing a specified function without the recital of structure ... in support thereof, ... shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof." Paragraph 6 "operates to cut back on the type of means which could literally satisfy the claim language." Johnston v. IVAC Corp., 885 F.2d 1574, 1580 (Fed.Cir.1989). More specifically, "where a claim sets forth a means for performing a specific function, without reciting any specific structure for performing that function, the structure disclosed in the specification must be considered, and the patent claim construed to cover both the disclosed structure and equivalents thereof." Data Line Corp. v. Micro Technologies, Inc., 813 F.2d 1196, 1201 (Fed.Cir.1987).

The phrase at issue here does not use the word "means," and although a claim element might still meet the requirements of s. 112, para. 6, this does not. In Personalized Media Communications, LLC v. International Trade Com'n, 161 F.3d 696, 703 (Fed.Cir.1998), the Federal Circuit stated:

We also made clear that use of the term "means" is central to the analysis: "the use of the term 'means' has come to be so closely associated with 'means-plusfunction' claiming that it is fair to say that the use of the term 'means' ... generally invokes [s. 112, para. 6] and that the use of a different formulation generally does not." ... [F]ailure to use the word "means" creates a presumption that s. 112, para. 6 does not apply.... In

deciding whether either presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of s. 112, para. 6.

Id. at 703-704 (internal citations omitted); *see also* Cole v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed.Cir.1996) ("To invoke [35 U.S.C. s. 112 para. 6], the alleged means-plus-function claim element must not recite a definite structure which performs the described function.").

In *Cole*, the claim recited a "perforation means ... for tearing." The court held that the statute did not apply because the claim "describes the structure supporting the tearing function (i.e., perforations)." *Id*. In addition, the claim "describes not only the structure that supports the tearing function, but also its location (extending from the leg band to the waist band) and extent (extending through the outer impermeable layer)." *Id*. The court concluded that "an element with such a detailed recitation of its structure, as opposed to its function, cannot meet the requirements of the statute." *Id*.

[9] The same rationale applies here. The phrase at issue provides for a "a user station within said predetermined region for interrogating said apparatus." ('525 patent, Claim 1). Although the latter part of the quoted phrase describes a function, the claim includes a specific recitation of the structure to support that function-a "user station." In addition, as in *Cole*, this phrase includes a limitation on the user station-it must be "within said predetermined region." Furthermore, the phrase "user station" is expressed throughout Claims 1 & 5 as a specific structural element, such as a kiosk. Accordingly, the phrase at issue does not meet the requirements of 35 U.S.C. s. 112 para. 6, and I will not analyze it as a means-plus-function element. Although I do not find that 35 U.S.C. s. 112 para. 6 limits the scope of the term "user station," the overwhelming weight of relevant evidence supports a more limited construction than that proposed by CIVIX.

This invention was intended to provide travelers a convenient substitute for visitor's centers and Chambers of Commerce. ('170 Patent, Col. 1 lines 25-27). For example, the '170 patent states that a kiosk is to be "placed on the sidewalk of the downtown area of a city. Preferably, user station, such as kiosks are placed on the sidewalks at a plurality of locations throughout the city." ('170 Patent, Col. 1 lines 29-32). The preferred embodiment in figure 1 shows a "base station 2 in the form of a kiosk. The kiosk is preferably placed on a sidewalk, and receives power from cables (not shown) buried beneath the sidewalk." ('170 Patent, Col. 2 lines 40-43). The patent explains that a user station "may be located on a sidewalk at a street intersection for easy access by pedestrians." ('170 Patent, Col. 2 lines 53-54). Further, the patent proudly states that,

It will be appreciated that a unique method and apparatus has been described wherein *anyone in the city may obtain a map* of the area immediately surrounding where they are, the map having information regarding the locations of businesses, historical sites, or the like by simply activating an input key on a kiosk.

('170 Patent, Col. 3 lines 62-67) (emphasis added). The patent specification does not detail or teach any mobile, private, or non-fixed user station. In fact, the patent's stated purpose to provide travelers with information about local businesses could not be furthered without an accessible public structure.

I look to the ordinary meaning of these terms because there is no specialized meaning asserted. *See*, *e.g.*, Karlin Technology, Inc. v. Surgical Dynamics, Inc., 177 F.3d 968 (Fed.Cir.1999). A "station" merely denotes "a place established to provide a public service," such as a fire station, police station, or gas station.

Webster's Third New Int'l Dictionary 2229 (3d ed.1986). The modifying word "user," in this context, not surprisingly, means that the station is one for users. I conclude that in early 1990, the time of the filing of the '170 patent application, one of ordinary skill in the art would not have understood the term "user station" to mean a personal computer or "work station," *see Markman*, 52 F.3d at 986 ("the focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean."), especially in light of the other language and specifications of the '170 patent. (Waite Declaration, para. 17). Therefore, I am not persuaded by CIVIX' citation of the term "work station" in the 1997 Random House Webster's Unabridged Dictionary, as this definition was created subsequent to the patent application.

[10] Finally, if any ambiguity remains in the meaning of the term "user station," the '525 patent is illuminating. The '525 patent notes the insufficiencies of the '170 patent: "such a system is inflexible.... A user of the system must also know the exact location of the kiosk in order to use the system. Tourists and business travelers to the city are unlikely to know of the kiosk; and thus the kiosk system is of little use to such users. Further, a user must be physically present at the kiosk in order to access the information about the businesses and/or sites in the surrounding area." ('525 Patent, Col. 1 lines 29-37) (emphasis added). This characterization by the '525 patentees are also those of Mr. Bouve, a named inventor on both the '170 and '525 patents. Therefore, these comments are relevant to the construction of the terms and corroborate my interpretation. Although I do not limit the term "user station" to include only "kiosks," I conclude that "user station," as used in the '170 patent, is limited to a fixed public structure.

2. Claims 1 & 5-"Predetermined Region"

The term "predetermined region" appears throughout the '170 patent and is another term crucial to the invention. Defendants argue that "predetermined region" is a region determined prior to user station installation, which region the user cannot change. CIVIX, on the other hand, contends that "predetermined region" is a bounded geographical region around a user station which is determined before a map is provided to the user, but which is not necessarily fixed prior to use by the user.

The parties do not disagree on the meaning of the word "region" which is defined as "a particular part of the world or universe." Webster's Third New Int'l Dictionary 1912 (3d ed.1986). Nor do the parties appear to disagree with the definition of the word "predetermined" which Webster's defines as "to determine beforehand: settle in advance." Webster's Third New Int'l Dictionary 1786 (3d ed.1986). Instead, the disagreement centers on when the region is determined. CIVIX argues that the geographical area surrounding the user station is necessarily decided before a map is provided to a user, and no other limitation should apply. CIVIX contends that Defendants are wrongly attempting to saddle the term "predetermined region" with the limitations in the preferred embodiment where the predetermined region is created by a master database and loaded into a kiosk located on a city sidewalk. This region is not determined by the user at the user station. However, CIVIX urges that it is legal error to thus saddle the phrase. The claim language, not the preferred embodiments define the scope and meaning of the phrase. Defendants, on the other hand, argue that the term "predetermined" in the '170 patent means that the region is determined prior to kiosk installation.

[11] I disagree with both proffered interpretations. I conclude that "predetermined region" means that the region is determined prior to use by the user and thus cannot be changed by the user, but that it has the potential to be changed by those who maintain the user station by loading new information into the user station to reflect a new, altered, or broader region.

CIVIX' definition of "predetermined region" as a region determined before a map is provided to a user would render the term "predetermined" superfluous. Necessarily, any system providing a geographical representation to a user must determine such a region before providing a map. However, this broad concept of determination prior to provision of a map would allow for the system to flexibly select a region or a user to select such a region. Necessarily a region must be determined before a map is provided. This would be true even if the term "predetermined" were ignored. This is not the broad meaning to be given the term "predetermined region" in this context. CIVIX chose to limit the region to a "predetermined" region and I cannot read this limitation out of the claims. *See* Ethicon Endo-Surgery, Inc. v. United States Surgical Corp., 93 F.3d 1572, 1583 (Fed.Cir.1996) ("[Plaintiff] need not have included this limitation in its claim. Having done so, it must live with the language it chose."); Exxon Chemical Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1557 (Fed.Cir.1995) (recognizing that the court "must give meaning to all the words in [the] claims").

Further, it is proper for me to refer to the specification in determining the meaning of the term "predetermined region." *See* Ethicon, 93 F.3d at 1578 ("the district court did not import an additional limitation into the claim; instead, it looked to the specification to aid its interpretation of a term already in the claim, an entirely appropriate practice."). CIVIX's embodiment of the purported invention is clear. Data for one region surrounding a user station is loaded into the user station's memory during installation. Specifically, the location of the new kiosk is entered into a primary database and a map is generated having the kiosk at the center. ('170 Patent, Col. 3 lines 12-16). The perimeter of this map is then clipped to provide a circular shape. ('170 Patent, Col. 3 lines 16-17). The transfer of this map is completed by being "physically carried to the new kiosk, and the information therein is loaded into the memory of the base station." ('170 Patent, Col. 3 lines 22-24). This specification only contemplates a predetermined region loaded into the user station upon installation of each new user station. However, I conclude that the same process can be used to update the region periodically.

Furthermore, I cannot construe the '170 patent claims broadly, to cover an apparatus providing a user-specified region, because the prosecution file shows that the applicants added the term "predefined region" to the claims to distinguish them from prior art which provided user-defined regions. (CIV 000058-000061). In distinguishing the '170 patent from the Esparza patent, which taught the automated dispensing of maps of any one of a number of regions depending on user choice and regardless of user location, the '170 patent applicants noted:

The claims ... call for identifying locations within a predetermined region of a selected group of this set relative to the location of a user station. The claims call for the data including an identification of the location for each subscriber in the predetermined region

(CIV 000063). Thus, "predetermined region" is not open-ended enough to include user-defined regions.

Finally, the inventors of the '525 patent have acknowledged that the '170 patent is limited in that it does not employ user-selected regions:

U.S. Pat. No. 4,974,170 ['170 patent] describes one system which includes a fixed kiosk with an internal memory for storing locations such as businesses and historical sites within a predetermined distance from the kiosk.... However, such a system is inflexible. *The map generated by the system is predefined*; and thus the user cannot access or select information about businesses and historical sites outside of the predefined map.

('525 Patent, Col. 1 lines 21-32) (emphasis added). These comments are relevant to the construction of the term "predetermined region" in the '170 patent because they are representative of comments of common inventors of both the '170 and '525 patents. I conclude that "predetermined region" denotes a region stored in the user station and determined prior to use by the user subject, however, to new information loaded into the base station memory, by the system developers, from time to time.

3. Claims 1 & 5-"Subscriber," "Subscribers," "Set of Subscribers," "Selected Group of Subscribers"

[12] The '170 patent uses the term "subscribers" to describe those businesses, historical sites or governmental sites included in the map of the predetermined region given to the user. CIVIX argues that "subscriber" means any and all businesses, historical sites, governmental sites and the like that have an identifiable location that can be stored in a database. Defendants argue that "subscriber" means a business or site that requests to be included in the invention's data. I agree with Defendants' interpretation.

[13] In construing the terms of a patent, I must give such terms their ordinary and plain meanings unless the patentee has defined them differently within the patent. See Process Control, 190 F.3d at 1357 ("a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning"); see also Karlin, 177 F.3d at 971 (using dictionary to define terms). "Subscriber"in ordinary parlance means "one that agrees or consents." Webster's Third New Int'l Dictionary 2278 (3d ed.1986). The ordinary meaning of the term "subscriber" implies action on the part of the one to which it refers (e.g., paying a fee or requesting to be part of a service). The '170 patent's specification does not teach differently when it explains that "[t]he subscribers are typically businesses within the predetermined area surrounding the kiosk, or historical or governmental sites." ('170 Patent, Col. 1 lines 39-42). "Subscribers" is not deliberately or precisely defined in a lexicographical manner by the inventors. Instead, the excerpt gives examples of types of subscribers. See, e.g., Renishaw, 158 F.3d at 1249 ("The patentee's lexicography must ... appear 'with reasonable clarity, deliberateness, and precision' before it can affect the claim."). The ordinary meaning of the term "subscribers" implies some action on behalf of the listed entities, otherwise the inventors could have used a more generic term such as "entities." Most likely, the patentees envisioned a profit making device whereby subscribers would pay to be included in the directory. (Custom Page Information and Rates, CIV 000083). I conclude that the term "subscribers" in the '170 patent means businesses, historical sites, governmental sites or the like that either agreed or requested in some manner to be a part of the database.

The parties agree that the term "set of subscribers" includes all "subscribers" in the predetermined region stored in the apparatus.

[14] CIVIX contends that the term "group" of subscribers includes those subscribers that share "at least one characteristic." CIVIX disputes the Defendants' limitation of this to a single characteristic. CIVIX argues that a set of subscribers can clearly be searched using more than a single characteristic. Defendants dispute this and contend that "selected group" refers to all of the subscribers within a set of subscribers that have the particular characteristics identified via input means. Defendants contend that there is no indication in the '170 patent that the user station's database can be searched with respect to more than one characteristic at a time. However, I conclude that the language in Claim 1 reciting "input means at said user station for identifying *at least one characteristic* of said group" denotes that searching with more than one characteristic at a time was contemplated by the inventors. ('170 Patent, Col. 4 lines 16-17) (emphasis added). I may not incorporate limitations from the specification that are not present in the claims themselves. *See* E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433

(Fed.Cir.1988); *see also* Burke, Inc., 183 F.3d at 1341 ("an attribute of the preferred embodiment cannot be read into the claim as a limitation.").

4. Claim 1-"Input Means"

[15] Defendants' argue, and I agree, that "input means" is a means-plus-function term. The entire phrase reads, "input means at said user station for identifying at least one characteristic of said group." Defendants urge that "input means" are thus limited to the only means of input disclosed in the '170 patent (an input panel with input keys each labeled with a corresponding characteristic) and its equivalents. 35 U.S.C. s. 112 para. 6. CIVIX, on the other hand, argues that the "input means" limitation is not the "means" of a means-plus-function limitation. Instead, CIVIX argues that the term "input" provides sufficient structure for performing the function of identifying characteristics.

As stated above, 35 U.S.C. s. 112 para. 6, provides that limitations "expressed as a means ... for performing a specified function without the recital of structure ... in support thereof, ... shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof." Paragraph 6 "operates to cut back on the type of means which could literally satisfy the claim language." Johnston, 885 F.2d at 1580. More specifically, "where a claim sets forth a means for performing a specific function, without reciting any specific structure for performing that function, the structure disclosed in the specification must be considered, and the patent claim construed to cover both the disclosed structure and equivalents thereof." Data Line, 813 F.2d at 1201.

The phrase at issue here uses the word "means," and although this does not dictate that a claim falls under s. 112, para. 6, I conclude that this claim does. *See* Personalized Media, 161 F.3d at 703 ("use of the word 'means' has come to be so closely associated with 'means-plus-function' claiming that it is fair to say that the use of the term 'means' ... generally invokes [s. 112, para. 6] [U]se of the word 'means' creates a presumption that s. 112, para. 6 applies") (internal citations omitted).

There is no definite structure recited in this phrase that is used to perform the described function. "Input" is not structural. Thus, I construe the patent to cover both the disclosed structure and equivalents thereof. The structure disclosed by the '170 patent is "an input panel having a plurality of input keys." ('170 Patent, Abstract). Further, Figure 2 depicts an "input panel includ[ing] a plurality of input keys." ('170 Patent, Col. 2 lines 55-56). In operation, "a user selects one of the input keys 12 corresponding to the characteristic of the organization desired. For example, if a key labeled 'Drugstores' is activated, internal electronic means ... searches ... for the group of subscribers which are drugstores." ('170 Patent, Col. 2 lines 60-65). Thus, I conclude that "input means" is limited to an input panel with input keys each labeled with a corresponding subscriber characteristic, and equivalent structures.

5. Claims 1 & 2-"Means for Generating a Map of Said Predetermined Region."

The parties agree that the phrase, "means for generating a map of said predetermined region" is a meansplus-function limitation governed by 35 U.S.C. s. 112 para. 6. CIVIX contends that a skilled artisan reading the '170 patent would clearly understand that the structure of the means is an electronic logic processor, such as that found in a computer, and software that converts electronic signals into a map, and their equivalents. (CIVIX' Bench Book, Exh. F). Defendants, on the other hand, argue that no structure has been disclosed in the patent for the generation of the map of a predetermined region. Defendants contend that because no corresponding structure is actually disclosed in the patent specification, each claim incorporating this claim element violates 35 U.S.C. s. 112 para. 6 and is invalid under 35 U.S.C. s. 112 para. 2.

[16] [17] Although 35 U.S.C. s. 112 para. 6 provides that a patentee may use means-plus-function language in a claim, the patentee is still required to particularly point out the structure of the invention. *See* In re Dossel, 115 F.3d 942, 946 (Fed.Cir.1997) (citing In re Donaldson Co., 16 F.3d 1189 (Fed.Cir.1994)). To be valid, a patent must contain claims "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. s. 112 para. 2. A claim complies with the definiteness requirement of paragraph 2 if "one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification." Atmel Corp. v. Information Storage Devices, Inc., 1998 WL 184274, (N.D.Cal. April 14, 1998) (citing Seattle Box Co. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826 (Fed.Cir.1984)).

Therefore, if one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.

See In re Dossel, 115 F.3d at 946 (citing In re Donaldson Co., 16 F.3d at 1195).

CIVIX argues that "a skilled artisan reading the '170 patent disclosure and claims would clearly understand that the structure of the means is an electronic logic processor (such as the kind found in a computer) and software that convert electronic signals into a map, and equivalents." However, 35 U.S.C. s. 112 para. 2 requires that the specification disclose at least a minimal structure corresponding to the claimed means, regardless of whether one skilled in the art could understand the claim. CIVIX cannot escape this requirement by claiming that such a structure is understood. *See*, *e.g.*, Atmel Corp., 1998 WL 184274 at *4 ("A patent holder cannot evade [the specificity] requirement with a conclusory assertion that one skilled in the art would understand the claimed means despite the failure to disclose a structure.").

[18] Although a close call, I conclude the '170 patent specifications convey sufficient structure for the means of generating a map. *See*, *e.g.*, Personalized Media, 161 F.3d at 700. The '170 patent contains the following language:

The kiosk has an internal electronic memory which contains signals representative of a map of the city in a region surrounding the kiosk.

[I]f a key labeled "Drugstores" is activated, internal electronic means in the base station 2 searches its data base of subscribers for the group of subscribers which are drugstores. The data base includes the coordinates for each of the subscribers, and the coordinates for the selected group of subscribers is thus obtained. Then, the apparatus prints a map having the location of the drugstores indicated thereon, and the map is dispensed in the hopper.

('170 Patent, Col. 1 lines 33-35, Col. 2 line 62 through Col. 3 line 2).

This language leaves much to be desired in terms of detail. Nevertheless, the language discloses sufficient supporting structure. No computer or algorithm, *per se*, is disclosed. However, the language "internal electronic means in the base station" denotes the use of a computer and corresponding software. *See* In re Dossel, 115 F.3d at 946-47 ("Neither the written description nor the claims uses the magic word 'computer,' nor do they quote the computer code that may be used in the invention.... [However, w]hile the written

description does not disclose exactly what mathematical algorithm will be used to compute the end result, it does state that 'known algorithms' can be used to solve standard equations which are known in the art."). Further, the patent generally discloses the functions of such software in generating the map by searching the data base of subscribers and including the coordinates for each subscriber. *See* Fonar Corp. v. General Electric Co., 107 F.3d 1543, 1549 (Fed.Cir.1997) ("providing the functions of the software was more important than providing the computer code."). Therefore, this term in the '170 patent does not fail for indefiniteness.

6. Claim 1-"Means ... for Searching said Data Base Means"

The parties agree that the limitation of "means responsive to the identification at said user station of said at least one characteristic for searching said data base means ..." is a means-plus-function limitation controlled by 35 U.S.C. 112 para. 6. The claimed function is searching the database with reference to at least one characteristic to determine the members of the selected group of subscribers that have locations in the predetermined region. Defendants contend that the phrase should be construed as an undisclosed structure for searching the user station database with reference to the at least one characteristic. Because no corresponding structure is disclosed, Defendants argue that each claim incorporating this claim element should be held invalid under 35 U.S.C. s. 112 para. 6.

For the reasons stated in the previous section, this claim recites sufficient structure and does not fail for indefiniteness. Again, this term references "electronic means" for its structure. ('170 Patent, Col. 1 lines 45-53). See In re Dossel, 115 F.3d at 946-47. Further, the patent generally discloses the functions of such software. See Fonar, 107 F.3d at 1549 ("providing the functions of the software was more important than providing the computer code."). Therefore, this term in the '170 patent does not fail for indefiniteness.

7. Claim 1-"Means for Displaying Said Map"

[19] Again, the parties agree that "means for displaying said map at said user station" is a means-plus-function limitation controlled by 35 U.S.C. s. 112 para. 6. CIVIX contends that the means is not limited to a printer as described in the specification. Instead, CIVIX argues that a skilled artisan would have recognized that a monitor or similar device for presenting the map in visual form could perform the claimed function. Defendants, on the other hand, argue that this term is to be narrowly construed as a printer and the structural equivalents of a printer.

The only "means for displaying" a map indicated in the '170 patent is through a printer providing a hard copy of the map. For example,

In operation, a user selects one of the input keys 12 corresponding to the characteristic of the organization.... Then, the apparatus prints a map having the locations of the drugstores indicated thereon, and that map is dispensed into a hopper 16. The user then withdraws the map and ascertains which drugstore to use.

('170 Patent, Col. 2 line 60 through Col. 3 line 4). Nowhere in the '170 patent does the inventor indicate that a monitor or similar device for presenting a map in visual form could be used. In construing a means-plus-function claim controlled by 35 U.S.C. s. 112 para. 6, I am limited to the specifications of the patent and their equivalents. I cannot find that a monitor or similar device is a structural equivalent of a printer. Therefore, the means are thus limited.

8. Claim 5-"Providing to Said User Station Map/Subscriber Electronic Information"

[20] Defendants contend that Claim 5 is comprised of step-plus-function limitations controlled and limited by 35 U.S.C. s. 112 para. 6 and the precise embodiments and specifications of the claim. CIVIX disagrees and asserts that Claim 5 is a method claim and not limited by Section 112. I disagree with Defendants' characterization of this claim as steps-plus-function and hold Claim 5 to be one of method.

35 U.S.C. s. 112 para. 6 states, in relevant part:

An element in a claim for a combination may be expressed as a ... step for performing a specified function without the recital of ... acts in support thereof, and such claim shall be construed to cover the corresponding ... acts described in the specification and equivalents thereof.

35 U.S.C. s. 112 para. 6; see also O.I. Corp. v. Tekmar Co. Inc., 115 F.3d 1576, 1582-1583 (Fed.Cir.1997). However, this paragraph "is implicated only when steps plus function without acts are present." Id. at 1583. The paragraph allows that "an element in a combination method or process claim may be recited as a step for performing a specified function without the recital of acts in support of the function." *Id.* The price for this convenience is limitation of the claim to the steps specified in the written description and equivalents thereof. *Id.* However, merely claiming a step or even a series of steps without recital of a function does not implicate 35 U.S.C. s. 112 para. 6.

Claim 5 reads, in pertinent part:

A method for identifying the location within a predetermined region of a selected group of a set of a plurality of subscribers relative to the location of a user station comprising,

providing to said user station map electronic information representing a map of said predetermined region around said user station,

providing to said user station subscriber electronic information representing the location and at least one characteristic for each subscriber of said set of subscribers,

said at least one characteristic being common to the members of a group,

selecting at said user station at least one of said characteristics as a group characterization identifying a group of said subscribers,

searching said subscriber electronic information with respect to said group characterization,

and **providing** said map at said user location displaying the locations of members of said selected group identified by said group characterization relative to the location of said user station.

Defendants contend that the emphasized elements of this claim, beginning with the terms providing, providing, selecting, searching, providing, constitute steps-plus-function limitations. 35 U.S.C. s. 115 para. 6. I disagree. Although not determinative, the term "step for" does not appear in this method claim. *See* Seal-Flex, Inc. v. Athletic Track and Court Construction, 172 F.3d 836, 849 (Fed.Cir.1999) (Rader, J., concurring) (holding that only the words "step for" raise the presumption that 35 U.S.C. s. 112 para. 6 applies). Further, this method claim is not composed of steps aimed at performing a specified function.

The Federal Circuit addressed an analogous situation in O.I. Corp., 115 F.3d at 1576. This case involved a method claim that read, in pertinent part:

A method for removing water vapor from an analyte slug passing between a sparge vessel, trap and gas chromatograph, comprising the steps of:

- (A) passing the analyte slug through a passage heated ...;
- (B) passing the analyte slug through the passage that is air cooled

The Federal Circuit rejected the Defendants' arguments that both "passing" limitations were part of a means plus function limitation. The Court stated,

[C]laiming a step by itself, or even a series of steps, does not implicate Section 112, P 6 If we were to construe every process claim containing steps described by an "ing" verb, such as passing, heating, reacting, transferring, etc. into a step-plus-function limitation, we would be limiting process claims in a manner never intended by Congress.

Id. at 1583. I find no reason here to limit Claim 5's terms by 35 U.S.C. s. 112 para. 6. Thus, I reject Defendants' contention that "providing to said user station map electronic information" is limited to only the eight acts specified by Defendants and present as specifications in the patent. I further reject the contention that "providing to said user station subscriber electronic information," is limited to the specified six acts. Instead, I construe the term "providing" in both phrases according to its ordinary usage, "supplying for use." Websters' Third New International Dictionary, p. 1827. Nothing in the '170 patent suggests a different meaning. In all the embodiments discussed in the specification, map and subscriber electronic information is supplied to the user station by loading this information into the user station. Likewise, the act of "providing" a map to a user at a user station is limited as it was above, through the element of a printer.

For these reasons, I reject Defendants' contention that the terms within this claim are limited to specific acts within the '170 patent. Instead, I construe the term "selecting" according to the specification which provides that the step of selecting at least one desired characteristic at a user station merely requires the entry of one or more desired characteristics to interrogate a database. Although the preferred embodiment represents the pressing of a single key representing at least one desired characteristic, limitations from these precise embodiments should not be read into the claim. *See*, *e.g.*, Burke, Inc., 183 F.3d at 1341 ("an attribute of the preferred embodiment cannot be read into the claim as a limitation."). "In the absence of ambiguity, it is fundamental that the language of a count should be given the broadest reasonable interpretation it will support." Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 500 (Fed.Cir.1997).

Likewise, I find that the ordinary meaning of "searching" in database technology applies, such as "querying" a database. (Oxman Declaration, para. 13). This is supported by the specification: "A user activates the apparatus by pressing one of the input keys. This causes an electronic element to search the subscribers to determine the group of subscribers having that characteristic." ('170 Patent, Abstract). Thus, "searching said subscriber electronic information with respect to said group characterization" denotes the act of querying the database to provide all subscribers within the database which have the user-selected group characterization.

C. Claim Construction of the '525 Patent

The '525 patent contains the following disputed claims with disputed terms emphasized. Some of the claims are independent and some depend from others, this distinction is obvious within each claim. I excerpt only those claims which are relevant for purposes of infringement which CIVIX alleges have been infringed by one or more of the Defendants. See, e.g., Markman, 52 F.3d at 976 ("The first step is determining the meaning and scope of the patent claims asserted to be infringed."). Because the claims include similar and sometimes identical elements, and the parties have not argued for different interpretations of identical words in different claims within the '525 patent, my interpretation of a term applies whenever that term is used in the '525 patent.

- [Claim 1] System for remotely determining the **position** of a selected category of items of interest in a selected **geographic vicinity** from a **database**, the system comprising
- (A) a **database** for storing information about a plurality of items of interest, the information including, for each of the items of interest, **positional coordinates**, a **geographic vicinity**, and at least one associated category, the **positional coordinates** locating the **geographic vicinity**,
- (B) a communications link for communicating between a user of the system and the database,
- (C) means for transmitting a portion of the information in the database to the user via the link upon receipt of a request signal representative of a selected category and geographic vicinity, the transmitted portion of the information including identification of a position for each of the items of interest within the selected category and geographic vicinity and relative to the positional coordinates and other items of interest within the vicinity, and
- (D) a port for remotely accessing the portion of information via the link, the port generating the **request signal** in response to inputs by the user which are representative of the selected category and **geographic vicinity**, the port having a user interface for accepting the inputs and for indicating to the user the **position** of each of the items of interest in the selected category and **geographic vicinity**.
- [Claim 7] System according to claim 1 wherein the **geographic vicinity** comprises a map of the items of interest in the selected category and selected **geographic vicinity**.
- [Claim 15] System according to claim 1, wherein the information comprises an advertisement associated with at least one of the items of interest, and further comprising **means for communicating the advertisement to the user**.
- [Claim 17] **Database** apparatus for storing information about a plurality of items of interest, the information including, for each of the items of interest, a *1151 geographic vicinity, positional coordinates locating the geographic vicinity, and at least one associated category, comprising
- (A) a **communications link** for communicating between a user of the **database** apparatus and a remote port, and
- (B) means for transmitting a portion of the information to the user via the link upon receipt of a request signal representative of a geographic vicinity and a selected category of the items of interest, the transmitted portion of the information including identification of a position for each of the items of interest within the selected category and geographic vicinity, the position for each of the items of interest within

the Selected category and **geographical vicinity** being defined **relative to** the **positional coordinates** and other items of interest within the selected category and **geographic vicinity**.

[Claim 23] **Database** apparatus according to claim 17, wherein the information comprises additional detail for at least one of the items of interest, and further comprising means for communicating the additional detail to the remote port upon receipt of a signal indicating that a user has selected one of the items of interest.

[Claim 24] **Database** apparatus according to claim 17, wherein the information comprises an advertisement associated with at least one of the items of interest, and further comprising **means for communicating the advertisement to the remote port**.

[Claim 26] Remote access port for remotely accessing a selected category of items of interest in a selected **geographic vicinity** from a **database**, the **database** being of the type which stores information about a plurality of items of interest, the information including, for each of the items of interest, a **geographical vicinity**, **positional coordinates** that locate the vicinity, and at least one associated category, the remote access port comprising

- (A) a **communications link** for communicating between a user of the remote access port and the **database**, and
- (B) means for generating a request signal representative of a selected category and a selected geographic vicinity of the items of interest in response to inputs by the user, the remote access port having a user interface for accepting the inputs and for indicating to the user the position of each of the items of interest within the selected category and geographic vicinity, the position for each of the items of interest within the selected category and geographic vicinity being defined relative to the positional coordinates and other items of interest within the selected category and geographic vicinity.

1. Claims 1, 17 & 26-"Positional Coordinates"

[21] CIVIX contends that "positional coordinates" are a collection of values sufficient to identify a geographic vicinity. Defendants, on the other hand, argue that this term means "coordinates defining a single reference point within a corresponding geographic vicinity which also operate to determine the corresponding geographic vicinity." I agree with Defendants' definition.

From Defendants' definition of "positional coordinates," as a set of values defining a single location, Defendants argue that this single point or location determines the surrounding geographic vicinity. Defendants emphasize that the positional coordinates work to locate a *single* point of reference which in turn generates a geographical vicinity. They deny that multiple sets of coordinates work to locate multiple points of reference that in turn represent a vicinity.

The '525 patent's claims, specifications, and prosecution history, support Defendants' construction of "positional coordinates." Although a preferred embodiment cannot be read into a claim as a limitation, I may look to the embodiments and their written descriptions to assist in defining a term, such as "positional coordinates" already in a claim limitation. *See* Renishaw, 158 F.3d at 1248. A claim must be read in view of the specification of which it is a part. *See id*. Figure 4A of the patent:

This depicts a "hierarchical structure of geographical vicinities, according to the invention." ('525 patent, Col. 4 lines 21-22). More specifically, Figure 4A shows the positional coordinates, labeled 77, for each geographical vicinity, labeled 75a and 76a. ('525 patent, Col. 8 lines 37-38). In describing the embodiment, the patent states that "there are a plurality of discrete geographic vicinities (each set of positional coordinates corresponding *to one discrete location within the geographical vicinity*)." ('525 patent, Col. 3 lines 3-5) (emphasis added). Figure 4A and the specification clearly show that the positional coordinates define a single reference point which operates to determine the corresponding geographic vicinity.

This definition of "positional coordinates" is supported throughout the patent and its prosecution history.

The positional coordinates ... operate to locate the geographic vicinity. *Briefly, the positional coordinates locate one location within the geographic vicinity-such as the center of the vicinity-so that items of interest can be determined relative to the positional coordinates and within the geographic vicinity.*

('525 patent, Col. 5 lines 14-19) (emphasis added). Positional coordinates, made up of an undetermined number of values, are used in the '525 patent to produce a single location within a geographic vicinity. Therefore, although positional coordinates can be made up of any number of values, the resulting set of positional coordinates can work only to locate one single point of reference, around which a geographical vicinity is determined.

The prosecution history further shows that the inventors contemplated positional coordinates defining one discrete location within a geographic vicinity. The '525 patent was intended to provide a "virtual kiosk," similar to the actual user station in the '170 patent, but not fixed in location. A user can access a virtual kiosk, in a discrete location, and obtain information about items of interest surrounding this discrete location. A letter from William Semple to co-inventor William Bouve, dated April 1, 1994, describes this limitation:

In effect, instead of requiring the user to physically go to a kiosk to retrieve information for a defined geographic area of the kiosk ..., you would create an opportunity for the kiosk to go the user ...

To take this one step further (and this was *your* idea), you could derive geographically-defined information based on locators other than kiosks, such as street intersections or landmarks. (For example, you could provide data for businesses, events, etc. for an area with 500 yards walking distance of the Washington Monument, or some known location that a tourist might want to visit, but not know what else was in the immediate vicinity).

In order to keep the system consistent, directed, and understandable, it would be my suggestion that the software interface and information derived *essentially mimic that available at the physical kiosks themselves....* [I]t is important to maintain the essential characteristics of your primary systems so that competitors cannot duplicate or transfer parts of the "Walking Locator" technology without patent, trademark, or copyright infringement.

. . . .

Whatever you do, the essential characteristics of my proposed computer tele-link would have to remain relevant to the patented functions provided by the kiosks themselves. *That is, information would be geographically determined from a defined and identifiable point;* information would be accessed by category; and at least some of the data would *have* to be printed to be read...

(April 1, 1994 letter, CIV 0000237-0000238) (emphasis added). This letter shows that the inventors contemplated users accessing a single discrete, defined, and identifiable point, around which a geographic vicinity would be defined. Also in the prosecution history are documents proving that the inventors referred to these discrete locations as "virtual kiosks." (CIV 0000263).

CIVIX argues that software disclosed in the '525 patent application expressly discloses a system in which a collection of values with hierarchical layering "are used to identify *a unique location* and vicinity for each item of interest." (CIVIX brief, p. 34) (emphasis added). CIVIX argues that positional coordinates do not have to be made up of merely a pair of numbers or values. It cites to the declaration of Mr. Oxman for the proposition that, "[t]hese positional coordinates are a collection of values that identify *a location or a vicinity*. Since locations and areas are organized in a collection of related layers in the preferred embodiment, the number of positional coordinates varies depending on the number of layers that must be linked to produce the requested result. This is why there can be no numeric limit on the number of positional coordinate values that identify a location." (Oxman Declaration, para. 5) (emphasis added).

CIVIX' contention that a number of values can make up *one set* of "positional coordinates" in identifying *one location*, has some support in the software disclosure. However, the software does not support CIVIX' further contention that positional coordinates can define more than one discrete location. Because the software disclosure, Exhibit A to the patent specification, is written in computer-speak (CIV 0000315-0000337), I turn to the declarations submitted by the parties. CIVIX submits the declaration of C. David Dickerson. With regard to the software disclosure, Mr. Dickerson states:

I have looked through the source code for some indication that the maps stored and called by the program are defined by a relationship to a single positional coordinate pair. I see no reference in the code to such a method.

(Dickerson Declaration, para. 13). This declaration does not support CIVIX' contention that "positional coordinates" can define more than a single discrete location. Further, the declarations submitted by Defendants, analyzing the source code, support their conclusion that "positional coordinates" define only one discrete location. (Mavis Declaration, para. 11) ("Each area of interest is defined by reference to a single (*x*,*y*) coordinate pair representing the center point to which the boundary algorithm is applied which sets the boundaries of the area of interest."). Therefore, I conclude that "positional coordinates," as used in the '525 patent, means a set of coordinates defining a single reference point within a corresponding geographic vicinity which operates to determine the corresponding geographic vicinity.

2. Claims 1, 17 & 26-"Relative To"

In the course of the December 10, 1999 *Markman* hearing and in pre-hearing filings, it became apparent that the meaning of "relative to" is disputed. CIVIX contends the term "relative to" was inserted in the '525

patent only to address the patent examiner's concern about relativity. (Dec. 10, 1999 Tr., p. 14). CIVIX contends that the '525 patent makes clear that the transmitted information must be displayed relative to the positional coordinates. (Dec. 10, 1999 Tr., p. 15). Defendants argue that "relative," as used in the '525 patent, is opposed to "absolute" positioning along universal latitude and longitude coordinates.

CIVIX directs my attention to the amendments made to the '525 patent in response to the patent examiner's initial rejection of the claims as indefinite. On October 2, 1996, the PTO issued a First Office Action rejecting each of the thirty-seven claims pending in the '525 patent's application. (Detailed Action, CIV 0000214). In so doing, the examiner stated:

The use of terms "positional coordinates" and "identification of a position," as recited in line 4 and 11 of claim 1 (and in independent claims 17, 26, and 35) is unclear *because the position of an element (or an item)* can be absolute or relative. If the position is meant to be relative it is necessary to distinctly point out the relativity.

(CIV 0000214) (emphasis added). In response, the inventors submitted the following amendments addressing relativity (emphasis shows language added by amendment):

Claim 1:(C) means for transmitting a portion of the information in the database to the user via the link upon receipt of a request signal representative of a selected category and geographic vicinity, the transmitted portion of the information including identification of a position for each of the items of interest within the selected category and geographic vicinity and relative to the positional coordinates and other items of interest within the vicinity, and

Claim 17:(B) means for transmitting a portion of the information to the user via the link upon receipt of a request signal representative of a geographic vicinity and a selected category of the items of interest, the transmitted portion of the information including identification of a position for each of the items of interest within the selected category and geographic vicinity, the position for each of the items of interest within the selected category and geographical vicinity being defined relative to the positional coordinates and other items of interest within the selected category and geographic vicinity.

Claim 26:(B) means for generating a request signal representative of a selected category and a selected geographic vicinity of the items of interest in response to inputs by the user, the remote access port having a user interface for accepting the inputs and for indicating to the user the position of each of the items of interest within the selected category and geographic vicinity, the position for each of the items of interest within the selected category and geographic vicinity being defined relative to the positional coordinates and other items of interest within the selected category and geographic vicinity.

(CIV 0000224-0000227). In the "Remarks" section concerning the above amendments, the inventors state that the amendments make clear that the items of interest are spatially related to each other and relative to the positional coordinates selected for the geographical vicinity. (CIV 0000227). Given the clear concern by the patent examiner, the inventors chose relative positioning rather than absolute positioning.

In response to these amendments, the Examiner allowed each of the thirty-seven claims of the '525 patent and provided his reasons for doing so in an Examiner's Statement of Reasons for Allowance. The Examiner emphasized that a primary factor distinguishing the claimed invention from prior art was that the position of the items of interest were defined, not absolutely, but rather in relation to the positional coordinates and

other points in the selected vicinity:

The prior art does not teach or fairly suggest an apparatus or a method for ... remotely accessing the database through a user interface to obtain information that includes the position for each of the items of interest within the selected category and geographic vicinity being defined relative to the positional coordinates and other items of interest within the selected category and geographic vicinity as recited in all independent claims.

(Examiner's Statement of Reasons for Allowance, para. 1.1, CIV 0000287) (emphasis in the original). Accordingly, it is reasonable to infer that the '525 patent was issued because the positions of items of interest were defined in relative rather than absolute terms.

Because the term "relative" remains somewhat ambiguous in light of the intrinsic evidence, both sides have submitted expert declarations assisting in my technical understanding of absolute versus relative positioning. *See* Phillips Petroleum, 157 F.3d at 870. However, I heed *Vitronics*' warning that such opinion testimony on claim construction should be treated with the utmost caution. *See* Vitronics, 90 F.3d at 1585.

In support of its position, CIVIX submits the declaration of Rebecca McKinley. She testifies that the concept of "absolute" positioning means the use of precise measurement such as that involving surveyors instruments. (McKinley Declaration, para. 6). She further states that the assignment of a latitude/longitude coordinate pair does not necessarily constitute absolute positioning. (McKinley Declaration, para. 7). Instead, she contends that a latitude/longitude location would ordinarily suggest a relative location to other objects defined by this same coordinate system. (McKinley Declaration, para. 7).

Defendants submit contrasting declarations supporting their view on absolute versus relative positioning. For example, Timothy Woods testifies:

[T]he terms "absolute position" or "absolute coordinates" typically refers to positions defined in relation to the origin of a generally accepted coordinate system (e.g., 35 degrees latitude, 45 degrees longitude specify a position in relation to the equator and prime meridian.) By contrast, "relative positioning" or "relative coordinates" refers to positions defined in relation to an arbitrary point, not the origin of a generally accepted coordinate system. For example, the location of a drug store can be specified without knowing its absolute latitude and longitude, as two miles north and six miles east of a shopping mall whose location is otherwise known. In that case, "two miles north" and "six miles east" specify the relative position of the drug store.

(Wood Declaration, para. 6). This is confirmed by the Defendants' other submitted declarations of Robert French and Robert Mavis. This view is further confirmed by recent United States Geological Survey documents that suggest ways of teaching students about mapping. http://rockyweb.cr.usgs.gov/public/outreach/topoteach.html. One education suggestion addresses "absolute versus relative location," and recommends that this notion be taught to elementary students:

Discuss absolute location versus relative location. What is the difference between 42 07 31" lat / 101 15 31" long versus the phrase "northeast of Pleasant Grove"? When is absolute location important, and when is relative location important?

http://rockyweb.cr.usgs.gov/public/outreach/topoteach.html.

CIVIX makes no argument that its product uses latitude/longitude positioning. Instead, when I presented CIVIX with a simple hypothetical concerning these positioning concepts, CIVIX provided insight into their concept of "relative" positioning:

THE COURT: You know, if you have an air observer, you may only have to drop five zero and then fire for effect the whole battery. But that is a known point or position defined by an acceptable method of latitude and longitude.

You could also be from Rocky Ford, like I am, and somebody drives up and says, "Where's Maud's place?" And you say, "Well, you go down this lane about a mile and a quarter, hang a left through the cemetery. When you get through the cemetery turn right about a quarter of a mile and Maud's is on the right up the lane."

MR. SHEIKH [CIVIX]: Uh-huh.

THE COURT: That defines her location.

MR. SHEIKH [CIVIX]: Yeah.... I would say it's much closer to showing your second example, you know, up there to the right, past the cemetery, than your military analogy.

Evidence was also presented that instead of latitude/longitude positioning, CIVIX uses an internal positioning grid system specific to each geographic vicinity. (Mavis Declaration, para. 6). The items of interest are then located relative to the positional coordinates that specifically define the geographic vicinity.

[22] I conclude that the term "relative to" denotes the concept of relative positioning as opposed to absolute positioning. CIVIX does not employ a universal system of latitude and longitude coordinates. Instead, it uses its own internal grid system and the information transmitted to a user of the system displays the items of interest only relative to the positional coordinates within this grid system.

3. Claims 1 & 17-"Identification of a Position"

[23] CIVIX argues that "position" should be given its ordinary meaning of "expression of a location." Defendants do not dispute this and, indeed, suggest the equivalent definition of "a location in space." However, CIVIX disputes Defendants' limitation that the "position" cannot be located with reference to coordinates outside of the geographic vicinity. Defendants contend that the phrase " *identification of a* position" means a coordinate pair uniquely defining a location relative to the positional coordinates as a reference. I am persuaded by Defendants' construction of this phrase.

The claims at issue state that the "identification of a position" is transmitted to the user. ('525 Patent, Claims 1 & 17). Within the claims, the phrase is, therefore, used as a noun rather than a verb. This supports Defendants' construction of this term as a thing specifying a position or location. Further, as noted earlier in this Order, the '525 patent and its prosecution history supports the limitation that positional coordinates uniquely define a geographic vicinity. Further, items of interest use the positional coordinates as a reference.

As I noted earlier, on October 2, 1996, the PTO rejected the thirty-seven claims pending in the 525 patent's application as indefinite under 35 U.S.C. s. 112. (Office Action, CIV 0000214). In particular, the Examiner

was concerned that the meaning of the term "identification of a position" was unclear. (Office Action, CIV 0000214). The Examiner presented applicants with a choice between relative positioning (ie., positioningdefined relative to a known point or points in the geographic vicinity) or absolute positioning (i.e., positioning defined in a universal manner, not relative to an arbitrary point in the geographical vicinity).

In response, on February 3, 1997, applicants amended the claims to specify the concept of relative positioning. For example, Claim 1 was amended to add the following emphasized phrase, "the transmitted portion including ... identification of a position for *each of* the items of interest within the ... geographic vicinity ... relative to the positional coordinates and other items of interest within the vicinity" (Response, CIV 0000225) (emphasis denotes language added by amendment). In response to the amendments, the Examiner allowed each of the thirty-seven claims of the '525 patent. (Examiner's Statement of Reasons for Allowance, para. 1.1, CIV 0000287). Accordingly, it is reasonable to infer that the '525 patent was issued because of the distinction of positions of items of interest defined in relative rather than absolute terms. For the above reasons, I adopt Defendants' interpretation of "identification of a position" as being coordinates defining a location using the positional coordinates of the vicinity as a reference.

4. Claims 1, 17, 23, 24 & 26-"Database"

[24] Although CIVIX and the Defendants submit alternative definitions of this term, I believe that the parties are in accord. CIVIX construes the term to mean a collection of related information organized for convenient access. CIVIX correctly states that this definition is consistent with the specification in Claim 17, "[d]atabase apparatus for storing information about a plurality of items of interest". Defendants also direct me to the definition given within the specification,

"Remote database" or "database" are used herein to denote a database, e.g., a client server, which stores information for access by a user of the invention from a port.

('170 Patent, Col. 2 lines 2-4). However, CIVIX argues that while the claimed database includes a client server, it is by no means limited to that device. I agree. The use of the term "e.g." literally means "for example." Webster's Third New International Dictionary, p. 726. Further, the patent specification states, "[t]he database is, typically, a personal computer, mainframe, workstation, mini-computer, or digital data processor." ('525 Patent, Col. 2 lines 36-38). The patentees have not limited themselves to a client server.

5. Claims 1, 7, 17 & 26-"Geographical Vicinity"

[25] In their claim construction brief, CIVIX states that the parties agree on the definition of the term "geographical vicinity" to be "a geographic region which includes and surrounds selected items of interest." CIVIX cites the specification's definition of this term. ('525 Patent, Col. 2 lines 8-10). In their initial construction of terms mailed September 14, 1998, Defendants jointly agreed on this definition. However, in their claim construction brief and argument to the Court, they submitted new grounds for a narrower definition.

Defendants now argue that "geographic vicinity" is a pre-defined local area consisting of a pre-defined discrete point (represented by the positional coordinates) and the surrounding area that is within a limited distance. Defendants contend that this local area is smaller than a city, and is generally within walking distance. Although Defendants point to persuasive evidence in the '525 patent specification and prosecution history, they overlook the fact that the inventor acted as his own lexicographer in this instance and clearly

defined the term in a portion of the patent containing definitions for other crucial terms. *See*, *e.g.*, Process Control Corp., 190 F.3d at 1357 ("a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning.... We must construe the claims based on the patentee's version of the claim as he himself drafted it."); Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1344 (Fed.Cir.1998) ("The actual words of the claim are the controlling focus.... The written description is considered, in particular to determine if the patentee acted as his own lexicographer, as our law permits, and ascribed a certain meaning to those claim terms.").

The summary of the invention provides the following:

"Geographic vicinity," and "map" are used to denote a geographic region which includes and surrounds selected items of interest.

Because the inventor has specified his own definition for this term, I reject Defendants' arguments for a narrower lexicography. The Federal Circuit has held that when "a patent applicant has elected to be a lexicographer by providing an explicit definition in the specification for a claim term ... the definition selected by the patent applicant controls." *See* Renishaw, 158 F.3d at 1249. The Federal Circuit tempers this rule by stating that a patentee's definition must, of course, appear with reasonable clarity, deliberateness, and precision to affect the claim. *See id.* However, I find that the '525 patent's definition of "geographic vicinity" is sufficiently clear, deliberate, and precise, and therefore, CIVIX' definition controls.

6. Claims 1, 17 & 26-"Communications Link"

[26] [27] Defendants contend that "communications link for communicating between a user of the system and the database" is a means-plus-function phrase and is thus limited by 35 U.S.C. s. 112 para. 6. CIVIX argues that this phrase should not be so limited.

35 U.S.C. s. 112 para. 6 and federal circuit case law dictate that "where a claim sets forth a means for performing a specific function, without reciting any specific structure for performing that function, the structure disclosed in the specification must be considered, and the patent claim construed to cover both the disclosed structure and equivalents thereof." Data Line Corp., 813 F.2d at 1201. Although not dispositive, the phrase at issue here does not use the word "means." *See* Cole, 102 F.3d at 531; *see also* Personalized Media, 161 F.3d at 703-704 ("failure to use the word 'means' creates a presumption that s. 112, para. 6 does not apply").

I conclude that this phrase is not a means-plus-function limitation controlled by 35 U.S.C. s. 112 para. 6. "Communications link" is defined in the '525 patent as follows:

"Communications link" is used to denote means, including for example a telephone line for communicating between the database and the port.... A communications link facilitates communications between a user of the system and the database.

('525 Patent, Col. 2 lines 5-7, 16-17). Other portions of the specification support CIVIX' contention that "communications link" is a connection allowing for the transmission of information between one or more databases and one or more ports. ('525 Patent, Col. 11 line 65 through Col. 12 line 7). The patent is careful not to limit itself to the recited forms that this structure might take.

The communications link 18 of the invention can take many forms. It is generally impractical to "hard-wire" each remote access port 16 to the database 12; so the form of the communications link 18 generally includes existing communications networks, such as one or more of the following: telephone lines, fiber-optic cabling, satellite communications, cellular communications, radio and microwave-frequency communicators, infra-red communicators, the facsimile mechanism, airphones, modems, the internet, co-axial cabling, television including interactive TV communications, and the like. These communications networks and subsystems are readily known to those skilled in the art without further reference hereto.

('525 Patent, Col. 5 line 63 through Col. 6 line 8). Furthermore, the phrase "communications link" is expressed throughout the '525 patent as a specific structural element. Accordingly, the phrase at issue is not subject to s. 112, para. 6, and I will not analyze it as a means-plus-function element. Therefore, I reject Defendants' contention that the patent is limited to the means in the specification.

7. Claims 1, 17 & 26-"Request Signal"

[28] CIVIX contends that "request signal" means an electronic representation of one or more queries. Defendants, on the other hand, state that a "request signal" is a "single transmission from the port to the database sent over the communication link which identifies both a selected category and a selected geographic vicinity."

Both Claims 1 and 17 describe "the port generating the *request signal* in response to inputs by the user which are representative of the *selected category* and *geographic vicinity* ". ('525 Patent, Claims 1 & 17) (emphasis added). Thus, the "request signal" is the result of a user's selection of a category and a geographic vicinity. Each "request signal" must have, therefore, one or more inputs based on each a category and a vicinity. This is supported by other portions of the specification which emphasize that:

The system also provides for transmitting a portion of the information in the database to a user via the link upon receipt of a *request signal* representative of a selected category *and* geographic vicinity.... Specifically, the port generates the *request signal* in response to inputs by a user of the system; that signal being representative of the selected category *and* geographic vicinity.

('525 Patent, Col. 2 lines 18-28) (emphasis added).

I conclude that "request signal" is a single electronic representation of a user's selection of at least one category *and* at least one geographic vicinity. Both categories of information must be in a single "request signal" in the '525 patent.

8. Means-plus-Function Claims Pursuant to 35 U.S.C. s. 112 para. 6

The parties agree that 35 U.S.C. s. 112 para. 6 applies to limit the construction of several means-plus-function clauses appearing in Claims 1, 15, 17, 23, 24, and 26 of the '525 patent:

- -> means for transmitting a portion of the information in the database to the user via the link upon receipt of a request signal representative of a selected category and geographic vicinity (Claims 1 and 17);
- -> means for communicating the additional detail to the remote port upon receipt of a signal indicating that a user has selected one of the items of interest (Claim 23);

- -> means for communicating the advertisement (Claims 15 and 24); and
- -> means for generating a request signal (Claim 26).

Because the parties agree that these phrases are limited by s. 112 para. 6, they should be construed as the means for performing the function disclosed in the patent specification and equivalents thereof. 35 U.S.C. s. 112 para. 6. As with the '170 patent, Defendants contend that the patent discloses no corresponding structure in terms of algorithms or software and, therefore, all claims incorporating these clauses should be held invalid. CIVIX disputes this contention and points to corresponding structures within the '525 patent.

[29] CIVIX generally contends that the structure or "means" for all of these phrases is one or more electronic logic processors, software, databases, or communication links. CIVIX argues that a skilled artisan reading the '525 patent would clearly appreciate that the structure can take the form of software within the databases. However, as I have held earlier in this Order, 35 U.S.C. s. 112 para. 6 requiresthat the specification disclose minimal structure corresponding to the claimed means, regardless of whether one skilled in the art could understand such structure. CIVIX cannot escape this requirement by claiming that such a structure simply would be "understood." *See*, *e.g.*, Atmel Corp., 1998 WL 184274 at *4 ("A patent holder cannot evade [the specificity] requirement with a conclusory assertion that one skilled in the art would understand the claimed means despite the failure to disclose a structure."). However, I conclude that CIVIX discloses sufficient structure for these various means-plus-function phrases.

The '525 patent specifications convey specific structure to one of ordinary skill in the art to describe the structure for the various means-plus-function claims. ('525 Patent, Col. 4 lines 56-59) ("The database 12 includes an information controller 14 which communicates with a remote access port 16 via a communications link 18 and which controls the access and flow of information into and out of the database 12."); ('525 Patent, Col. 9 lines 46-48) ("[a] modem 80 couple[d] to the controller 14a, such as known to those skilled in the art, and further to a telephone line 18a."); ('525 Patent, Col. 9 lines 63-67); ('525 Patent, Col. 4 lines 45-47; Col. 12 lines 44-45) ("process flow and system architecture for interfacing between user inputs and the database."); ('525 Patent, Col. 11 lines 15-27) ("[t]he invention generally incorporates software to facilitate the several embodiments described herein and to support the principles of the invention. As known to those in the art, the data within the database can be maintained, for example, on a SQL-server, or in xBASE.... In accord with the invention, software code supporting the database interaction with the remote port can include object-oriented programming, Visual Basic, and other software architectures configured to allow user interaction)"; Figures 6B and 10; ('525 Patent, Col. 2 lines 34-36); ('525 Patent, Col. 11 lines 34-41); Appendix A to the '525 patent. The patentee's specifications are sufficient. See In re Dossel, 115 F.3d at 946-47 ("Neither the written description nor the claims uses the magic word 'computer,' nor do they quote the computer code that may be used in the invention.... [However, while the written description does not disclose exactly what mathematical algorithm will be used to compute the end result, it does state that 'known algorithms' can be used to solve standard equations which are known in the art.").

[30] To the extent CIVIX contends that the corresponding structure to the recited functional clauses includes a logic processor and software, Defendants argue that the clause is invalid as no specific algorithm for performing the recited function has been disclosed. I disagree that the patentee must disclose such an algorithm. Instead, I conclude that the disclosure of software, different types of computers and databases, and related communications means is sufficient. *See* WMS Gaming Inc. v. Int'l Game Tech., 184 F.3d 1339, 1348 (Fed.Cir.1999). The Federal Circuit's opinion in Fonar Corp., 107 F.3d at 1549, supports my

conclusion:

Fonar's witnesses further testified that providing the functions of the software was more important than providing the computer code. We agree. As a general rule, where software constitutes part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the functions of the software. This is because, normally, writing code for such software is within the skill of the art, not requiring undue experimentation, once its functions have been disclosed. It is well established that what is within the skill of the art need not be disclosed to satisfy the best mode requirement as long as that mode is described.

Id. Thus, I conclude that the inventors have cited sufficient structure for these claims. The '525 patent specification expressly discloses devices such as electronic logic processors, databases, communications links, and software, such as the much-discussed source code in Appendix A. However, because this is a means-plus-function phrase, the means are limited to those set forth in the specifications.

IV. Cross Motions for Summary Judgment

Having completed claim construction of both the '170 and '525 patents, I move to the second stage of the infringement analysis: "a determination must be made as to whether the properly construed claims read on the accused device." Pitney Bowes, Inc., 182 F.3d 1298, 1304 (citing Carroll Touch, 15 F.3d 1573, 1576). Summary judgment of non-infringement is properly granted if, "after viewing the alleged facts in the light most favorable to the non-movant, there is no genuine issue whether the accused device is encompassed by the claims." Pitney Bowes, Inc., 182 F.3d at 1304. A mere dispute over the meaning of a phrase or term does not create an issue of fact. *See* Rutgers, 41 Fed.Cl. at 764 (citing Johnston, 885 F.2d at 1579). This is true even when the meaning cannot be determined without resort to extrinsic evidence. *See id*.

I begin my summary judgment analysis with the '170 patent and then as to the '525 patent. Within the context of each patent I will describe the accused products and the relevant issues of infringement.

During the course of pre-trial filings, it appeared that CIVIX was attempting to reserve various summary judgment arguments against additionally accused products and services, not the subject of this summary judgment briefing. I emphasize, however, that at the December 10, 1999 hearing, CIVIX made it clear and assured me that the both the briefing and the hearing constituted a comprehensive proceeding on these matters for both claim construction and infringement/non-infringement summary judgment purposes. (Dec. 10, 1999 Tr., p. 30). Therefore, my conclusions in this Order are determinative for this action.

A. Infringement and Non-Infringement Standards

1. Literal Infringement

[31] [32] Unlike claim construction, the question of literal infringement is generally one of fact. *See* Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed.Cir.1995). Direct infringement is defined by 35 U.S.C. s. 271(a):

[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

Direct infringement may be established either literally or by the doctrine of equivalents. *See* Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997). However, CIVIX has offered no proof or specific argument for infringement by the doctrine of equivalents and, thus, I do not provide this analysis.

[33] "To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly." *Id.* Any deviation from the claim language with regard to any claim of either the '170 or '525 patents precludes a finding of literal infringement with respect to that claim. *See* Lantech, Inc. v. Keip Machine Co., 32 F.3d 542, 547 (Fed.Cir.1994) ("For literal infringement, each limitation of the claim must be met by the accused device exactly, any deviation from the claim precluding a finding of infringement."); Wolverine World Wide, Inc. v. Nike, Inc., 38 F.3d 1192, 1199 (Fed.Cir.1994) ("If an express claim limitation is absent from the accused product, there can be no literal infringement as a matter of law.").

2. Inducement of Infringement

Whoever actively induces infringement of a patent shall be liable as an infringer.

A Defendant can have no liability for inducement to infringe absent proof of direct infringement by another. *See* Micro Chemical, Inc. v. Great Plains Chemical Co., 103 F.3d 1538, 1549 (Fed.Cir.1997) ("There can be no inducement to infringe absent direct infringement."); Zenith Laboratories, Inc. v. Bristol-Myers Squibb Co., 19 F.3d 1418, 1423 Fn.5 (Fed.Cir.1994) ("A finding that a claim is infringed is a necessary prerequisite to a finding that there has been an act constituting inducement to infringe under s. 271(b).").

Further, case law and legislative history provide that inducement to infringe must be done "knowingly" under this statute. *See* Rodime PLC v. Seagate Technology, Inc., 174 F.3d 1294, 1306 (Fed.Cir.1999) ("Inducement requires proof that the accused infringer knowingly aided and abetted another's direct infringement of the patent."); C.R. Bard, Inc. v. Advanced Cardiovascular Sys., Inc., 911 F.2d 670, 675 (Fed.Cir.1990) ("A person induces infringement under s. 271(b) by actively and knowingly aiding and abetting another's direct infringement.").

The alleged infringer must be shown, however, to have knowingly induced infringement.... It must be established that the defendant possessed specific intent to encourage another's infringement and not merely that the defendant had knowledge of the acts alleged to constitute inducement. The plaintiff has the burden of showing that the alleged infringer's actions induced infringing acts and that he knew or should have known his actions would induce actual infringements.

See Manville Sales Corp. v. Paramount Systems, Inc., 917 F.2d 544, 553 (Fed.Cir.1990) (internal citations omitted).

3. Contributory Infringement

Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

To establish contributory infringement, a plaintiff must show that a defendant knew that the services in which its components were to be implemented were patented and infringing. *See* Preemption Devices, Inc. v. Minnesota Mining & Manufacturing Co., 803 F.2d 1170, 1174 (Fed.Cir.1986); *see also* Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F.2d 1464, 1469 (Fed.Cir.1990) ("[O]nly proof of a defendant's knowledge, not intent, that his activity cause[s] infringement was necessary to establish contributory infringement."). However, like inducement to infringe, a finding of contributory infringement requires a finding of underlying direct infringement. *See* Met-Coil Sys. Corp. v. Korners Unlimited, Inc., 803 F.2d 684, 687 (Fed.Cir.1986) ("Absent direct infringement of the patent claims, there can be neither contributory infringement nor inducement of infringement.").

B. The '170 Patent

CIVIX asserts infringement of the '170 patent against only two of the seven Defendants, DeLorme and Microsoft. CIVIX moves for summary judgment on grounds of infringement of Claims 1, 2, and 5 of the '170 patent against both Defendants DeLorme and Microsoft. DeLorme cross-moves for summary judgment on non-infringement of the '170 patent. Microsoft, on the other hand, has not yet moved for summary judgment on the basis of non-infringement.

1. The Accused Products

DeLorme: Only two DeLorme products are accused of infringement, Street Atlas USA Versions 5.0 and 7.0 Street Atlas USA Version 5.0 ("Atlas 5.0") and Street Atlas USA Version 7.0 ("Atlas 7.0") are both sold in the form of CD ROM disks. Atlas 5.0 includes a "Setup" disk for installing on a computer the programs necessary to use the product, and a "Runtime" disk which actually runs the product. Similarly, Atlas 7.0 includes an "Install" disk and a "Program Data" disk which serve the same respective functions. DeLorme customers receive a license to install and use the software on a personal computer. This same license would prohibit a customer from installing the software in a structure accessible by the general public. (Gray Declaration, para. 3). The Introductory Guide to Atlas 5.0 describes the product as,

the original and best mapping software available! Street Atlas USA 5.0 combines DeLorme's extraordinary map detail with address-to-address routing. High-quality maps and easy-to-use tools help you plan your trips quickly. Street Atlas USA 5.0 not only helps you map the route of your choice, but also lets you explore and select from over two million points of interest along the way.

Plan your route based upon your travel preferences and driving habits. Make your trip more enjoyable by avoiding expensive toll roads or heavily congested traffic areas. Street Atlas USA 5.0 lets you choose the route that best fits your needs and then automatically calculates the distance and driving time for you. Take the Scenic route to see the country, save gas by taking the Shortest route or save time by taking the Quickest route.

Best of all, when you've finished planning your trip, you can print a Travel Plan of strip maps, complete with your customized list of places to see along the way. You can also print out a separate list of detailed directions for your journey. Street Atlas USA 5.0 is the complete street-level travel planner.

(Street Atlas USA 5.0 Introductory Guide, D 0028). The introductory language to the Atlas 7.0 product describes a very similar system. (Street Atlas USA 7.0 Introductory Guide, p. 4).

Microsoft: Only one Microsoft software product is accused of infringing the '170 patent, Microsoft Expedia Streets 98 Version 6.0 ("Streets 98"). It is sold in the form of a CD ROM disk. Microsoft's Streets 98 product allows users to find street addresses anywhere in the Country and to display or print them on custom maps. (Microsoft's Motion, p. 5).

2. The '170 Patent Summary Judgment Conclusions

[36] As judges and commentators have noted, to decide what the claims mean will almost always decide the case. *See Markman*, 52 F.3d at 989 (Mayer, J., concurring in the judgment), aff'd. 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996); *Baxa*, 981 F.Supp. at 1360; Gregory D. Leibold, *In* Juries We Do Not Trust: Appellate Review of Patent-Infringement Litigation, 67 U. Colo. L.Rev. 623, 635 (1996). To establish literal infringement, CIVIX has the burden of showing that "every limitation set forth in a claim [is] found in an accused product, exactly." Southwall, 54 F.3d at 1575. If any physical component recited in an apparatus claim is not present in an accused product, the product cannot literally infringe that claim. *See* Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279, 1282 (Fed.Cir.1986). Where, as here, "the parties do not dispute any relevant facts regarding the accused product but disagree over which of two possible meanings of [the claim] is the proper one, the question of literal infringement collapses to one of claim construction and is thus amenable to summary judgment." Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1578 (Fed.Cir.1996). Now that I have construed properly the claims as a matter of law, there is no genuine issue of fact whether DeLorme or Microsoft's products infringe the claims. I hold that they do not.

[37] As contained in the only independent claims at issue in the '170 patent, Claims 1 and 5, per my construction, "user station" is limited to a fixed public structure, and is not broad enough to include a non-fixed personal computer. DeLorme's Atlas 5.0 and 7.0 products and Microsoft's Streets 98 do not employ a fixed, public structure, but are rather in the form of CD ROM disks to be installed on a personal computer. My construction of this term alone warrants a grant of summary judgment in favor of Defendants. This point was conceded by Plaintiff's counsel during the December 10, 1999 hearing:

THE COURT: If I define "user station" as the defendants suggest, how can there be any direct infringement?

MR. CASIMER [CIVIX]: If you exclude a computer from the definition of a user station-

THE COURT: Fixed station.

MR. CASIMER [CIVIX]: Then I would agree that that would be dispositive of the issue.

(Dec. 10, 1999 Tr., p. 107). It is conceded by the parties that DeLorme and Microsoft do not produce "user stations" or computer hardware. Instead, both DeLorme and Microsoft's products are mapping software and a license to use such software. Indeed, the licenses issued by DeLorme prohibit customers from installing software in a structure accessible by the general public. (Gray Declaration, para. 3).

In addition, I have construed "predetermined region" as requiring the region to be determined prior to use by the user and, thus, the region cannot be changed by the user or specified by the user. A "predetermined region" represents a stationary, predetermined and fixed area immediately surrounding a user station. Although one possible use of the accused products would allow a user to choose to view points of interest

surrounding the location of his or her computer, this is not the intended use of the product. (Gray Affidavit, para. 4). Unlike users of the '170 patent, a user of the accused products must intentionally choose this course of action. Furthermore, unlike the CIVIX claims, with the accused products a user must choose and specify the region they want to search. The accused products are primarily designed, similar to a traditional road atlas, to provide specific road directions and corresponding sights based on a user's precise trip destination anywhere in the United States. The '170 patent, on the other hand, was intended to replace a traveler's bureau or visitor's center as a public convenience for tourists. Hence, a prime component of the '170 patent is a fixed, public structure with a fixed surrounding region. For this additional reason, I find no literal infringement of independent Claims 1 and 5. Further, dependent claims, such as Claim 2, cannot be infringed unless the independent claims upon which they depend have also been infringed. *See* Wahpeton Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1553 (Fed.Cir.1989).

In their Response, CIVIX contends that, at a minimum, DeLorme's products include an element that is substantially equivalent to the term "predetermined region." To the extent that CIVIX attempts to argue infringement under the doctrine of equivalents, a seemingly new theory, I also find for DeLorme on this claim. The Supreme Court has cautioned that "the doctrine of equivalents must be applied to individual elements of the claim." Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 117 S.Ct. 1040, 1049, 137 L.Ed.2d 146 (1997). "The doctrine of equivalents requires that the accused device have an identical or equivalent element *for each limitation contained in the claim*-sometimes known as the 'all elements' rule." Loral Fairchild, Corp. v. Sony Corp., 181 F.3d 1313, 1327 (Fed.Cir.1999) (emphasis added). Therefore, even if I were to find that the accused products include an element that is substantially equivalent to "predetermined region," I find that the other elements, especially "user station," so differentiate these products as to preclude infringement.

Finally, CIVIX claims that both DeLorme and Microsoft have induced infringement of the '170 patent by encouraging third parties to use the accused products as intended. However, a Defendant can have no liability for inducement to infringe absent proof of direct infringement by another. *See* Micro Chemical, 103 F.3d at 1549. Therefore, I find for these Defendants on CIVIX' claim of inducement of infringement because DeLorme and Microsoft's products are incapable of infringing the '170 patent.

For the above reasons, I deny CIVIX' motions for summary judgment against DeLorme and Microsoft on grounds of infringement. Accordingly, I grant DeLorme's motion for summary judgment on non-infringement of the '170 patent. Microsoft has not yet filed a motion for summary judgment on grounds of non-infringement.

C. The '525 Patent

CIVIX asserts infringement of the '525 patent against six of the seven Defendants, Microsoft, Excite, Infoseek, InfoUSA, Lycos, and Zip2. CIVIX moves for summary judgment on grounds of infringement of the following claims of the '525 patent against the following Defendants: Claims 1, 7, 14, 15, 17, 23 and 24 against Defendant Microsoft; Claims 1, 7, 14, 15, 17, 23, 24 and 26 against Defendant Excite; Claims 1, 7, 17, 24 and 26 against Defendant InfoSeek; Claims 1, 14, 15, 17, 23 and 24 against Defendant InfoUSA; Claims 1, 7, 15, 17, 24 and 26 against Defendant Lycos; and Claims 1, 7, 14, 15, 17, 23 and 24 against Defendant Zip2. Defendants Excite, InfoUSA, Lycos, and Zip2 cross-move for summary judgment on grounds of non-infringement of the '525 patent. Defendants Infoseek and Microsoft, on the other hand, have not yet moved for summary judgment on the basis of non-infringement.

1. The Accused Services

Excite: The accused Excite service is the Excite Yellow Pages service provided at *www.excite.com*. Located on this Excite Home Page is a link labeled "Yellow Pages." When a user clicks on this link, the user is taken to a web site that is operated by a third party, Web YP, Inc. CIVIX alleges that Excite has both directly infringed Claims 1, 7, 14, 15, 17, 23 and 24 through its use of this yellow pages service and has actively induced third parties to infringe Claim 26 of the '525 Patent. Excite contends that it does not "use" the patented invention but has only entered into a contract where it gets paid a commission for delivering users to the door of an independent third party.

Infoseek: The accused Infoseek service appears at a website allegedly owned and operated by Infoseek-www.infoseek.go.com. Infoseek is one of the so-called "portal" defendants in this case. "Portal" is a term used by the parties to identify those Defendants whose websites contain a collection of services, operated and owned by third parties, accessible at a single site. (Dec. 10, 1999 Tr., p. 142). For example, Infoseek's site provides links to Yellow Pages services, White Pages services, news services, and stock quotes. These services are provided by third parties. CIVIX alleges that the portal benefits from this arrangement because they can charge for the services advertising on their site. This motion concerns two services that Infoseek has made available through www.infoseek.go.com: a "People Finder" service, which appears to be discontinued; and a "Yellow Pages" service, which also appears to be discontinued. The only claim brought against Infoseek in this motion is for inducement of infringement under 35 U.S.C. s. 271(b).

InfoUSA: InfoUSA allegedly develops and sells databases and related services to third parties for use in electronic directory and mapping products and services. The databases typically include information on businesses, including business name, address, and telephone numbers. InfoUSA databases are used in the accused Microsoft "Sidewalk Yellow Pages" and "Expedia" services provided through *www.sidewalk.com* and *www.expedia.com*. These services are the subject of CIVIX' infringement claims against Microsoft. In addition, InfoUSA provides its own on-line directory service called "Video Yellow Pages" at *www.infousa.com* and *www.vyp.com*. CIVIX claims that InfoUSA's Video Yellow Pages literally infringes the '525 Patent. CIVIX also seeks summary judgment that InfoUSA's marketing and sales activities in connection with the provision of databases and services to Microsoft for use in the Expedia service constitute contributory infringement and inducement of infringement of Claims 1 and 17 of the '525 Patent.

Lycos: The Lycos service at issue is the HotBot Yellow Pages service provided at *www.lycos.com* and *www.hotbot.com*, both web pages owned by Lycos or subsidiaries of Lycos. However, Lycos is another one of the "portal" defendants in this case. There are various links on the Lycos' sites that take users to sites run by third parties. On the *www.hotbot.com* site, for example, there is a link labeled "Yellow Pages" that takes the user to a yellow pages site run by a third party provider, "At Hand." The only claim asserted against Lycos is for inducement of infringement under 35 U.S.C. s. 271(b).

Microsoft: The Microsoft service at issue in this motion is the "Sidewalk Yellow Pages" provided over the Internet at *www.sidewalk.com*. This website provides users with access to yellow pages, a buyers guide, and an entertainment guide. CIVIX argues that the '525 patent reads literally on the Sidewalk Yellow Pages service and that Microsoft is liable for direct infringement of these claims.

Zip2: The accused service is the Zip2Yellow Pages provided on the internet at *www.zip2.com*. Zip2 provides online consumer information for media companies. Zip2's licensees operate their own Web sites but obtain "content" (i.e., yellow pages, business listings, and other information) from Zip2. Zip2 also

provides a computer "host" for the licensee's Web site. CIVIX argues that Zip2 is liable for direct infringement of these claims through Zip2's "use" of the Zip2 Yellow Pages.

2. The '525 Patent Summary Judgment Conclusions

[38] Once again, my construction of the terms of the '525 patent dictates the resolution of summary judgment in favor of non-infringement. *See Baxa Corp.*, 981 F.Supp. at 1360. Now that I have construed properly the claims as a matter of law, there is no genuine issue of fact whether Defendants' services infringe the '525 claims. I hold that they do not. There are three terms within the '525 patent that, when construed together, secure a finding of non-infringement: "positional coordinates," "relative to," and "identification of a position."

As contained in the three independent claims at issue in the '525 patent, Claims 1, 17, and 26, "positional coordinates" means a group of coordinates defining a single reference point within a corresponding geographic vicinity which also operate to determine this corresponding geographic vicinity. The '525 patent claims at issue do not read literally on any of the '525 Defendants' services because these Defendants' services either allow for the entry of numerous positional coordinates to define a location or map or, alternatively, do not employ any positional coordinates whatsoever. This contrasts with the '525 patent where positional coordinates confine and define the actual geographic vicinity represented. The '525 Defendants' services do not use positional coordinates to define a single reference point which, in turn, operates to determine a corresponding geographic vicinity.

Further, each independent claim of the '525 patent teaches that the information transmitted to the user must represent each item of interest within the geographical vicinity "relative to" the positional coordinates and other items of interest. I have defined the term "relative" as opposed to "absolute" positioning. The '525 patent employs a non-universal, arbitrary grid system, specific only to the '525 patent, that is internally consistent within each geographic vicinity. Items of interest are located relative to the positional coordinates. The '525 Defendants' services do not locate items of interest relative to any positional coordinates or relative to other items of interest. Instead, they use geocoded data and employ absolute universal latitude and longitude positioning. When this positioning is combined with the use of a single reference point represented by positional coordinates, the '525 patent claims do not read on the accused services.

For example, if a user of the '525 patent wanted to view an area of downtown Denver it could choose to view such an area surrounding several reference points, or virtual kiosks. If a user chose to view lower downtown Denver ("LoDo"), it would click on this preference. Coors Field would appear to the user in relation to the center positional coordinates in this LoDo vicinity. Coors Field would be given an arbitrary reference point on this particular grid. If a user wanted to view the Highland neighborhood, there is a chance that Coors Field would also be included within this limited range, as some of the vicinities may overlap. However, Coors Field would now appear in a different location relative to the new positional coordinates and it would be given a new and different arbitrary reference point on this particular grid. This reference point would be stored differently in the database as relative to this new geographic vicinity. Therefore, despite the fact that Coors Field has a single, physical address and occupies a single, latitudinal and longitudinal position in a universal system, the '525 patent would store Coors Field in multiple manners depending on its relation to various positional coordinates defining different geographic vicinities. The '525 Defendants' services, on the other hand, use latitude and longitude coordinates that do not vary depending on "positional coordinates" or arbitrary points of reference. Coors Field would always be identified by its universal latitude and longitude coordinates and is stored only once. Items of interest in the '525 Defendants'

services are not located relative to anything else nor are these positions tied to the user's frame of reference. This allows a user to move from place to place seamlessly. The user is not selecting positional coordinates or a virtual kiosk to find surrounding points of interest. Indeed, many of the '525 Defendants' services do not store information relative to anything else. Instead, a map with only the one requested item of interest is given to the user.

CIVIX argues that latitude and longitude values are "relative coordinates" because if you know the latitude and longitude of one item, you also know the distance and direction between that item and a second item. (Dec. 10, 1999 Tr., p. 153). Philosophically, it may be argued that all things are relative. However, grounded in the fixed, mundane world of patent law, CIVIX is off-base and has missed the mark. The use of one global system such as latitude and longitude with one reference point, the equator and the meridian, is not a truly "relative" system. Such a definition would read the word "absolute" out of mapping terminology. The patent examiner, when reviewing the '525 patent, stated that "[t]he position of an item can be absolute or relative. If the position is meant to be relative, it is necessary to distinctly point out that relativity." (CIV 0000214). CIVIX changed its claims and specified a system of relativity. Items of interest were located relative to positional coordinates and other items of interest. The '525 Defendants' use of latitude and longitude positioning is different from CIVIX' use of an non-universal, internal arbitrary grid system, specific only to the '525 patent. The '525 Defendants do not locate or transmit information relative to positional coordinates.

Finally, my interpretation of "identification of a position" sits in harmony with the above analysis. "Identification of a position" means a set of coordinates uniquely defining a location *relative to the positional coordinates as a reference*. For the above stated reasons, this differentiates the '525 Defendants' services from the independent claims of the '525 patent.

To establish direct infringement, CIVIX has the burden of showing that "every limitation set forth in a claim [is] found in an accused product, exactly." Southwall, 54 F.3d at 1575. CIVIX has not carried its burden. Because of my construction of the terms "positional coordinates," "relative to," and "identification of a position," the claims of the '525 patent do not read on the '525 Defendants' services. Therefore, I deny CIVIX' motion for summary judgment of direct infringement. Likewise, to the extent that CIVIX alleges inducement of infringement and contributory infringement, I deny their motion of summary judgment. The '525 Defendants can have no liability under these theories of indirect infringement absent proof of direct infringement by another. *See* Met-Coil, 803 F.2d at 687 (Fed.Cir.1986) ("Absent direct infringement of the patent claims, there can be neither contributory infringement nor inducement of infringement."). Because I find that the '525 Defendants' services are incapable of infringing the '525 patent, as construed, there can be no liability for contributory infringement nor inducement of infringement.

Accordingly, I grant summary judgment of non-infringement in favor of Defendants Excite, InfoUSA, Lycos, and Zip2. Defendants Infoseek and Microsoft, on the other hand, have not yet moved for summary judgment on the basis of non-infringement.

Accordingly, IT IS ORDERED that:

- 1. CIVIX' summary judgement motions on grounds of infringement against Defendants DeLorme, Excite, Infoseek, InfoUSA, Lycos, Microsoft, and Zip2, are DENIED;
- 2. Defendants DeLorme, Excite, InfoUSA, Lycos, and Zip2's motions for summary judgment on grounds of

non-infringement are GRANTED; Defendants Infoseek and Microsoft are given until February 7, 2000 to file summary judgment motions of non-infringement in light of this Order;

- 3. Accordingly, this action is DISMISSED as to Defendants DeLorme, Excite, InfoUSA, Lycos, and Zip2, appropriate costs to be awarded to these Defendants.
- 4. Because I have not relied upon any of the exhibits objected to by Defendants InfoUSA, Infoseek, Excite, and Zip2, the Defendants' evidentiary objections as to admissibility are DENIED AS MOOT; and
- 5. Excite's Motion for Additional Discovery is DENIED AS MOOT.

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