

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

**GEOMAS (INTERNATIONAL) LIMITED, LLC, and,**  
v.  
**IDEARC MEDIA SERVICES-WEST, INC.**

No. 2:06-CV-475-CE

**Nov. 20, 2008.**

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### ***MEMORANDUM OPINION AND ORDER***

**CHARLES EVERINGHAM IV, United States Magistrate Judge.**

#### **I. Introduction**

In this case, Geomas (International) Limited, Geotag Management Group, LLC, and Geomas, Inc. ("Geomas") contend that the Defendant, Idearc Media Services-West, Inc. ("Idearc") infringes various claims of United States Patent 5,930,474 ("the '474 patent"). This opinion resolves the parties' various claim construction disputes. The court will address briefly the technology at issue in the case and then turn to the merits of the claim construction issues.

#### **II. Background of the Technology**

This patent, titled "Internet Organizer for Accessing Geographically and Topically Based Information" is directed to a software interface which organizes information based upon the geographical area of the resources about which the information is desired. *See* U.S. Patent No. 5,930,474, abstract. Generally, it discloses systems and methods for integrating geographically organized data with topical data to help Internet users find information on the Internet quickly and efficiently. For instance, the software interface may allow a user to search a specific geographical area for goods or services relating to a specific topic. The invention also allows a seller to make his goods or services available upon a user-search predicated on varying geographic levels (e.g., city, state, etc.). According to the patent, the invention improves previous technology by allowing a user to search for information relating to a certain topic based on geographic areas instead of subject matter or keyword searches. *Id.* at 2:25-32. Prior art did not incorporate means for effectively integrating the topical and geographically based information in a consistent manner.

In one embodiment, the patent describes a system wherein a number of computers have access to a computer network and an "organizer." This "organizer" receives search requests from any user of any one of the computers and contains a database of information, arranged by geographical area. Within each geographical area, the information is further arranged by specific topics. A search engine associated with the organizer communicates the request from the user, through the "organizer," to the database, searching geographically and topically depending on the search inputted by the user. *Id.* at 2:63-3:14.

Claim 1 is an illustrative independent claim:

1. A system which associates on-line information with geographic areas, said system comprising:

a computer network wherein a plurality of computers have access to said computer network; and

an organizer executing in said computer network, wherein said organizer is configured to receive search requests from any one of said plurality of computers, said organizer comprising:

a database of information organized into a hierarchy of geographical areas wherein entries corresponding to each one of said hierarchy of geographical areas is further organized into topics; and

a search engine in communication with said database, said search engine configured to search geographically and topically, said search engine further configured to select one of said hierarchy of geographical areas prior to selection of a topic so as to provide a geographical search area wherein within said hierarchy of geographical areas at least one of said entries associated with a border geographical area is dynamically replicated into at least one narrower geographical area, said search engine further configured to search said topics within said selected geographical search area.

Of the various claims of the '474 Patent which Geomas asserts, the parties dispute approximately thirty-three terms and phrases. Notwithstanding the large number of terms and phrases, the disputed terms can generally be divided into five broad categories: (1) the hierarchy terms and phrases; (2) the entry terms and phrases; (3) the search engine terms and phrases; (4) the dynamically replicated terms and phrases; and (5) the organizer and means-plus-function terms.

### **III. Discussion**

#### **A. General Principles Governing Claim Construction**

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed.Cir.1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. A patent's claims must be read in view of the specification of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may

define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed.Cir.2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed.Cir.1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed.Cir.1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed.Cir.1994).

This court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed.Cir.2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed.Cir.2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention. The patent is addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38, 25 L.Ed. 68 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed.Cir.1998):

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. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the

applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence. That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims.

*Phillips* rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed.Cir.2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Id.* at 1319-24. The approach suggested by *Tex. Digital*-the assignment of a limited role to the specification-was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of the claim terms within the context of the patent." *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

*Phillips* does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The '474 patent includes claim limitations that fall within the scope of 35 U.S.C. s. 112 para. 6. Section 112 para. 6 states "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure ... in support thereof, and such claim shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof." 35 U.S.C. s. 112 para. 6 (2008). The first step in construing a means-plus-function limitation is to identify the recited function. *See Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250 1258 (Fed.Cir.1999). Then, the court must identify in the specification the structure corresponding to the recited function. *Id.* The "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Med. Instrumentation and Diagnostics, Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed.Cir.2003) (citing *B. Braun v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed.Cir.1997)).

The patentee must clearly link or associate structure with the claimed function as part of the quid pro quo for allowing the patentee to express the claim in terms of function pursuant to s. 112 para. 6. *See id.* at 1211; *see also*, *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1377 (Fed.Cir.2001). The "price that must be paid" for use of means-plus-function claim language is the limitation of the claim to the means specified in the written description and equivalents thereof. *See O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed.Cir.1997). The court now turns to a discussion of the disputed claim terms.

## B. Specific terms in dispute

### 1. The Hierarchy Terms/Phrases

#### a. "hierarchy" (# 1) and "hierarchy of geographical areas" (# 2); "hierarchically organized" (# 3)

Term # 1 appears in claims 1, 5, 20, 26, 31, 32, and 35; phrase # 2 appears in claims 1, 20, and 26; phrase # 3 appears in claim 32.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
(# 1) a series of ordered groupings moving from broader general categories to narrower specific ones	(# 1) a tree-like arrangement of data that has several levels and that branches from a broadest unit into narrower units based on parent-child relationships between broader and narrower units, where each broader unit encompasses one or more narrower units in the level immediately below it and each narrower unit is encompassed by a single broader unit in the level immediately above it
(# 2) an arrangement of geographical areas into ordered geographic areas that descend from broader areas to narrower areas	(# 2) a tree-like arrangement of geographical areas that has several levels and that branches from a broadest geographical area into narrower geographical areas based on parent-child relationships between broader and narrower geographical areas, where each broader geographical area encompasses one or more narrower geographical areas in the level immediately below it and each narrower geographical area is encompassed by a single broader geographical area in the level immediately above it
(# 3) the geographical areas are organized from broader areas to narrower areas [ FN1]	(# 3) wherein there is a collection of interrelated data records that are associated with a tree-like arrangement of geographical areas that has several levels and that branches from a broadest geographical area into narrower geographical areas based on parent-child relationships between broader and narrower geographical areas, where each broader geographical area encompasses one or more narrower geographical areas in the level immediately below it and each narrower geographical area is encompassed by a single broader geographical area in the level immediately above it

FN1. Geomas agreed prior to the Markman hearing to replace the phrase "structured, ordered, or arranged" with the term "organized."

The general issue regarding these terms and phrases is whether they must be limited, as Idearc argues, to several levels-specifically, tree-like structures based on parent-child relationships where parents can have multiple children, but each child can only have one parent. Geomas argues that the patent allows for a broader construction, with one or more levels without the constraints of a tree-like relationship.

In construing "hierarchy," the Court begins with the claims. The context in which a term is used in the asserted claim is highly instructive; additionally, the usage of a term in one claim can often illuminate the meaning of the same term in other claims. "The presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." Phillips, 415 F.3d at 1314-15. In reading claims 1, 5, 20, and 26 together, it is apparent that "hierarchy" is not limited to the extent that Idearc suggests. Claim 1 reads, "a database of information organized into a hierarchy of geographical areas." Claim 5 describes a more limited hierarchy and closely resembles the definition that Idearc asserts. It limits "hierarchy" to "a structure comprising plural geographical levels into which the geographical areas are geographically categorized by size to provide a low level, one or more intermediate levels and a high level, each of the geographical levels above the lowest level encompassing a plurality of lower level geographies." Claims 20 and 26 add similar limitations to "hierarchy." FN2

FN2. Claim 20 limits "hierarchy" to "a predetermine hierarchy of geographical areas comprising at least a geographical area of relatively smaller expanse and a geographical area of relatively large expanse, said area of larger expanse including a plurality of areas of smaller expanse ...." Claim 26 limits "hierarchy" to "a predefined hierarchy of geographical areas, wherein entries corresponding to each of said geographical areas is further organized into topics."

The specification also teaches against limiting "hierarchy" as broadly as Idearc proposes. The portions of the specification that Idearc focuses on refers to specific embodiments, not the invention as a whole. *See* '474 Patent, col. 8, l. 59-col. 9, l. 4; col. 3, ll. 46-56. Absent a clear intention to the contrary, it is improper to limit the scope of the claim terms to the preferred embodiments described.FN3

FN3. Idearc also argues that the patent describes only a single embodiment of a database structured to organize geographic information-geography database 210. While this may arguably be the case, the court will not restrict the claims unless the patentees have demonstrated a clear intention to limit the claim scope. *See* Liebel-Flarsheim Co. v. Mallinckrodt, Inc., 358 F.3d 898, 906 (Fed.Cir.2004) (stating "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." (internal quotations omitted)).

Notwithstanding the claim differentiation argument presented by Geomas, however, the court is hesitant to "broaden [the] claims beyond their intended scope, determined in light of the specification ... and any relevant extrinsic evidence." *Seachange Int'l v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed.Cir.2005). Reading the specification as a whole, it is apparent that there is a relationship between entries, but that relationship is not limited to the extent that Idearc argues. *See generally* '474 Patent col. 8, ll. 22-36 (describing the ability of a user to advance through a geographical hierarchy of subdirectories and providing an example using related entries). The various embodiments described in the specification also assume a relationship between the entries. *See generally* *id.* at col. 3, ll. 45-56; col. 8, l. 59-col. 9, l. 4; col. 9, ll. 28-34. Additionally, extrinsic evidence also supports a relationship between entries.FN4 This relationship may be illustrated through the use of Idearc's "tree" analogy, but the term is not limited to that type of arrangement.

FN4. The IBM Dictionary of Computing and the Microsoft Press Computer Dictionary define most of the hierarchical terms as having a tree-like structure. *See* IBM DICTIONARY OF COMPUTING 313-14 (10th ed.1993), MICROSOFT PRESS COMPUTER DICTIONARY 232 (3rd ed.1997).

The court, therefore, defines "hierarchy" as follows: **"an arrangement of related information or data, ordered from broader general categories to narrower specific ones."**

**b. "database"**

Geomas' Proposed Construction	Idearc's Proposed Construction
a collection of information organized such that a computer program can quickly retrieve selected data	a collection of interrelated data records arranged according to a given structure

The primary issue regarding this term is whether the term should be limited to "interrelated data records," as Idearc proposes. Although the patent suggests that there is a relationship between the organized data or information, see supra Part.III.B.1.a, there is no need to limit the term "database" as suggested by the Defendant. The Court construes "database" to mean **"a collection of information or data organized such that a computer program can quickly retrieve selected information or data."**

**c. "a database of information organized into a hierarchy of geographical areas" (# 1); "said database of information organized into a *predetermine* hierarchy of geographical areas" (# 2); "a database of information organized into a *predefined* hierarchy of geographical areas" (# 3)**

Phrase # 1 appears in claim 1; phrase # 2 appears in claim 20; phrase # 3 appears in claim 26. The major difference between the three phrases is the inclusion of "predetermine" in phrase # 2 and "predefined" in phrase # 3. The parties agree on the construction of both "predetermine" and "predefined." FN5

FN5. The parties define "predetermine" to mean "decide or establish in advance." The parties define "predefined" to mean "decided or established in advance."

Geomas' Proposed Construction	Idearc's Proposed Construction
(# 1) a collection of information organized to permit a computer to quickly retrieve selected data that is organized from broader geographic areas to narrower geographic areas	(1, 2, & 3) a collection of interrelated data records that are associated via name key values with geographical areas and structured in a tree-like arrangement that has several levels and that branches from a broadest geographical area into narrower geographical areas based on parent-child relationships between broader and narrower geographical areas, where each broader geographical area encompasses one or more narrower geographical areas in the level immediately below it and each narrower geographical area is encompassed by a single broader geographical area in the level immediately above it, and where each data record includes a name key value associating it with a particular geographical area such that the parentage of each narrower geographical area can be determined based on the name key value in its associated data record
(2 & 3) a collection of information organized to permit a computer to	

quickly retrieve  
selected data that is  
organized from  
broader  
geographical areas  
to narrower  
geographic areas  
that is decided or  
established in  
advance

There are two issues regarding these phrases. First, Idearc asserts that these claims are limited to a hierarchical database. Second, Idearc asserts that the information or interrelated data records within the database are associated via name key values with geographical areas.

Regarding the first issue, Geomas first argues that the plain and ordinary language of Claim 1 indicates that it is "information" that is organized into a hierarchy of geographic areas, not the database itself. The specification supports this construction. In the specification, the patent refers to the structure of the database only one time within the patent.FN6 Throughout the remainder of the specification, the patent describes databases as containing information or data, but not according to any structure. Finally, that the patentees used the term "hierarchically structured database" and "LOTUS/NOTES database environment" in the specification, but did not do so in the claims, strongly implies that the inventors did not intend that the claims be limited to a particular type of database. *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 807 (Fed.Cir.2007).

FN6. "Typically, such on-line computer service provides access to a hierarchically structured database ...."  
'474 Patent, col. 1, l. 15-16.

Regarding the second issue, Idearc argues that the patent requires a "name key" to organize geographic information within the hierarchical structure of geography database 210. *See* '474 Patent, col. 12, ll. 40-45. As indicated above, absent a clear intention by the patentee, the court will not limit the claims to a preferred embodiment, even if it is the only embodiment described. Furthermore, in this instance, the specification clearly and unequivocally contemplates a broader interpretation than Idearc asserts. *See* '474 Patent, col. 28, ll. 16-21 (stating "the particular formats of information stored within each database may vary as called for by the particular implementation of the invention."); *id.* at col. 23, ll. 16-21 (stating "[a]s depicted in FIG. 16, the data within the local content database 230 includes a folder name header field 1600 which provides the key or index under which all of the subentries for this entry will be stored."). The court does not find any evidence that the patentee intended to disavow the use of folders.

As such, the court defines phrase # 1 as follows: "**a collection of interrelated information or data organized such that a computer program can quickly retrieve selected information or data, ordered from broader geographical categories to narrower geographical categories.**" All remaining phrases (# # 2 and 3) are defined in light of # 1, taking into consideration the agreed upon definitions of "predetermine" and "predefined."

**d. "on-line information"**

This phrase appears in claim 31.

<b>Geomass' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
information capable of being accessed by a computer	information accessible to a network user that can be searched and then displayed on the user's computer

As both parties include "information" in their definition, the issue becomes the definition of "on-line." Although Geomas relies on a non-technical dictionary for its definition, the specification supports such a definition. The use of "on-line" in the specification reveals that the patentee did not intend to limit "on-line" to information that must be "searched and then displayed." Reading the claim language in the context of the background section, it is clear that the patentees intended "on-line" to refer to the ability to access information. *See* '474 Patent, col. 1, ll. 13-23, 1:66-2:11.

The court defines "on-line information" as follows: **"information capable of being accessed by a computer."**

**e. "organizing a database of on-line information into a plurality of geographic areas"**

This phrase appears in claim 31.

<b>Geomass' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
organizing a collection of organized information that can be accessed and quickly retrieved by a computer into more than one geographical area	creating a collection of interrelated data records that are associated via name key values with geographical areas and structured in a tree-like arrangement that has several levels and that branches from a broadest geographical area into narrower geographical areas based on parent-child relationships between broader and narrower geographical areas, where each broader geographical area encompasses one or more narrower geographical areas in the level immediately below it and each narrower geographical area is encompassed by a single broader geographical area in the level immediately above it, and where each data record includes a name key value associating it with a particular geographical area such that the parentage of each narrower geographical area can be determined based on the name key value in its associated data record

Geomass argues that Idearc's proposed construction should not be adopted for the same reasons as discussed above. Again, following the analysis regarding the above terms, the court will not limit a term to reflect the preferred embodiment (here, database 210), as Idearc suggests.

As such, the court defines this phrase as follows: **"organizing a collection of information that is capable of being accessed by a computer into more than one geographical area."**

**f. "wherein said topics are hierarchically organized"**

This term appears in claims 16 and 35.

Geomas' Proposed Construction	Idearc's Proposed Construction
the topics are structured, ordered, or arranged into ordered categorical levels that descend from broader categories to narrower categories	there is a tree-like arrangement of topics that has several levels and that branches from a broadest topic into narrower topics based on parent-child relationships between broader and narrower topics, where each broader topic encompasses one or more narrower topics in the level immediately below it and each narrower topic is encompassed by a single broader topic in the level immediately above it

The court construes this phrase in accordance with the above discussion in Part III.B.1 a.

The court defines the phrase as follows: **"an arrangement of related topics, ordered from broader general categories to narrower specific ones."**

## 2. The Entry Terms/Phrases

### a. "entry" (# 1) and "entries" (# 2)

These terms appear in claims 1, 20, 26, and 31.

Geomas' Proposed Construction	Idearc's Proposed Construction
(# 1) data contained in a database	(1 & 2) data records in the database, each including a name key value associating the data record with a particular geographical area such that the parentage of each geographical area can be determined based on the name key value in its associated data record
(# 2) more than one entry	

The main issues regarding these terms are whether the terms are limited to "data records" and/or whether they require "name keys."

With respect to data records, Geomas argues that claim differentiation dictates that "entry" and "entries" are not limited to "data record," and that the specification also teaches against such limitation. Idearc argues that Geomas unequivocally disclaimed its construction during prosecution, and that the specification does, in fact, support such a limitation.

During prosecution, the patentee replaced "information" with "entries" in each independent claim. In describing the amendment, the examiner states, "[t]he examiner rejected Claims 1-19, 32-40 and 43-50 under 35 U.S.C. s. 103(a) as obvious over the Netscape reference[ ]" and "[a]pplicants have amended Claims 1, 32, 38, and 43 herein in order to clarify the patentably distinguishing features of Applicants' inventions along the lines discussed in the interview." *See* Ex. 7 to D.'s brief at 7. Indeed, it is apparent that the change in claim terms was intended to distinguish the present invention over prior art. In order to make the connection to "data," however, it is necessary for the court to determine whether the patentee intended to use "information" interchangeably with "data." For this link in the chain, Idearc assumes that persons of

ordinary skill in the art of computer science use the terms "data" and "information" interchangeably. *See* D.'s brief at 17, n. 29. To support its contention, Idearc cites a definition from a technical dictionary, which defines "information" as follows: "the meaning of data as it is intended to be interpreted by people." MICROSOFT PRESS COMPUTER DICTIONARY 232 (3rd ed.1997). The dictionary further states, however, that, "[d]ata consists of facts, which become information when they are seen in context and convey meaning to people." Idearc further relies upon statements made by Geomas in their opening claim construction brief. *See* Pl.'s brief at 2, 12, & 15. The court has reviewed these passages and is not persuaded that the patentee intended to use the terms "data" and "information" interchangeably. The court is accordingly hesitant to find that the patentee unequivocally disclaimed "data" during prosecution.

Furthermore, the claims and the specifications do not support the limitation asserted by Idearc. Each of the four independent claims (1, 20, 26, and 31) have dependent claims (18, 24, 27, and 36) that limit "entries" to "data records." As discussed above, "[t]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." Phillips, 415 F.3d at 1314-15. Additionally, throughout the specification, the '474 patent uses the disputed terms "entry" and "entries" broadly. *See, e.g.,* '474 Patent, col. 12 ll. 3-5, col. 22 l. 39-col. 23 l. 3, col. 18 ll. 62-63, col. 24 ll. 30-31.FN7 These "varied uses[s] of a disputed term in [the] written description attest[ ] to the breadth of a term rather than providing a limiting definition." Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1308 (Fed.Cir.2003).

FN7. Idearc contends that the specification teaches otherwise. As discussed above, however, Idearc points to sections within the specification that refer to a preferred embodiment or examples. *See* '474 Patent, col. 11 ll. 30-33, col. 11 ll 58-64, col. 15 ll. 10-14.

Regarding the "name key" limitation asserted by Idearc, as discussed above, the court is not persuaded that invention encompasses only the name key organizational format.

For these reasons, the court adopts Geomas' construction and construes "entry" as follows: **"data contained in a database."**

**b. "entries corresponding to each one of said hierarchy of geographical areas is further organized into topics" (# 1); "entries corresponding to each of said hierarchy of geographical is further organized into topics" (# 2); "entries corresponding to each of said geographical areas is further organized into topics" (# 3); "organizing said entries corresponding to said plurality of geographical areas into one or more topics" (# 4)**

Phrase # 1 appears in claim 1; phrase # 2 appears in claim 20; phrase # 3 appears in claim 26; phrase # 4 appears in claim 31.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
(1, 2, & 3) data in the database associated with a geographic area in the hierarchy of geographical areas is further organized to permit selected data to be retrieved into topics	(1, 2, & 3) the data records in the database for a particular geographical area in the hierarchy of geographical areas are further arranged in the database into topics associated with that particular geographical area
(# 4) organizing data contained in the	(# 4) further arranging the data records in the database for

database corresponding to one or more geographical areas to further permit selected data to be retrieved into one or ore topics

a particular geographical area in the plurality of geographical areas into topics associated with that particular geographical area

The issue regarding these phrases is whether the patent requires each entry to be arranged in the database into topics associated with a particular geographical area. Both Geomas and Idearc argue that the unambiguous language of the claim supports their respective constructions. Reading claim 1, it is apparent that it is the "entries" and not the "topics" that correspond to the hierarchy of geographic areas. Furthermore, as Geomas argues, claims 20 and 31 instruct that the topics may be associated with more than one geographical area. Idearc points to passages in the "Summary of the Invention" and "Detailed Description of the Preferred Embodiment" sections for support. Neither sections are determinative. *See* '474 Patent, col. 2 ll. 42-52.

For these reasons, the court adopts Geomas' construction and construes the phrases consistent with the above definitions.

### 3. The Search Engine Terms/Phrases

#### a. "search engine"

This term appears in claims 1, 20, and 31.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
software, hardware, and/or firmware that alone or in combination receives search requests and fulfills the received requests through interaction with a database	software in a computer that executes a search request by searching only the data records associated in the database with a particular selected geographical area

The main dispute concerns whether the term is limited to searching *only* data records associated with a particular geographical area. Here again, it is proper to look at the claim language first. As discussed above, the language of claims 1, 20 and 31, when read together, indicate that the search engine searches both geographically and topically. Furthermore, Idearc again improperly attempts to limit the term to its preferred embodiment. *See* '474 Patent, col. 11 ll. 24-33, col. 14 ll. 15-17, col. 15 ll. 54-56, col. 15 l. 60-col. 16 l. 16.

For the foregoing reasons, the court adopts Geomas' construction and defines the term consistent with the above definitions.

#### b. "geographical search area"

This phrase appears in claims 1, 20, and 31.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
an area which is a subset of the entire domain of geographic areas, from which topical information can be accessed	the particular selected geographical area for which the associated data records in the database are to be searched

Here, the parties disagree on whether the selected geographical search area is the only geographical area that

is searched by the search engine. Geomas argues that the patentee expressly defines the term. Generally, where the inventor acts as his own lexicographer, the inventor's lexicography controls. *See Phillips*, 415 F.3d at 1316. Another, more recent case, however, guards against such a strict interpretive analysis. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 808 (Fed.Cir.2007). Here, as in *Acumed*, the use of the word "defined" does not necessarily imply a lexicographic definition. In this instance, the definition that Geomas seeks is taken out of context of the paragraph as a whole. The definition as given by the patentee is in the context of a user-inputted search. *See '474 Patent*, col. 7 ll. 11-21. As such, this definition does not control; there is no indication that the patentee intended this sentence to define the term universally throughout the patent. It is thus necessary to examine the use of the term throughout the patent.

First, the language of claims 20 and 31 indicate that the selected geographical area is the geographical search area. Second, the specification confirms such interpretation. The portion of the specification that Geomas looks to for its definition provides support for Idearc's construction. In that example, the Los Angeles area defines a geographic search area because it is the geographic area the user selected. *See id.* at col. 7 ll. 11-18.

As such, the court adopts Idearc's proposed construction.

**c. "said search engine further configured to select one of said hierarchy of geographical areas *prior to* selection of a topic so as to provide a geographical search area" (# 1); "said search engine configured to select at least one geographical area in said hierarchy of geographical areas so as to define a geographical search area" (# 2); "directing a search engine executing in a computer to select one or more of said geographical areas so as to select a geographical search area" (# 3)**

Phrase # 1 appears in claim 1; phrase # 2 appears in claim 20; phrase # 3 appears in claim 31.

Geomas' Proposed Construction	Idearc's Proposed Construction
(# 1) that the software, hardware and/or firmware, alone or in combination, that receives search requests and fulfills the received requests through interaction with a database is configured to select one of the hierarchy of geographical areas prior to the selection of a topic so as to define an area from which topical information can be accessed that is a subset of the entire domain of geography	(# 1) the search engine is configured to select a particular geographical area within the hierarchy of geographical areas so as to define a geographical search area for which only the associated data records in the database are to be searched, before selection of a topic associated with that selected geographical search area
(# 2) the, software, hardware and/or firmware, alone or in combination, that receives search requests and fulfills the received requests through interaction with a database is configured to select one of the hierarchy of geographical areas so as to define an area from which topical information can be accessed that is a subset of the entire domain of geography	(# 2) the search engine is configured to select a particular geographical area within the hierarchy of geographical areas so as to define a geographical search area for which only the associated data records in the database are to be searched, before searching regarding a topic associated with that selected geographical search area
(# 3) directing software, hardware, and/or firmware executing in a computer, alone or in combination to	(# 3) directing a search engine executing in a computer to select a particular geographical area

select one or more geographical areas so as to select an area from which topical information can be accessed that is a subset of the entire domain of geography

within the plurality of geographical areas so as to define a geographical search area for which only the associated data records in the database are to be searched

The key dispute with regard to these phrases is whether the patent requires that a geographic area be selected before a topic is selected. Through the inclusion of "prior to," claim 1 expressly provides that the geographic area is selected before the topic. Claims 20 and 31 do not contain those words. Geomas argues that "prior to" should not be read into claims 20 and 31, and that neither of those claims require the selection of a geographic search area before a topic is selected. Geomas further argues that the prosecution history confirms that the order of steps is not important. Idearc argues that the plain language of the claims indicate an order. The court agrees with Geomas.

The Federal Circuit has refused to impose a specific order of steps absent an indication to do so.FN8 There is no indication in the patent that the geographic area necessarily must be selected before the topic. Additionally, Idearc's logic and grammar argument is not sufficient to overcome the prosecution history. The prosecution history makes it clear, for instance, that the steps of claim 31 need not be performed in a specific order. *See* Ex. J to Pl.'s brief at 5.

FN8. Geomas cites *Liebel-Flarsheim Co. v. Medrad, Inc.* for the proposition that it is improper to impose a specific order of steps absent an indication to do so. *See* *Liebel-Flarsheim Co.*, 358 F.3d at 906. The *Liebel-Flarsheim* court attributes this rule to another case, *Altiris, Inc. v. Symantic Corp.*, 318 F.3d 1363, 1372 (Fed.Cir.2003). In *Altiris*, the Federal Circuit looked to the claim language, the specification, and the prosecution history and found no indication that the specific order was important or that there was any disclaimer of any other order of steps. *Id.*

As such, the court adopts Geomas' construction.

#### 4. The Dynamically Replicated Terms/Phrases

##### a. "replicated" and "replicating" (# 1); "dynamically replicated" and "dynamically replicating" (# 2)

These phrases and terms appear in claims 1, 20, 26, and 31.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
(# 1) reproduced, duplicated, repeated or included	(# 1) copying or inheriting.
(# 2) reproduced, duplicated, repeated or included at the time needed rather than at a time decided or established in advance	(# 2) automatically copying or inheriting, at the time needed rather than at a time decided or established in advance

The parties agree that "dynamic" means "at the time needed rather than decided or established in advance." Thus, the dispute focuses on the definition of "replicate" in the context of "dynamic." Looking first to the claims, the language requires that an entry for a broader geographical area is "dynamically replicated into at least one narrower geographical area." Incorporating the agreed construction of dynamic into the claim language requires that the entry for the broader area is replicated into the narrower area at the time the entry

is needed, rather than at a time that is decided or established in advance.

Turning to the specification, neither the term "replicate" nor the phrase "dynamically replicated" appear *per se* in the specification. Instead, they first appear in the prosecution history. *See* Ex. 7 to D.'s response at 6. The patentees included the "dynamically replicating" phrases in claims 1, 20, and 31 "to clarif[y] the patentability distinguishing features of the invention." *Id.* In the Notice of Allowance, discussing amended claim 31, including "dynamically replicating," the examiner cites the phrase as a basis for distinguishing prior art and interprets the phrase to mean "*automatically inheriting* an entry from a broader geographical area into said selected geographical search area." *See* Ex. 8 of D.'s response at 2-3. While "unilateral statements by an examiner do not give rise to a clear disavowal of claim scope by an applicant, it does not necessarily follow that such statements are not pertinent to construing claim terms." *Salazar v. Proctor & Gamble Co.*, 414 F.3d 1342, 1347 (Fed.Cir.2007). This interpretation is indicative of how one skilled in the art understood the term at the time the application was filed. *See id.* The specification adds further credibility to such understanding. *See* '474 Patent, col. 19 ll. 29-39; col. 19 ll 46-63. Additionally, both parties look to extrinsic evidence for their definition of "replicate." FN9 Idearc's complete definition, including "automatically copying," more appropriately defines the term in light of the specification.

FN9. Geomas defines "replicate" as "to reproduce, duplicate, or repeat." WEBSTER'S II NEW COLLEGE DICTIONARY at 940 (1995). Idearc defines "replicate" to mean "to copy all or a specified portion of data." IBM DICTIONARY OF COMPUTING at 573 (10th ed.1994).

Geomas generally argues that "replicate" is more than simply copying. For support, Geomas points to a specific section of the specification discussing Figure 15. *See* '474 Patent, col. 22 ll. 32-38. This citation does not support its construction. Figure 15 displays a list of related entries 1540 that is derived from the text previously stored within the label field 1315 of the data record. There is no replication or copying of any information from a broader area into a narrower area at the time it is needed to respond to a search inquiry. As such, this portion of the specification does not support Geomas' construction.

For these reasons, the court adopts Idearc's proposed construction.

**c. "wherein within said hierarchy of geographic areas at least one of said entries associated with a broader geographical area is dynamically replicated into at least one narrower geographical area" (# 1); "wherein at least one of said entries in said geographical area of relatively larger expanse is dynamically replicated into at least one of said geographical areas of smaller expanse" (# 2); "wherein at least one of said entries associated with a broader geographic area is dynamically replicated into a narrower geographical area" (# 3)**

Phrase # 1 appears in claim 1; phrase # 2 appears in claim 20; phrase # 3 appears in claim 26.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
that within the hierarchy of geographical areas at least a piece of data in a database associated with a broader geographical area is reproduced, duplicated, repeated, or included into at least one narrower geographical area at	wherein within the hierarchy of geographical areas, at the time needed rather than at a time decided or established in advance, at least the name key value in a parent data record associated with a broader geographical area is automatically copied or inherited into a child data record associated with a narrower geographical area such that the parentage of the narrower

the time such data is needed rather than at a time decided or established in advance geographical area can be determined based on the name key value in the associated child data record

The court construes these phrases consistent with the above discussion.

Accordingly, the court defines the above phrases to mean the following: **"wherein within the hierarchy of geographical areas, at the time needed rather than at a time decided or established in advance, at least a piece of data in a database associated with a broader geographical area is automatically copied or inherited into at least one narrower geographical area."**

**d. "dynamically replicating an entry from broader geographical area into said geographic search area"**

This phrase appears in claim 31.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
reproducing, duplicating, repeating, or including at least a piece of data contained in a database that is associated with a broader geographical area into an area from which topical information can be accessed that is a subset of that broader geographical area at the time such data is needed rather than at a time decided or established in advance	automatically copying or inheriting, at the time needed rather than at a time decided or established in advance, at least the name key value in a parent data record associated with a broader geographical area into a child data record associated with a narrower geographical area such that the parentage of the narrower geographical area can be determined based on the name key value in the associated child data record

The court construes these phrases consistent with the above discussion.

Accordingly, the court defines the above phrases to mean the following: **"automatically copying or inheriting, at the time needed rather than at a time decided or established in advance, at least a piece of data contained in a database that is associated with a broader geographical area into an area from which topical information can be accessed that is a subset of that broader geographical area."**

## **5. "organizer" and Means-Plus-Function Terms**

**a. "organizer"**

This term appears in claim 1.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
software, hardware, and/or firmware, that alone or in combination is configured to receive search requests, together with a database and a search engine in communication with the database	software in a computer that includes a network browser interface that provides a geographical arrangement of information available on the network and translates search requests from users into queries for use by a search engine

The parties agree that the term does not have an ordinary meaning outside of the patent; therefore, it must

have a meaning in the context of the intrinsic evidence. The issues are first, whether the patent requires the organizer to include a network browser interface and, second, whether that network browser interface must "provide a geographic arrangement of information available."

The court agrees with Geomas that the patent does not require a network interface, nor does it require the network interface to "provide a geographic arrangement of information available." First, the words of the claim provide some guidance. Claim 1, for example, requires that the "organizer" is "executing in said computer network." This language does not require a network browser interface. Idearc points to other language in the claim, beginning with "configured to receive search requests," for its proposition that the organizer requires a network browser. Merely because the organizer is configured to receive search requests from other computers does not require that it have a network browser interface. An inventor is not required to claim every aspect of an invention. *See Carl Zeiss Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1181 (Fed.Cir.1991).

Furthermore, the specification supports Geomas' construction. Figure 1 suggests an embodiment in which the organizer does not include a network browser interface. Instead, it depicts a user accessing the web organizer either through port server 112 (via a modem link and an ethernet link) or through routing hub 100 (via high speed data transfer connection and an ethernet link).

Regarding the second issue, claim 1 does not include language indicating that the "organizer" interacts with the user, the user's computer, a network browser interface, or that it translates search requests. *See* '474 Patent, cl. 1. Additionally, the portions of the specification to which Idearc cites refer to the preferred embodiment. As indicated above, the court will not limit the claims to a preferred embodiment, even if it is the only embodiment described, absent a clear intention that such limitations are appropriate.

The court defines the term "organizer" as follows: **"software, hardware, and/or firmware, that alone or in combination is configured to receive search requests, together with a database and a search engine in communication with the database."**

**b. "organizer means for processing requests received from said user computer"**

This phrase appears in claim 26.

<b>Geomas' Proposed Construction</b>	<b>Idearc's Proposed Construction</b>
FUNCTION: processing requests received from the user computer, selecting one of said geographical areas, and searching said topics associated with said geographical search area	FUNCTION: providing a geographical arrangement of information available on the network and translating search requests from users into queries for use by the search engine means
CORRESPONDING STRUCTURE: (I) web organizer 114, HTTP server 820, or Netscape server 310, a database, and, alternatively, (a) geographic search engine 315, local content search engine 520, and read subroutine 320, or (b) CGI file 420 and map file 425, or (II) similar executable or CGI files capable of executing	CORRESPONDING STRUCTURE: (1) one of web organizer server 114, HTTP server 820, or Netscape server 310;  (2) one of a database 210, a map file 425, a

the algorithms graphically depicted in Figures 2-5 and 8.

local content database 230, or Yellow Page database 245, and

(3) one of geographical search engine 315, a read subroutine 320, a CGI program 420, a local content search engine 520, a Yellow Page search engine 620, or a note search engine 730

The parties agree that this limitation should be construed as a means-plus-function limitation. The parties disagree as to both the recited function and the corresponding structures.

First, the court will identify the recited function. The claim language indicates that "organizer means" comprises both a database and a search engine means. This nested structure indicates that the "organizer means" has three functions, as indicated by Geomas' proposed construction. In light of the previous constructions, the court adopts Geomas' proposed construction of the recited function.

Second, the court will identify the structure in the specification corresponding to the recited function. The parties generally agree on the structure, except for two issues. First, Geomas does not provide a specific database in their proposed construction, but, instead, simply names "database" as part of the structure. Idearc, on the other hand, lists a number of specific databases. The court agrees with Idearc that Geomas' position does not comply with the requirement that the specification describe the structure corresponding to the recited function. *See Med. Instrumentation & Diagnostics Corp.*, 344 F.3d at 1210. The corresponding structure includes the specific databases described in the specification.

Second, Geomas proposes a second, alternative structure for the organizer means. Geomas argues that Figures 2 through 5 and 8 disclose generic structures to perform the recited function. These figures graphically depict algorithms; specifically, Figures 2 through 5 depicts system flow diagrams illustrating the sequence of events when a user chooses a particular query and Figure 8 is a diagram of the overall system structure. *See '474 Patent*, col. 4 ll. 45-67. Here, however, none of these figures illustrates an algorithm that could be considered structure corresponding to the functions of the organizer means.

As such, the court defines the phrase as follows: **"FUNCTION: processing requests received from the user computer, selecting one of said geographical areas, and searching said topics associated with said geographical search area; CORRESPONDING STRUCTURE: (1) one of web organizer server 114, HTTP server 820, or Netscape server 310; (2) one of a database 210, a map file 425, a local content database 230, or Yellow Page database 245, and (3) one of geographical search engine 315, a read subroutine 320, a CGI program 420, a local content search engine 520, a Yellow Page search engine 620, or a note search engine 730."**FN10

FN10. Pursuant to s. 112 para. 6, the literal scope of the claim includes the corresponding structure and equivalents.

**c. "search engine means for selecting one of said geographical areas"**

This phrase also appears in claim 26.

Geomas' Proposed Construction	Idearc's Proposed Construction
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**FUNCTION:**

selecting one of said geographical areas and searching topics associated with the geographical area but not necessarily in that order

**FUNCTION:**

hierarchy of geographical areas for which only the associated data records in the database are to be searched, before searching a topic associated with that selected particular geographical area

**CORRESPONDING STRUCTURE:**

(I)(a) geographical search engine 315, local content search engine 520, and read subroutine 320, or (b) CGI file 420 and map file 425, or

(II) and similar executable or CGI files capable of executing the algorithms graphically depicted in figures 2-5, and 8

**CORRESPONDING STRUCTURE:**

(1) one of geographical search engine 315 or CGI program 420, and

(2) one of read subroutine 320, or map file 425

As with the above phrase, the parties agree that this limitation should be construed as a means-plus-function limitation, but they disagree as to both the recited function and the corresponding structures.

In light of the discussion above, the court defines the function in accordance with Geomas' proposed construction and the structure in accordance with Idearc's proposed construction.

As such, the court defines the phrase as follows: "**FUNCTION: selecting one of said geographical areas and searching topics associated with the geographical area but not necessarily in that order; CORRESPONDING STRUCTURE: (1) one of geographical search engine 315 or CGI program 420, and (2) one of read subroutine 320, or map file 425.**"

#### **IV. Conclusion**

The court adopts the above definitions for those terms in need of construction. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the court.

E.D.Tex.,2008.

Geomas (Intern.) Ltd. v. Idearc Media Services-West, Inc.

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