IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MICROSOFT CORPORATION and GOOGLE INC.,	:	
Plaintiffs,	:	
v.	:	C.A. 11-175-RGA
GEOTAG, INC.,	:	
Defendant.	:	

CLAIM CONSTRUCTION

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May 3, 2013
Wilmington, Delaware

ANDREWS, UNITED STATES DISTRICT JUDGE:

This is a claim construction opinion. Plaintiffs Google Inc. and Microsoft Corporation filed a declaratory action asserting non-infringement of Defendant Geotag, Inc.'s U.S. Patent No. 5,930,474 ("'474 Patent"). The '474 Patent discloses computer software informational databases integrated with search engine technology that allow users to find points of interest according to desired geographic regions.

DISCUSSION

Claim construction is a question of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–78 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370, 388–90 (1996). When construing the claims of a patent, a court considers the literal language of the claim, the patent specification and the prosecution history. *Markman*, 52 F.3d at 979. Of these sources, the specification is "always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). However, "[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.' " *Liebel–Flarsheim Co. v. Medrad*, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004) (*quoting Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)).

A court may consider extrinsic evidence, including expert and inventor testimony, dictionaries, and learned treatises, in order to assist it in understanding the underlying technology, the meaning of terms to one skilled in the art and how the invention works. *Phillips*,

415 F.3d at 1318–19; *Markman*, 52 F.3d at 979–80. However, extrinsic evidence is considered less reliable and less useful in claim construction than the patent and its prosecution history. *Phillips*, 415 F.3d at 1318–19 (discussing "flaws" inherent in extrinsic evidence and noting that extrinsic evidence "is unlikely to result in a reliable interpretation of a patent claim scope unless considered in the context of intrinsic evidence").

In addition to these fundamental claim construction principles, a court should also interpret the language in a claim by applying the ordinary and accustomed meaning of the words in the claim. *Envirotech Corp. v. Al George, Inc.,* 730 F.2d 753, 759 (Fed. Cir. 1984). If the patent inventor clearly supplies a different meaning, however, then the claim should be interpreted according to the meaning supplied by the inventor. *Markman*, 52 F.3d at 980 (noting that patentee is free to be his own lexicographer, but emphasizing that any special definitions given to words must be clearly set forth in patent). If possible, claims should be construed to uphold validity. *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

The parties organize the disputed phrase terms into five groups: the "hierarchy" phrases, the "dynamic replication" phrases, the "topics" phrases, the "entries" phrases, and the "additional" phrases.

A. The "Hierarchy" Phrases

The first group is referred to as the "hierarchy" phrases by the parties. The proposed constructions for this group follows:

Claim term phrase	Google	Microsoft	Geotag
#1. "hierarchy of	"related geographical	No separate	"an arrangement of

geographical areas" (claims 1, 4, 20)[1]	areas, ordered such that broader general areas encompass narrower specific ones"	construction. See construction for term #2	related information or data, ordered from broader general categories to narrower specific ones"
#2. "a database of information organized into a hierarchy of geographical areas wherein entries to each one of said hierarchy of geographical areas is further organized into topics" (claim 1)	Google focuses on the separate terms in the limitation and does not construe this entire term.	"a database of records primarily organized into interrelated geographic areas such that there are parent geographic areas and child geographic areas, wherein the records associated with a geographic area are further organized into topics"	No need to separately construe; see constructions for #3 and #19
#3. "a database of information organized into a hierarchy of geographical areas" (claim 1) #4. "said database of information organized into a predetermine [sic] hierarchy of geographical areas" (claim 20)	No need to separately construe. See term # 1	No separate construction necessary. See construction for term # 2	"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"
#5. "hierarchy" (claims 1, 5, 20) #6. "hierarchically organized" (claim 32)	No need to separately construe. See term #1, term #16 for "topics," and term #17 for "wherein said topics are hierarchically organized"	No separate construction necessary. See construction for term #2, term #16 for "topics" and term #17 for "wherein said topics are hierarchically organized."	"an arrangement of related information or data, ordered from broader general categories to narrower specific ones" (same as #1, 17)
#7. "narrower geographical area" (claim 1) #8. "geographical area of relatively smaller expanse" (claim 20)	"a geographic area in the database encompassed by a broader geographic area in the database"	"a geographic area in the database which is a child of the broader geographic area"	No need to construe. Plain and ordinary meaning
#9. "broader	"a geographic area in	"a geographic area in	No need to construe.

[1] Claim term # 1 also appears in independent claim 26. It is not clear to the Court whether independent claim 26 is being asserted. It is referenced by the parties in connection with term #21, but it is not referenced in a number of places where it might be expected to be referenced.

geographical area" (claims 1, 31) #10. "geographical area of relatively larger expanse" (claim 20)	the database that encompasses one or more narrower geographic areas in the database"	the database which is a parent of one or more narrower geographic areas"	Plain and ordinary meaning

This group concerns the organization of the "hierarchy of geographical areas" of the database. The phrase appears in claim 1 as follows: "a database of information organized into a hierarchy of geographical areas wherein entries to each one of said hierarchy of geographical areas is further organized into topics." As an initial matter, the Court agrees with Microsoft's proposal that this group of terms should be construed as a single phrase, as opposed to breaking down the construction into multiple component phrases. The parties do agree that the "hierarchy of geographical areas" is comprised of an organization of broader geographic areas and related narrower geographic areas. They do not agree as to how the broader and narrower geographic areas are arranged in relation to one another. Google argues that the broader geographic areas should be understood to "encompass" the narrower geographic areas. Microsoft argues that the broader geographic areas and the narrower geographic areas are organized according to a "parent-child" relationship. Geotag argues that both of those constructions are wrongful attempts to employ the specification to limit the claims, and argues that the hierarchy is simply "ordered from broader general categories to narrower specific ones."

Google relies on the specification in support of its argument that the broader geographic regions necessarily "encompass" the narrower geographic regions. It refers to the following quotation in support: "Each of the geographical levels above the lowest level encompasses a plurality of lower level geographical areas." '474 Patent, col. 3 ll. 22-24. Google argues that

this portion of the specification demonstrates the full scope of the invention, as the very function of the hierarchy requires the broader geographic area to completely encompass a narrower area. The Court is not convinced by this argument. Google relies on a few sparse statements in the specification in support of its construction, and Google does not provide any persuasive reasoning as to why the claimed invention hinges on broader areas "encompassing" narrower areas. This understanding of the claim term is bolstered by a comparison of the claims. In Claim 1, the word "encompass" is not used to describe the relationship between the broader and narrower areas. In contrast, dependent Claim 5 does use "encompass" to describe these relationships. "There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims." *Tandon Corp. v. U.S. Int'l Trade Comm'n*, 831 F.2d 1017, 1023 (Fed. Cir. 1987). Although there are other differences between these two claims than the presence of "encompass" in dependent Claim 5, the presumption is this difference was intentional. For these reasons, the Court rejects Google's construction.

Microsoft's proposal to construe the phrases according to the "parent-child relationship," on the other hand, explains a necessary aspect of the claims. During claim construction, the Court must look to see "whether the specification refers to a limitation only as a part of less than all possible embodiments or whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment." *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003).

Claim 1 requires "entries" associated with "broader geographical areas" to be "dynamically replicated" to "narrower geographical areas." The "dynamic replication" phrases are the second group of disputed terms and are not construed in this section, but that group's meaning has ramifications for the "hierarchy" phrases' construction. Both Geotag and Google

agree that "dynamic replication" must be construed to mean "automatic inheritance." The Court adopts this construction in Part B of this opinion *infra*.

"Automatic inheritance" requires that "hierarchy" be construed according to the "parent-child relationship." The specification describes the function of "automatic inheritance" as follows:

> These values are the parentage name keys related to the current entry, and provide the key to displaying related entries to the internet user, and are automatically inherited from the parent entry. These reference values are used to retrace the path back through the geographic hierarchy when the user wishes to return to a related (e.g., parent) location display screen.

'474 Patent, col. 19 ll. 33-38. "Automatic inheritance" as described here is strictly dependent on the existence of "parentage name keys" and a "parent entry." They are the "reference values" that allow retracing through the hierarchy when the user returns to the related location display screen. Although the specification's use of "(e.g., parent)" would seem to indicate that the "parent-child" relationship is merely exemplary, there is no indication elsewhere as to how "automatic inheritance" would function without the "parent-child relationship." Because neither "automatic inheritance" nor "dynamically replicated" are terms with a plain and ordinary meaning, the Court can only construe their meaning and function according to what is disclosed in the patent. There is nothing in the patent indicating how these functions would occur absent a "parent-child" hierarchy.

The necessity of the "parent-child relationship" to "automatic inheritance" is again demonstrated below:

> The data contained within the geographic database 210 also includes reference field 1305 which include a reference city, reference region, reference state, province or territory, reference country, reference continent, and reference world values. These values are the parentage name keys related to the current entry, and

> provide the key to displaying related entries to the internet users, and are automatically inherited from the parent entry.

Id. at col. 19 ll. 29-39. The "parentage name keys" are necessary to displaying "related entries to the internet users." They are "automatically inherited from the parent entry." To further demonstrate the necessity of the "parent-child relationship" to "automatic inheritance," the patent teaches the importance of "label fields" to the invention. *See id.* at col. 19 ll. 45-63. When a user selects a certain geographic region, all corresponding "parent entries" are taken from the "label field" and displayed to the user. *Id.* at col. 19 ll. 52-57. The patent then specifically teaches that the label field is "automatically inherited" from the "parent entry," and warns that the values within the parent label field should not be changed. *Id.* at col. 19 ll. 61-63. The most reasonable interpretation of the admonition to leave the label field unchanged is to preserve the function of "automatic inheritance." It is language of restriction that strongly demonstrates that "automatic inheritance" requires the "parent-child relationship." There is no clue within the specification as to how "automatic inheritance" would possibly function in any other context.

This understanding is bolstered by the file history. 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). The file history includes the examiner's "Search Request Form." (D.I. 174, Exh. D at 91). Within this form, the examiner noted that "dynamic replication = automatic inheritance = parent-child = inheriting attributes." (*Id.*).[2] While only "dynamically replicat[e]" actually appears within the claims, the notations indicate that "dynamic replication," "automatic inheritance," and the "parent-child relationship"

[2] The examiner categorized these terms as "synonyms." Although they do not all literally have the same meaning and are thus not true synonyms, the examiner clearly viewed these terms as interrelated.

are at the very least closely interrelated. This is not an example of adopting unilateral examiner statements as disclaimer, but is an example of using the file history to understand the contours of the invention. For all these reasons, the Court determines that the "hierarchy of geographical areas" is organized according to the "parent-child relationship."

There is a second dispute regarding the "hierarchy" phrases. Microsoft argues that phrases should be construed with the primacy of the geographical as opposed to topical information of the hierarchy in mind.[3] It points to claim 1, which states, "a database of information organized into a hierarchy of geographical areas wherein entries . . . [are] further organized into topics." There is no reason to insert "primarily" into the construction. The claim's use of the word "further" shows that the database is organized into a hierarchy of geographical areas, and also organized into topics, but does not imply any additional limitation. "Primarily" is not a synonym for "further." Moreover, it is not at all clear what "primarily" would mean in this context.

The parties also propose the construction of the following related terms: "narrower geographical areas," "geographical area of relatively smaller expanse," "broader geographical areas," and "geographical area of relatively larger expanse." The Court agrees with Geotag that these terms should be construed according to their plain and ordinary meaning. They are easily understandable and neither Microsoft nor Google demonstrate that the meanings differ from the plain and ordinary meaning.

The Court's claim construction chart for this group of terms follows.[4]

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[3] Microsoft proposes, "a database of records primarily organized into interrelated geographic areas…"

[4] The Court has renumbered the terms consistent with its decision to construe longer phrases as a single term when possible.

Term Phrase	Court's Construction
# 1. "a database of information organized into a hierarchy of geographical areas wherein entries to each one of said geographical areas is further organized into topics"	"a database of information organized into interrelated geographic areas such that there are parent geographic areas and child geographic areas, wherein the records associated with a geographic area are further organized into topics"
# 2. "narrower geographical area"	Plain and ordinary meaning
#3. "geographical area of relatively smaller expanse"	Plain and ordinary meaning
#4. "broader geographical area"	Plain and ordinary meaning
#5. "geographical area of relatively larger expanse."	Plain and ordinary meaning.

B. The "Dynamic Replication" Phrases

The second group of terms is referred to as the "Dynamic Replication" phrases. The Court agrees with Google's suggestion that the terms should be construed as a single phrase when possible. The parties' proposed constructions follow:

Term	Google	Microsoft	Geotag
#11. (collectively) "dynamically replicating" "dynamically replicating" (claims 1, 20, 31)	"automatically inheriting at the time of a search"	Incapable of being construed because term or phrase is part of a claim limitation which is indefinite and/or lacks written description	"automatically copying or inheriting, at the time needed rather than at a time decided or established in advance"
#12. (collectively) "replicated" "replicating" (claims 1, 20, 31)	No need to separately construe; see constructions for term #11: "dynamically replicating" / "dynamically replicated"	Incapable of being construed because term or phrase is part of a claim limitation which is indefinite and/or lacks written description	"copied or inherited" and "copying or inheriting"
#13. "dynamically replicating an entry	Incapable of being construed because	Incapable of being construed because	"automatically copying or

from broader geographical area into said geographical search area" (claim 31)	term or phrase is part of a claim limitation which is indefinite and/or lacks written description	term or phrase is part of a claim limitation which is indefinite and/or lacks written description	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"
#14. "wherein within said hierarchy of geographical areas at least one of said entries associated with a broader geographical area is dynamically replicated into at least one narrower geographical area" (claim 1) #15. "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" (claim 20)	Incapable of being construed because term or phrase is part of a claim limitation which is indefinite and/or lacks written description	Incapable of being construed because term or phrase is part of a claim limitation which is indefinite and/or lacks written description	"wherein within the hierarchy of geographical areas, at the time needed rather than at a time 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"

"Dynamically replicated" is used in claim 1 as follows: "...a geographical search area wherein within said hierarchy of geographical areas at least one of said entries associated with a broader geographical area is dynamically replicated into at least one narrower geographical area..."

Microsoft argues that "dynamically replicated" is indefinite. Geotag argues that the term is not indefinite and should be construed as "automatically copying or inheriting, at the time needed rather than at a time decided or established in advance." Google argues that the term is not indefinite in isolation and should be construed as "automatically inheriting at the time of the search." Google also argues, however, that "dynamically replicated" is indefinite when used within the context of the patent's claims.

The Court begins with Microsoft's indefiniteness argument. A patent specification must "conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112, ¶ 2. The purpose of the definiteness requirement is to "ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee's right to exclude." *Datamize v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005). Claims are considered indefinite when they are not amenable to construction or are insolubly ambiguous. "Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning." *Id.* Indefiniteness requires a determination of whether those skilled in the art would understand what is claimed. "In the face of an allegation of indefiniteness, general principles of claim construction apply." *Id.* at 1348. In that regard, claim construction involves consideration of primarily the intrinsic evidence, *viz.*, the claim language, the specification, and the prosecution history. *Phillips,* 415 F.3d at 1303.

"Dynamically replicating" has no plain and ordinary meaning within the art of computer science. Therefore, the Court must consider the term's usage within the claim, specification and file history to gain guidance as to what the inventor intended this term to mean. The crux of Microsoft's indefiniteness argument is that "dynamic replication" is a function of the search engine, yet Google and Geotag rely on "automatic inheritance" to construe the term, despite the fact that "automatic inheritance" is a function of the database. Thus, "automatic inheritance" is an improper construction of "dynamic replication," and because there are no plausible alternative constructions, the term is indefinite.[5]

The relevant element of claim 1 follows:

> 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 broader 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.

The Court does not agree that "dynamically replicated" is solely a function of the search engine. Rather, the element claims "a search engine in communication with said database." This element thus speaks to both the search engine and the database. The "dynamically replicating" occurs "within" the hierarchy of geographical areas: "wherein within said hierarchy of geographical areas at least one of [the] entries …is dynamically replicated[.]" As the hierarchy of geographical areas is indisputably the substance of the database, "dynamic replication" is a

[5] Although the Court will construe the term, the Court is not definitively rejecting any indefiniteness arguments.

function of the database.[6] Although it is true that an "entry" is only "dynamically replicated" in response to the search engine, that does not require it to be a function only of the search engine. This makes sense, as the specification shows that the invention depends on interaction between the search engine and the database of hierarchically organized information. *See* '474 Patent at col. 3 ll. 1-14. The claim describes search engine functions within the context of the search engine's interrelationship with the database and the database's own function. If "dynamically replicated" is a function of the database, as I believe it is, then "automatic inheritance" is not an incompatible construction. The specification is replete with examples of automatic inheritance occurring within the database.[7] The file history further makes clear that the examiner equated automatic inheritance with dynamically replicating. (*See* D.I. 174, Exh. D at 91). The Court thus construes "dynamically replicated" as involving "automatic inheritance."

Although Geotag and Google agree that "automatic inheritance" is an appropriate part of the construction, they disagree as to other limitations. Geotag argues that "dynamically replicating" should be construed as "automatically copying or inheriting." Google argues that "copying" is nowhere to be found in the specification or claims and limits its construction to "automatically inheriting." Geotag does not point to any intrinsic evidence justifying the inclusion of the "copying" limitation. Further "copying" is a well-known term used in the art of computer science, and if the patentee had intended his invention to be understood as having this

[6] A previous element of Claim 1 states, "a database of information organized into a hierarchy of geographical areas[.]"

[7] These examples include Figure 13 and relevant lines col. 19 ll. 16-63, as well as Figure 16 and relevant lines col. 23 ll. 30-39 and col. 23 ll. 48-51.

function he could have easily done so by using this word *somewhere* in the patent.[8] The Court thus agrees with Google that "copying" is not a valid construction of "replicating."

The parties also differ as to the temporal limitation of "dynamically replicating." Geotag argues that it occurs "at the time needed, rather than at a time decided or established in advance." Google argues that it occurs "at the time of the search."[9] Claim 1 clearly states that an entry is "dynamically replicated" within the database in connection with a search. There is no indication in the record of any other moment where the function would occur or be needed. For this reason, the Court adopts "at the time of the search" as the temporal limitation.

The Court's constructions for the "dynamic replication" group of terms follow:

Term Phrase	**Court's Construction**
# 6. "dynamically replicating" (claim 1, 20, 31)	"automatically inheriting at the time of a search"
# 7. "dynamically replicating an entry from broader geographical area into said geographical area." (claim 31)	"automatically inheriting, at the time of a search, a record from the broader geographic area into said geographic search area"
#8. "wherein within said hierarchy of geographical areas at least one of said entries associated with a broader geographical area is dynamically replicated into at least one narrower geographical area" (claim 1)	"wherein within the hierarchy of geographic areas at least one of said records associated with a broader geographic area is automatically inherited into at least one narrower geographic area at the time of the search"
#9. "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"	"wherein at least one of said records in said geographic area of relatively larger expanse is automatically inherited at the time of the search into at least one of said geographic areas of smaller expanse."

[8] "Replicate" was not a term of art in the relevant field. If the inventors meant "copy," there is no obvious reason why they could not have said so.

[9] Geotag has not explained how its proposal differs from that of Google. Indeed, Geotag appears to acknowledge that Google's proposal is on the right track, although arguing that it is too precise. (D.I. 281 at 93).

(claim 20)	

C. The "Topics" Phrases

The third group of phrases is referred to as the "topics" phrases by the parties. The parties' proposed constructions follow:

Term	Google	Microsoft	Geotag
#16. "topics" (claims 1, 15, 16, 18, 20, 31, 34, 35, 36, 37)	"grouping of goods or services"	"grouping of goods or services"	No need to construe. Plain and ordinary meaning.
#17: "wherein said topics are hierarchically organized" (claims 16, 35)	"related goods or services, ordered such that broader general goods or services encompass narrower specific ones"	"interrelated goods or services such that there are parent goods and services and child goods and services"	"an arrangement of related information or data, ordered from broader general categories to narrower specific ones" (same as # 1, 5, 6)

"Topics" appears throughout the claims. It is used, for example, as follows in claim 1: "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[.]" Geotag argues that "topic" deserves its plain and ordinary meaning, whereas Microsoft and Google argue that "topic" should be construed as "a grouping of goods or services."

Geotag rightly points out that "topic" is used broadly within the specification: "....the topic list presented to the user includes a list of topics such as business services, entertainment,

news, consumer goods, historic sites, etc." '474 Patent, col. 9 ll. 28-30. "Topics" are further listed within Figure 10 as including "Beaches & Harbors." These descriptions within the specification clash with Microsoft and Google's proposed construction, as the Defendants would limit "topics" to "a grouping of goods and services." A beach, however, is not sensibly described as a good or a service. Further, the patent specifically mentions that "topics" are not so limited: "goods, services, or other topics, (i.e., final destinations)." *Id.* at col. 15 l. 58. There are plainly "other topics" besides "goods and services."

The patent clearly envisions a broader scope for "topics" than the construction offered by Microsoft and Google. Microsoft and Google argue that adopting the plain and ordinary meaning would create an inappropriately broad construction, but they fail to offer any principled basis to narrow the term. They offer no construction accounting for the full scope of the term envisioned by the specification. "Topics" is not a technical term. It is a broad term. Google argues that the plain and ordinary meaning is inapposite because a dictionary defines a "topic" as "the subject of conversation or discussion: to provide a topic for discussion." (D.I. 174, Exh. J at 459). To the contrary, this indicates the extremely broad nature of the word topic, as virtually any subject is amenable to conversation. According to Merriam-Webster, synonyms for "topic" include "content," "subject," and "matter."[10] For this reason, the Court construes "topics" according to its plain and ordinary meaning.

The Court's constructions follow:

Term Phrase	**Court's Construction**
# 10. "topics" (claims 1, 15, 16, 18, 20, 31, 34, 35, 36, 37)	Plain and ordinary meaning.

[10] http://www.merriam-webster.com/dictionary/topic

# 11. "wherein said topics are hierarchically organized" (claims 16, 35)	"wherein the topics are further organized such that there are parent topics and child topics."

D. The "Entries" Phrases

The fourth group of term phrases is referred to as the "entries phrases." The parties' proposed constructions follow:

Term	Google	Microsoft	Geotag
#18: (collectively) "entry" "entries" (claims 1, 17, 18, 20, 24, 31, 36)	"a record in the database"	"a record in the database"	"data contained in a database"
#19: "entries corresponding to each one of said hierarchy of geographical areas is further organized into topics" (Claim 1) #20: "entries corresponding to each of said hierarchy of geographical area is further organized into topics" (Claim 20) #21: "entries corresponding to	"No need to separately construe; see constructions for terms # 18, 1, and 16: "entries," "hierarchy of geographical areas," and "topics"	No separate construction necessary. See construction for term #2: "a database of information organized into a hierarchy of geographical areas wherein entries corresponding to each one of said hierarchy of geographical areas	"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"

each of said geographical areas is further organized into topics" (Claim 26)		is further organized into topics."	
#22: "organizing said entries corresponding to said plurality of geographical areas into one or more topics" (Claim 31)	No need to separately construe; see constructions for terms # 18, 1, and 16.	No separate construction necessary. See construction for term #2.	"organizing data contained in the database corresponding to one or more geographical areas to further permit selected data to be retrieved into one or more topics"

"Entries" and "entry" are used throughout the claims, including as follows in claim 1: "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." Geotag proposes that "entries" should be broadly construed as "data." Google and Microsoft propose that "entries" are more properly understood to be "records."

The dispute between the parties hinges on whether the patent requires "entries" to contain distinct and independently accessible named fields. If so, then the Court should adopt Microsoft and Google's construction, as the patent defines "record" as having "one or more fields wherein each field is given a name so that the field is independently accessible." '474 Patent, col. 27 ll. 3-9. "Data," on the other hand, is a broader term. It is not defined in the patent, but it is well known to mean stored information in essentially any form. There is no requirement that "data" contain individual fields, although it is not excluded from having fields, either. In other words, all "records" are a form of "data," but not all "data" types are "records."

Microsoft and Google argue that "entries" must be construed as "records" because the invention requires each "entry" to be organized by informational fields. They argue that the patent uses "entries" and "records" interchangeably. They cite passages of the specification where "entries" are described as having fields, including the following:

> Sample entries to the yellow pages database 245 are included as Table 9. An expiration date field 1700 includes the date or dates that this listing expires, while a name field 1705 includes, in text form, the name to be shown on the listing. Address and city fields 1710, 1715, respectively show the street address to be shown on the listing and the city name. In addition, a state field 1720 as well as a zip code field 1725, respectively, include the state name and the postal or zip code of the listing.

Id. at col. 24 ll. 30-39. This indeed states that "entries" have fields, at least in some embodiments. There is, however, further evidence that the patentee used these terms synonymously. The specification refers to Table 7 as a representation of the "entries" within the geography database.[11] Each one of the "entries," however, is labeled as a "Record" within the table itself. *See id.* at cols. 31-36.[12] They all have fields. *See id.* "Entries" again are said to contain fields during the discussion of the California "entry." *Id.* at col. 19 ll. 53-63. Table 7's California "entry" is entitled "SPT Record" and has the same fields as discussed in column 19, suggesting the interchangeability of the term "entry" and "record."

An even more persuasive reason to construe "entries" as "records" is to maintain fidelity with the disclosed functions of the claimed invention. As discussed *infra*, claim 1 states that the "entries" are "dynamically replicated," i.e., "automatically inherited," between broader and narrower geographical areas. For "automatic inheritance" to occur, a "parent entry" and a "child entry" must be present. The "parent entry" further contains a "label field" which must not be

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[11] "Sample entries for the geography database 210 are included in Table 7." '474 Patent, col. 18 ll. 62-63.

[12] For example, Table 7 lists various "entries" labeled, "Continent Record," "Country Record," "SPT Record," "Region Record," etc.

changed, lest the "automatic inheritance" function be disrupted. *See* '474 Patent col. 19 ll. 52-63. "Automatic inheritance" is not a term with a well-known meaning in the art, and there is no indication in the specification as to how the function would occur absent "entries" with "label fields." It follows that all "entries" have "fields," and therefore "entries" should be construed as "records."

Geotag argues that the following lines from the specification demonstrate an "entry" without fields: "Normally, when the Dbview parameter is specified as 'CITY,' the displayed entry will simply be the city name designated as the NameKey parameter." *Id.* at col. 12 ll. 3-5. Geotag argues that because the specification does not specifically refer to the field of the "displayed entry," it cannot be a "record." The Court disagrees. First, these lines merely describe the aspect of an "entry" that is "displayed" to the user. The fact that the city name is the only user visible component does not necessarily imply that there is not more to the "entry" as it exists hidden from sight in the database. Second, the lines mention the "NameKey parameter" of the "entry." Table 7 shows that the "NameKey parameter" is a field within each listed "entry."

Elsewhere in the specification, the description explicitly mentions the function of the "Name Key field" in a similar (if not the same) context of Geotag's citation, using "records" in place of "entries" to describe the files within the database:

> Thus, if a user wishes to search for a given file (specified by the Name Key parameter), then only those files within the subdivision of the geographic database 210 defined by Dbview will be searched. For example, if the parameter Dbview is specified as "city," this will cause the search engine to search those records having the designated folder name beneath the city level of the geographic hierarchy so that only points of interest having the given folder name will be searched.

Id. at col. 11 ll. 56-64. The "Name Key parameter" specifies the "given file" (i.e., "entry") within the database to be accessed by the user's search. This indicates that the "Name Key

parameter" is a field within the "entry." Thus, Geotag has not referenced any "entry" that does not rely on the presence of fields to perform the function of an entry.

It is thus apparent that the claimed invention can only function where its "entries" have "fields." To put it another way, the patentee did not disclose any information allowing an individual skilled in the art to understand this invention without employing "entries" with fields. Geotag argues that the various ways within which "entries" is used within the specification justify a broad construction, but it fails to locate any example contradicting the idea that all "entries" need a field.

Geotag further makes a claim differentiation argument. The four independent claims all use the term "entries." *See* '474 Patent, claims 1, 20, 26, and 31. There are four corresponding dependent claims that claim "entries" comprised of "data records," arguably indicating that there are differences between these terms. *See* '474 Patent, claims 18, 24, 27, 36. "[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 1315. The claim differentiation argument here is a weak one, as the dependent claims do not merely claim "entries" comprised of "data records," which would give rise to a strong presumption of different meanings. Instead, the dependent claims add "data records" with additional narrowing limitations not found in the independent claims.[13] For this reason, Geotag's claim differentiation argument is not persuasive.

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[13] For example, dependent claim 18 adds to independent claim 1 the following limitation, "wherein said entries comprises a plurality of data records wherein each of said data records is associated with at least one of said topics and at least one of said geographical areas." The requirement that each "entry" is associated with at least one topic and one geographical area is not found within independent claim 1, meaning there is no presumption that "data records" are narrower than "entries." Dependent claim 24 adds a functionally similar limitation to independent claim 20.

For all these reasons, the Court adopts Microsoft and Google's proposed constructions, construing "entries" as "records."

Term Phrase	Court's Construction
# 12. (collectively) "entry" "entries" (claims 1, 17, 18, 20, 14, 31, 36)	"a record in a database"

E. Additional Terms and Phrases

There are nine additional terms and phrases. Microsoft and Google propose that all of these phrases be construed according to their plain and ordinary meaning. Geotag disagrees, proposing instead specific constructions for each phrase. Geotag does not, however, argue that any of the phrases are used within the patent in a manner inconsistent with the plain and ordinary meaning. Instead, Geotag argues that its proposals should be adopted because they are consistent with an Eastern District of Texas opinion construing the '474 Patent. In those cases, however, none of the parties proposed plain and ordinary meaning constructions. *See Geomas (Int'l) Ltd. v. Idearc Media Services-W., Inc.*, 2008 WL 4966933, *5-17 (E.D. Tex. 2008).[14] Thus, the

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Further, dependent claim 27 adds to independent claim 26 the following limitation, "wherein said entries comprise data records wherein said data records are associated with said topics and wherein said data records contain information about institutions or enterprises." The narrowing of "entries" to "contain information about institutions or enterprises" is not present in independent claim 26, defeating the presumption that "entries" is necessarily different from "data records." Dependent claim 36 adds a functionally similar limitation to independent claim 31.

[14] The `474 Patent was also construed more recently in *GeoTag, Inc. v. Frontier Commc'ns Corp.*, 2013 WL 693852 (E.D. Tex. Feb. 26, 2013). Claim construction is reviewed without deference by the Court of Appeals. There is no reason for one trial court to pay any deference to another trial court's construction of the same patent. First, if the parties are different, as they are here, they may offer different constructions than what were proposed in the other cases. Courts generally will pick a construction of one party of the other. The parties in the first case may have proposed different constructions, and the first court may pick the better option. When the second or third court is presented with a new option, it may be that newer options are better still. Second, even when the same options are

Eastern District of Texas cannot be said to have rejected the plain and ordinary meaning of these terms. Because Geotag does not proffer any argument that these terms are used in a manner distinct from their plain and ordinary meaning, the Court construes them according to their plain and ordinary meaning as written below:

Term phrase	**Court's Construction**
# 13. "database" (claims 1, 20, 31)	Plain and ordinary meaning
# 14. "on-line information" (claims 1, 31)	Plain and ordinary meaning
# 15. "organizing a database of on-line information into a plurality of geographic areas" (claim 31)	Plain and ordinary meaning
# 16. "organizer" (claim 1)	Plain and ordinary meaning
# 17. "search engine" (claims 1, 15, 20, 31, 34, 37)	Plain and ordinary meaning
# 18. "virtual geographic environment" (claim 4)	Plain and ordinary meaning
# 19. "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" (claim 1)	Plain and ordinary meaning
# 20. "said search engine further configured to select at least one geographical area in said hierarchy of geographical areas so as to define a geographical search area"	Plain and ordinary meaning

presented in the later cases, the evidence offered in support will likely be different. Different factual presentations can lead to varying results.

Throughout the briefing, Geotag relies upon the earlier *Geomas* constructions. But since Microsoft and Google propose constructions that were not considered in the other cases, the other cases are not as persuasive as they might be to resolving the claim disputes here.

(claim 20)	
# 21. "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" (claim 31)	Plain and ordinary meaning

The parties should confer and submit a proposed order, suitable for submission to a jury, adopting the foregoing constructions.