IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

SOURCEPROSE CORPORATION[1], PLAINTIFF,	§	
	§	
V.	§	CAUSE NO. A-11-CV-117-LY
	§	
AT&T MOBILITY, LLC; METROPCS COMMUNICATIONS, INC.; SPRINT SPECTRUM L.P.; NEXTEL OPERATIONS, INC.; T-MOBILE USA, INC.; AND CELLO PARTNERSHIP, D/B/A VERIZON WIRELESS, DEFENDANTS.	§	
	§	
GOOGLE, INC., PLAINTIFF,	§	
	§	
V.	§	
	§	
SOURCEPROSE CORPORATION, DEFENDANT.	§	

MEMORANDUM OPINION AND ORDER ON CLAIM CONSTRUCTION

Before the court are Plaintiff's Corrected Opening Claim Construction Brief filed August 29, 2012 (Clerk's Doc. No. 136); Defendants' Opening Claim Construction Brief filed July 20, 2012 (Clerk's Doc. No. 114); Plaintiff's Reply to Defendants' Claim Construction Brief filed August 24, 2012 (Clerk's Doc. No. 129); Defendants' Reply to Plaintiff's Opening Claim Construction Brief filed August 24, 2012 (Clerk's Doc. No. 127); and the parties' claim-construction presentations.

[1] On October 5, 2011, this court granted Plaintiff's Unopposed Motion to Correct Caption, substituting SourceProse Corporation for SourceProse, Inc. (Clerk's Doc. No. 84). Parties are hereby advised to use the correct party names, as reflected in this style, for all future filings.

The court held a claim-construction hearing on September 21, 2012. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). After considering the patent and its prosecution history, the parties' claim-construction briefs, the applicable law regarding claim construction, and argument of counsel, the court now renders its order with regard to claim construction.

I. Introduction

The court renders this memorandum opinion and order to construe the claims of the patents-in-suit in this cause, U.S. Patent No. 7,161,604 ("the '604 Patent") and U.S. Patent No. 7,142,217 ("the '217 Patent"). The asserted patents generally relate to systems and methods for the coordinated manipulation of multiple maps on a display.

Plaintiff SourceProse Corporation ("SourceProse") asserts claims against Defendants AT&T Mobility, LLC ("AT&T"), MetroPCS Communications, Inc. ("MetroPCS"), Sprint Spectrum L.P. ("Sprint"), Nextel Operations ("Nextel"), T-Mobile USA, Inc. ("T-Mobile"), and CellCo Partnership (d/b/a Verizon Wireless) ("Verizon"), for infringement of the '604 and '217 Patents. In addition, Google, Inc. filed an action for declaratory judgment against SourceProse seeking judgement of invalidity and noninfringement regarding the same patents. This court granted the parties' joint motion to consolidate the declaratory-judgment action into the original infringement suit for all purposes and deadlines. *Google, Inc. v. SourceProse, Inc.*, 1:11-CV-637 (W.D. Tex., Sept. 22, 2011) (order granting motion to consolidate). Original Defendants and Declaratory Judgment Plaintiff Google, Inc. present consolidated briefing and claims-construction argument and are referred to collectively as "Defendants," except as otherwise noted.

II. Legal Principles of Claim Construction

Determining infringement is a two-step process. *See Markman,* 52 F.3d at 976 ("[There are] two elements of a simple patent case, construing the patent and determining whether infringement occurred . . . ."). First, the meaning and scope of the relevant claims must be ascertained. *Id.* Second, the properly construed claims must be compared to the accused device. *Id.* Step one, claim construction, is the current issue before the court.

The court construes patent claims without the aid of a jury. *See Markman* 52 F.3d at 979. The "words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). 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. *Id.* at 1313. The person of ordinary skill in the art is deemed to have read the claim term in the context of the entire patent. *Id.* Therefore, to ascertain the meaning of claims, courts must look to the claims, the specification, and the patent's prosecution history. *Id.* at 1314–17; *Markman*, 52 F.3d at 979.

Claim language guides the court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

Claims must also be read "in view of the specification, of which they are a part." *Markman*, 52 F.3d at 979. 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." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed.Cir.2002) (internal citations omitted). In the specification, a patentee may define a term to have a meaning that differs from the meaning that the term would otherwise possess. *Phillips*, 415 F.3d at 1316. In such cases, the patentee's lexicography governs. *Id.* The specification may also reveal a patentee's intent to disclaim or disavow claim scope. *Id.* Such intentions are dispositive for claim construction. *Id.* 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 embodiment. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

The prosecution history is another tool to supply the proper context for claim construction because it demonstrates how the inventor understood the invention. *Phillips*, 415 F.3d at 1317. A patentee may serve as his own lexicographer and define a disputed term in prosecuting a patent. *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed.Cir.2004). Similarly, distinguishing the claimed invention over the prior art during prosecution indicates what the claims do not cover. *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed.Cir.1988). The doctrine of prosecution disclaimer precludes patentees from recapturing specific meanings that were previously disclaimed during prosecution. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed.Cir.2003). Disclaimers of claim scope must be clear and unambiguous. *Middleton, Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed.Cir.2002).

Although "less significant than the intrinsic record in determining the legally operative meaning of claim language," the court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises

may help the court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the court in determining the particular meaning of a term in the pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* Extrinsic evidence may be useful when considered in the context of the intrinsic evidence, *id.* at 1319, but it cannot "alter a claim construction dictated by a proper analysis of the intrinsic evidence." *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1139 (Fed. Cir. 2004).

III. Discussion

A. Agreed Constructions

Prior to the claims-construction hearing, the parties agreed to the construction of two claim terms and agreed that one additional term did not require construction. The following table summarizes the parties' agreement. The court hereby adopts the agreed construction of all claim terms as listed below.

Claim Term/Phrase	Adopted Agreed Construction[2]
geographic coordinates; geographic coordinate set ('604 Patent, all claims) ('217 Patent, all claims)	**latitude and longitude or other coordinates that define a position on the earth**
map ('604 Patent, all claims) ('217 Patent, all claims)	**[No construction necessary]**
boundary ('217 Patent, all claims)	**Something that indicates or fixes a limit or extent. A point cannot be a boundary.**

[2] Throughout, the **bolded** terms indicate the court's adopted construction.

B. Disputed Terms

The parties dispute the construction of 14 terms. The following table summarizes the parties' proposed constructions of the disputed terms.

Claim Term/Phrase	SourceProse's Proposed Construction	Defendants' Proposed Construction
1. georeferencing function ('604 Patent, all claims) ('217 Patent, all claims)	A mathematical function used to associate map coordinates with geographic coordinates	A mathematical function used to change map coordinates into geographic coordinates (or vice versa) without using a lookup table or other predetermined relationships or correspondences
2. map coordinates ('604 Patent, all claims) ('217 Patent, all claims)	coordinates that specify the location of a point on a map	coordinates other than geographic coordinates that specify the location of a point on a map
3. second map ('604 Patent, all claims) ('217 Patent, all claims)	[No construction necessary] Alternatively: a second representation of part or all of the earth	a map distinct from the first map that does not combine or overlay with the first map as an aligned layer
4. map image ('217 Patent, all claims)	a graphic representation of a map	a representation of a flood map, such as a FEMA flood map, stored as a grid of pixels[3] OR a representation of a map stored as a grid of pixels[4]
5. synchronizing; synchronize ('217 Patent, all claims)	[No construction necessary] Alternatively: to manipulate in a coordinated way	synchronizing other than by zooming, rotating, scaling, or otherwise manipulating aligned layers

[3] Only Defendants MetroPCS, Verizon, and T-Mobile, and declaratory judgment plaintiff Google propose this construction.

[4] Only Defendants Sprint and AT&T propose this construction.

6. selecting a boundary; select a boundary ('217 Patent, all claims)	[No construction necessary] Alternatively: a boundary is selected	selecting a boundary other than by zooming, rotating, scaling, or otherwise manipulating aligned layers
7. determining a boundary; determining . . . at least one boundary ('604 Patent, Claim 15)	[No construction necessary] Alternatively: a boundary is determined	determining a boundary other than by zooming, rotating, scaling, or otherwise manipulating aligned layers
8. automatically adjust[ing] a boundary of the second map to correspond to the selected boundary in the first map when the boundary is selected in the first map; automatically adjusting a boundary of the second map to correspond to the selected boundary when the boundary is selected in the first map ('217 Patent, all claims)	[No construction necessary] Alternatively: a boundary of the second map corresponding with the selected boundary of the first map is adjusted automatically	Without user interaction, adjusting a boundary of the second map to correspond to the selected boundary of the first map, such that it appears that the boundaries on the two maps are similarly adjusted at the same time, other than by zooming, rotating, scaling, or otherwise manipulating aligned layers
9. annotating ('604 Patent, all claims)	adding text, graphics, or other displayable data to a map	adding text, graphics, or other visible data to a map
10. annotation; annotation entry ('604 Patent, all claims)	text, graphic or other displayable data	text, graphics, or other visible data
11. [automatically] annotating a second map when a first map is annotated ('604 Patent, all claims)	[No construction necessary] Alternatively: a second map is [automatically] annotated when a first map is annotated	Without user interaction, annotating a second map when a first map is annotated, such that it appears that the two maps are similarly annotated at the same time

12. map processing platform ('604 Patent, Claim 1) ('217 Patent, Claim 11)	data processing system capable of processing data for maps	A platform that reconciles a first map image and second map image
13. geographically substantially similar ('604 Patent, Claims 1, 16, 17, 19)	[Not indefinite]	[Indefinite]
14. the network ('604 Patent, Claim 12)	[Not indefinite]	[Indefinite]

1. "georeferencing function"

Although in agreement that a georeferencing function is fundamentally a mathematical function, the parties present two disputes regarding the construction of this term, which appears throughout the patents-in-suit. The first is whether the term dictates that the mathematical function must change or convert a map's internal coordinates into geographic coordinates, or whether the function merely associates map coordinates with geographic coordinates. The second dispute is whether the patentee disclaimed, during prosecution, a function that utilizes a lookup table or predetermined relationships.

With regard to the first dispute, SourceProse argues that a mathematical function "simply creates an association between the input and the output" of the function. According to SourceProse, the abstract of the '604 Patent indicates that the georeferencing function "provides a set of conversion functions to translate internal coordinates . . . of a first map into geographic coordinates, and to also translate those geographic coordinates into internal coordinates of a second map, and vice versa." SourceProse further argues that the internal coordinates of the first and second maps are not

themselves altered or changed. Referencing the '604 Patent specification, SourceProse argues that the ability to go back and forth between map coordinates and geographic coordinates is a key feature of the georeferencing function:

> A digital map image is said to be georeferenced if a pair of mathematical functions, f, and g, have been determined that can be used to convert *back and forth* between the coordinates of the map image (as defined by the pixels of the image) and the corresponding longitude and latitude of the location of that point.

'604 Patent, Col. 1, Lns. 39-44 (SourceProse's emphasis). SourceProse also argues that U.S. Patent No. 7,190,377 ("the '377 Patent"), which was incorporated by reference in both the '604 and '217 Patents, describes the "georeferencing function" as "relating" or "associating" map and geographic coordinates. In its weakest argument, SourceProse cites a Wikipedia definition of "function" as a "well-understood mathematical term that generally means 'a relation between a set of inputs and a set of outputs such that each input is related to exactly one output.'"

In arguing that the patentee did not intend to limit the meaning of georeferencing function to preclude the use of lookup tables or other predetermined correspondences, SourceProse again points the court to the Wikipedia definition of "function."[5] SourceProse contends that it is

---

[5] It is important to note that, in proffering the Wikipedia definition, SourceProse does not assert that a person skilled in the relevant art would have "commonly understood" the Wikipedia definition *at the time of the invention* or that the Wikipedia definition is related to a technical or scientific dictionary definition that would have been "commonly understood" at that time. Given the susceptibility of Wikipedia entries to inaccurate, untimely, or incomplete information, this court–and many other courts–caution against using Wikipedia citations as primary support for legal arguments. *See e.g. Smartphone Techs. LLC v. Research in Motion Corp.*, 6:10-CV-74-LED-JDL, 2012 WL 489112, at *5, n.3 (E.D. Tex. Feb 13, 2012) (characterizing information from Wikipedia entries as potentially "unreliable," changing "on a day-to-day basis," and suffering from "other more fundamental problems").

"commonly understood" that "[i]n science, functions are sometimes defined by a table that gives the outputs for selected inputs."

Next, SourceProse argues that statements in the prosecution history relating to the Tamano and Moore references do not amount to a disclaimer of lookup tables or predetermined correspondences. SourceProse attempts to distinguish Tamano, arguing that the "link information table" described in the reference is not a georeferencing function. Also, SourceProse argues that the Tamano reference does not provide a table containing correspondences for every single map coordinate with every single geographic coordinate; instead, SourceProse asserts, the reference describes a table of discreet objects or points on a pair of maps being associated in the link table. However, while arguing that not *all* lookup tables were disclaimed, SourceProse conceded during the claims-construction hearing that the patentee "disclaimed Tamano's link information table." Importantly, while arguing against disclaimer, SourceProse briefly revisited the parties' first point of dispute with regard to this term. Specifically, SourceProse provides a helpful example of the patentee's definition of georeferencing function, as argued to the Patent Examiner, stating that the "claimed georeferencing function . . . deriv[es] a mathematical relationship" between objects or points in two maps.

SourceProse also attempts to distinguish Moore, in effect rehashing the patentee's prosecution argument used to overcome the reference with the Examiner. Specifically, SourceProse argues that Moore concerns "geo-coding" pixel coordinates of an object on a single map, not the simultaneous coordinated manipulation of two map images as is discussed by the patents-in-suit. Thus, SourceProse argues, it was not disclaimer to point out the difference between the

predetermined correspondences used on a single map in the Moore reference and the georeferencing function at issue in the patents-in-suit.

Defendants' primary argument with regard to the first dispute is that SourceProse's definition "associating" geographic and map coordinates effectively eliminates the requirement–contained in the claim language–that a georeferencing function must "convert" back and forth between map and geographic coordinates. Defendants argue that "convert" and "change" are synonyms in this context, and that Defendants' proposed definition is based on the requirement that map coordinates must be converted back and forth with geographic coordinates. Further, Defendants indicated at the claims-construction hearing that they do not object to substituting the word "change" in their proposed definition with the word "convert." Finally, Defendants argue that during the prosecution of the '604 Patent, the Examiner specifically rejected the patentee's early attempt to use the word "associate" in the claim language, and that the patentee responded to the rejection by amending the claims to use the word "convert" instead of "associate."

In asserting their position that the patentee disclaimed the use of predetermined correspondences such as lookup tables, Defendants rely on written statements in the prosecution history made by both the patentee and the Examiner. Specifically, Defendants argue that on several occasions the patentee sought to distinguish the Tamano reference's use of predetermined relationships to identify related points on two maps with the conversion occurring though the use of the georeferencing function. According to Defendants, the patentee differentiated between using predetermined values and the mathematical function that comprises the georeferencing fuction. The Defendants further point to the Examiner's notes following a phone conference stating "[a]pplicant explicitly specifies the claim [sic] invention does not use a look up table." Also, Defendants

highlight the patentee's statement that the "[u]se of a look up table as disclosed by Tamano, however, does not constitute at least 'determining . . . at least one boundary of the modified first map image using a georeferencing function . . . ." Finally, the Defendants point to the prosecution history of an abandoned sister application where the Moore reference was distinguished because it "relies upon predetermined correspondences," a methodology that was incompatible with "using a georeferencing function."

The court finds it instructive that SourceProse concedes that the patentee disclaimed Tamano's use of a "link information table." This concession, read in context of the "ongoing conversation with Patent Examiner," indicates that there was, in fact, a disclaimer of the scope of the claim term during the patent's prosecution. The issue for the court to decide is: what are the exact contours of the disclaimer? Although SourceProse argues that not all types of predetermined correspondences were disclaimed, SourceProse is unable to sufficiently distinguish how "link information tables" and "look up tables" are distinct. The two terms are used interchangeably, and the patentee refers to both in distinguishing the claimed georeferencing function from the prior art. Further, it is consistent with the extensive evidence in the intrinsic record that the essential functionality of the georeferencing function is to perform a mathematical calculation on coordinates to dynamically convert back and forth between map and geographic coordinate systems. The focus of much of the intrinsic record is on the dynamic nature of this manipulation. The patentee distinguished this dynamic nature of the georeferencing function as compared to the preprocessed predetermined correspondences between coordinate systems taught in the prior art.

After reviewing the relevant portions of the prosecution history in light of the patents-in-suits' specification, this court concludes that there has been a "clear and unmistakable disclaimer"

of the scope of the claim. Specifically, the patentee disclaimed that a georeferencing function could include the use of a lookup table or other predetermined correspondences.

With regard to the parties' first dispute, the court concludes that neither party's proposed definition is a wholly appropriate characterization of the term's meaning understood in the context of the claim language and patent specification. Although Defendants urge the court that the words "convert" and "change" can be used interchangeably and that Defendants do not oppose a definition using the word convert, the court is unwilling to follow this tack. As SourceProse expressed during the claims-construction hearing, using "convert" to define georeferencing function would be confusing and self-referential, since convert is used throughout the surrounding claim language. Defining georeferencing function using "convert" would likely be unclear to the jury and unhelpful to understanding the term in the context of all the claims. Further, characterizing that map coordinates are "changed" into geographic coordinates by the georeferencing function goes too far. Although Defendants urge that change and convert are synonymous, the court concludes that the specification does not support that map coordinates are actually changed into geographic coordinates.

On the other hand, SourceProse's support for the use of "associate . . . with" is weak, and the court believes that the word associate is too vague to be helpful in the context of this term. However, SourceProse's argument at the claims-construction hearing presents a cogent explanation of the georeferencing function, as it is explained throughout the specification and intrinsic record. Specifically, SourceProse argues that the georeferencing function derives a mathematical relationship between the two coordinate systems. Because both parties emphasize that the georeferencing function works bidirectionally to convert between map and geographic coordinate systems,

emphasizing the mathematical relationship between the coordinates is most consistent with the specification and the court's reading of the claim language.

The court concludes that "georeferencing function" means "**a function used to derive a mathematical relationship between map coordinates and geographic coordinates without the use of a lookup table or other predetermined correspondences**."

2. "map coordinates"

The parties agree that map coordinates are coordinates that specify the location of a point on a map. The only point of contention between the parties is whether map coordinates may also be geographic coordinates. SourceProse argues that the specification specifically describes that, in some cases, map coordinates may actually be geographic coordinates as well. Defendants argue that, because the claims call for converting between map coordinates and geographic coordinates, it would be nonsensical to convert map coordinates that were already geographic coordinates.

SourceProse argues that the patentee recognized that the coordinate systems in vector-based maps are occasionally geographic coordinates. SourceProse further argues that the claims were purposely written broadly so as to be able to operate on a variety of map types with any combination of internal coordinate systems. SourceProse cites the '604 Patent specification as specifically addressing the situation where map coordinates are also geographic coordinates:

> Here, x and y represent the natural internal coordinate system of the map image. *In most cases, a vector-based map image uses longitude and latitude as its internal coordinate system*, if so, it can be considered to be trivially georeferenced already.

'604 Patent, Col. 1, Lns. 53-61 (SourceProse's emphasis). SourceProse further argues that "trivial" functions are a well-known and readily understood concept in mathematics whereby the input of a function equals the output.[6]

Defendants' argument is based entirely on the proposition that, if a map already has geographic coordinates as its internal coordinate system, the conversion step contained in the patent claims becomes unnecessary.[7] Defendants argue that if a vector-based map already uses geographic coordinates, the claimed georeferencing function does not need to be applied because, as was cited by SourceProse, the map image "can be considered to be trivially georeferenced already." If a map image is trivially georeferenced already, Defendants argue, the georeferencing function is redundant. Defendants do not respond to SourceProse's argument that trivial functions are nevertheless functions and that georeferencing function of the claims can be a trivial function.

The court finds no support in the intrinsic record for limiting the definition of map coordinates by explicitly excluding geographic coordinates as Defendants urge. That the patentee intended for the claimed invention to apply to both vector-based maps with geographic coordinates and raster-based maps is supported by the specification. It is clear from the specification that vector maps may have geographic coordinates as their internal coordinate system. The court does not agree

---

[6] SourceProse again offers a Wikipedia definition as the only support for the "well understood" mathematical concept of triviality.

[7] Defendants argue that SourceProse explicitly disclaimed vector maps in a claim-construction brief during litigation relating to U.S. Patent No. 6,631,326 (the '326 Patent). Defendants urge that SourceProse should be held to the argument made in those proceedings before the Eastern District of Texas. *Sourceprose Corp. v. The First American Corp., et al.*, 2:04-CV-265-TJW, Doc. No. 122 (E.D. Tex. Aug. 15, 2005) (Sourceprose opening claim-construction brief). The '326 Patent incorporates the '898 patent by reference. The patents-in-suit also incorporate the '326 Patent by reference. This court has considered and rejects the argument that the alleged disclaimer of vector maps has any bearing on whether map coordinates can include geographic coordinates.

with Defendants that a construction of this term consistent with SourceProse's proposed definition renders superfluous the conversion step contained in the claim language.

The court concludes that "map coordinates" means "**coordinates that specify the location of a point on a map.**"

3. "second map"

Although the parties agree that the term "map" needs no construction, each side expends considerable effort arguing for its preferred construction of "second map." Reduced to simplest terms, SourceProse argues that the term requires no further construction but provides an alternate construction for the court's consideration. Much of SourceProse's argument focuses on discrediting the Defendants' definition.

Defendants urge that the court must decide if, based on the patents' specification, claim language, and prosecution history, the "second map must be distinct from the first map" and "whether the second map can overlay with the first map as an aligned layer." As to the first point, Defendants point out that the two maps, which must share at least some geographic area in common, are at the "very heart of the claimed invention." The court agrees. One does not need to delve very deeply into the patents' specification or claim language to determine that the claimed invention features interactions between and operations on two distinct maps. Although the specification makes plain that the two maps may represent the same geographic region or different geographic regions with some commonality of geographic coverage, there is no support in the specification that the first map and the second map are anything but distinct from each other. Thus, the court concludes that the second map must be distinct from the first map.

Defendants next claim that in prosecuting the patent, the patentee limited the second map and disclaimed claim scope by stating to the examiner that the "'second map' cannot overlay with the first map as an aligned layer." The court notes that the word "layer" is nowhere used within the specification or claim language of the patents-in-suit. Thus, Defendants' arguments to limit the claim term are based solely on statements made during prosecution history. Specifically, Defendants argue that in overcoming the Hsu reference, the patentee disclaimed an interpretation of "second map" that includes the first and second maps combining or overlaying as aligned layers. The court disagrees. Based on the prosecution-history statements referenced by both sides, the court finds insufficient supporting evidence to establish a clear and unequivocal disclaimer of claim scope that would justify the adoption of the Defendants' proposed construction.

In light of definitions of "map" and "layer" in the International Geographic Information System (GIS) Dictionary, an extrinsic source upon which both sides rely, the court concludes that a person skilled in the art would understand a "map" and a "layer" to be two distinct and separate entities in the art of geographic data or mapping. Although a base map and layers may combine to form a type of map, a layer is not necessarily the equivalent to a map. However, as a "usable subdivision of a data set," it is possible that a layer may also be defined as a map. When viewing the prosecution history of the patents-in-suit in light of the Hsu reference, this court finds that the patentee was distinguishing the Hsu manipulation of aligned layers of data points over a base map as opposed to the manipulation of two distinct maps, an essential feature of the claimed invention. Therefore the court will not adopt Defendants' full proposed construction. Moreover, as Defendants appear to focus on potential applications of the term to accused products, the court views much of Defendants' reasoning as most appropriate with regard to a noninfringement argument, not in

asserting a claims-construction position. Because the parties fundamentally agree on the meaning of the term "map," the court believes that Defendants' definition of "second map" explicitly reading out the use of a layer or map that is already aligned with the first map is overly restrictive.

The court concludes that "second map" means "**a second map, distinct from the first map**."

4. "map image"

For this disputed term, SourceProse proposes "a graphic representation of a map," while all Defendants propose that a map image is "a representation of a map stored as a grid of pixels." Only Defendants MetroPCS, Verizon, T-Mobile, and Google add the additional limitation that a map image must be a representation of a "flood map, such as a FEMA flood map."

Defendants that argue for the additional flood-map limitation refer the court to earlier patent litigation in the Eastern District of Texas which both sides reference as the "Flood Map Litigation." *Sourceprose Corp. v. The First American Corp., et al.,* 2:04-CV-265-TJW (E.D. Tex.). In the Flood Map Litigation, SourceProse sought–and received–a construction for the term "map image" that limited the claim term in that litigation to a definition matching the one here proposed by Defendants. Defendants argue that because the Flood Map Litigation patent is incorporated by reference in the patents-in-suit, SourceProse should be bound by its position taken in the earlier litigation. Defendants also argue that the specification for the patents-in-suit repeatedly refers to embodiments that operate on FEMA flood maps.

Although the inventions described in the patents-in-suit may have grown from a kernel originating in the related Flood Map Litigation patents, this court is bound to examine the meaning of claim terms primarily in view of the specification and claim language of the patents at issue here.

As Defendants suggest, there is some similarity in the subject matter and language in both sets of patents. Yet, it is important to note that the patents-in-suit are legally distinct and describe distinct and patentable inventions. After reviewing the patent at issue in the Flood Map Litigation and that court's claim-construction order, this court is of the opinion that the differences in the patents' specification and claim language is significant. The patents are not so closely related as to suggest that an identical construction is required for the sake of consistency. More critical to the goals of claim construction is a close examination of how a term is used in the patent at issue. Here, there is no indication that the term "map image" was intended to be so narrowly limited as to include only flood maps such as FEMA maps. The specification does contain repeated examples of embodiments using FEMA maps; however, these are merely exemplar embodiments. Absent clear intention by the patentee to so limit his claims, this court will not restrict a claim term to examples of embodiments described in the specification. Therefore, this court rejects MetroPCS, Verizon, T-Mobile, and Google's argument to limit "map image" to "flood maps, such as FEMA maps."

The remaining dispute over this term relates to how a map image is stored. All Defendants argue that both SourceProse's position in the Flood Map Litigation and the patents-in-suit's specification limits the definition of map image such that the image is stored as a grid of pixels. SourceProse argues that this construction is inconsistent with the specification because it does not allow for the multiple map image formats described in the patents and would limit the claims to only cover raster images. SourceProse correctly argues that the specification of the patents-in-suit explicitly refer to both vector-map images and raster-map images. Defendants refer the court to the '217 Patent specification at 1:43-44 to bolster their argument that a map image is "defined by the pixels of the image." The court does not read the specification so narrowly. An equally valid

interpretation of the parenthetical cited by Defendants would be that "coordinates of the map image" are "defined by the pixels of the image." There is no clear-and-unequivocal evidence of the inventor's intent that map image be limited as Defendants suggest. Nowhere else in the patent specification does the term "map image" appear to be defined as being stored as a grid of pixels. This court declines to import this limitation without more specific support in the intrinsic record.

The court concludes that "map image" means "**a graphic representation of a map**."

5. "synchronizing;" "synchronize"

6. "selecting a boundary;" "select a boundary"

7. "determining a boundary;" determining . . . at least one boundary"

These three terms are grouped by the parties and argued together. The court will address them together. The parties' dispute centers on one issue: whether during the prosecution of the patents-in-suit the patentee disclaimed "zooming, rotating, scaling, or otherwise manipulating aligned layers" from the plain and ordinary meaning of all three of the disputed terms.

Defendants argument with regard to these terms is substantively identical to their argument on the term "second map." Specifically, Defendants argue that during prosecution, the patentee disclaimed manipulating aligned layers in order to overcome the Hsu reference. For the reasons stated when construing "second map,"[8] this court rejects Defendants proposed construction for substantially the same reasons.

With the exception of the limitation regarding manipulating aligned layers, Defendants appear to accept that the terms "synchronizing," "selecting a boundary," and "determining a

[8] *See* discussion *supra* pp. 17–19.

boundary" carry their otherwise plain and ordinary meaning. There is nothing in the intrinsic record that suggests that the terms are used in a way inconsistent with their plain and ordinary meaning.

The court thus concludes that the terms "synchronizing; synchronize," "selecting a boundary; select a boundary," and "determining a boundary; determining . . . at least one boundary" require no additional construction and shall be given their **plain and ordinary meaning**.

8. "automatically adjust[ing] a boundary of the second map to correspond to the selected boundary in the first map when the boundary is selected in the first map;" "automatically adjusting a boundary of the second map to correspond to the selected boundary when the boundary is selected in the first map"

SourceProse argues that this disputed term, like the previous three, is not subject to prosecution-history disclaimer and should be afforded its plain and ordinary meaning. Defendants, however, argue that the term (1) requires "automatically" to be defined as "without user interaction;" (2) that the word "when" in the disputed claim phrase means "such that it appears that the boundaries. . .are. . .adjusted at the same time;" and that (3) the patentee disclaimed manipulating aligned layers as previously argued. With regard to the third argument, the court rejects Defendants' arguments for substantially the same reasons as previously discussed when construing "second map."[9]

The court also disagrees with Defendants that substituting "without user interaction" for "automatically" advances the goals of claim construction or makes the claim language more easily understood by a jury. The court does not find that the word "automatically" is in need of additional

[9] *See* discussion *supra* pp. 17–19.

clarification or that it is used in the context of the patent any differently than its plain and ordinary meaning. The Defendants' extensive discussion of the claim element in the context of SourceProse's anticipated infringement arguments further reinforces the court's view that Defendants' claim-construction position on this element is more appropriately raised during the infringement phase of this litigation. The court concludes that there is insufficient support in the intrinsic record to justify Defendants' proposed substitution and the court declines to adopt Defendants' definition on this claim element.

Defendants' remaining argument is, essentially, that "when" is a "word of degree" when viewed in the light of "automatically," requiring additional clarification. Defendants refer the court to several places in the patents' specification that characterize the boundary adjustment and annotation being synchronized or occurring simultaneously. The court, however, does not interpret the word "when," viewed in context of the surrounding claim language, as a word of degree. The temporal time frame of the claim language "automatically . . . when" as it exists in the claim establishes a relationship that is sufficiently clear on its face without the need for additional construction. To import the Defendants' proposed definition "such that it appears that the boundaries . . . are . . . adjusted at the same time" would not add to the clarity of the claim language, nor is their sufficient support in the intrinsic record for such a definition. Instead, Defendants' definition would impose a narrowing limitation that is not directly supported in the claim language as interpreted in view of the specification. The court believes that the lengthy construction Defendants seek in order to "clarify" the claim language is unhelpful in light of the relatively simple language of the claim as it exists.

The court concludes that the claim term "automatically adjust[ing] a boundary of the second map to correspond to the selected boundary in the first map when the boundary is selected in the first map; automatically adjusting a boundary of the second map to correspond to the selected boundary when the boundary is selected in the first map" requires no additional construction and shall be afforded its **plain and ordinary meaning**.

9. "annotating"

10. "annotation;" "annotation entry"

The parties are in basic agreement that these terms generally refer to the addition of text, graphics, or other data to a map. However, Defendants argue that such data must always be visible. SourceProse insists that the data need not be visible, merely "displayable." For support, SourceProse references sections in specification that detail that one map may be directly superimposed on top of the other map and that the map may be "opaque." SourceProse argues that because annotations on the second map may be hidden due to the opaque nature of a superimposed map, "opaque map images necessarily require 'displayable' instead of 'visible' annotations." SourceProse also posits that the specification teaches that the user can toggle between the two maps, making annotations on the second map visible when the selected map is visible.

Defendants argue that the specification only teaches that annotations are visible and that for a data point to be an annotation, it must be visible. According to Defendants, for an annotation to be functional, it must be visible to the user. Defendants contend that the claims and specification "repeatedly describe that when an annotation is placed on one map, that same annotation shows up on a second map such that 'it appears that the user is annotating both maps in synchronicity.'"

Although concerned that a jury may be confused by SourceProse's proposed definition, Defendants concede that the visible versus displayable dispute is likely not case dispositive.

The court finds some merit in both parties' positions. The specification teaches that there are potentially times where annotations made on the second map may not always be visible due to the potential opacity of the first map. Yet, Defendants' point is well taken that an annotation must be visible to a user to have any function. Without actually agreeing upon a construction, the parties both essentially argue that a map's annotation is visible to the user when the map is visible to the user. The court finds this to be the essence of how the term is used throughout the patent.

The court concludes that "annotating" means "**adding to a map text, graphics, or other data that is visible when the map is visible.**" "Annotation" and "annotation entry" mean "**text, graphics, or other data on a map that is visible when the map is visible.**"

11. "[automatically] annotating a second map when a first map is annotated"

The disputes central to this term, and the arguments presented by both sides, are substantially the same as disputed term number eight, "automatically adjusting a boundary. . . ."[10] Defendants again argue that "automatically . . .when" must be interpreted as being done "without user interaction" and that the claim is limited such that "it appears that the two maps are similarly annotated at the same time." Defendants additionally argue that the court must construe the term because, though appearing in the claim's preamble, the preamble phrase requires construction. For the substantially the reasons expressed in the court's discussion of disputed term number eight, the court rejects Defendants' proposed definition. Further, the court disagrees that the preamble terms

[10] *See* discussion *supra* pp. 22–24.

here require additional construction because the plain meaning of the preamble is sufficiently clear that it can be understood in the context of the claim language without additional definition.

The court concludes that the term "[automatically] annotating a second map when a first map is annotated" requires no additional construction and shall be afforded its **plain and ordinary meaning**.

12. "map processing platform"

The disputed term "map processing platform" appears only in the claims of the patents-in-suit and nowhere in the specification. SourceProse urges that the specifications' description of a "data processing system" supports its proposed definition. Defendants argue that the patentee disclaimed claim scope during prosecution in an attempt to overcome the Schipper reference. It is from this statement in the prosecution history that Defendants argue that the patentee stated that the claimed map processing platform "reconciles" a first map image and a second map image. The court does not find that the statement cited by Defendants amounts to a clear and unequivocal disclaimer that should so limit the claim term. Moreover, the word "reconciles" is not used in the patents' specification, nor does it clarify what the map processing platform actually does. Conversely, there is support in the specification for SourceProse's proposed construction. The patents specifically mention a rather generic "data processing system." Viewed in the light of the remainder of the patent specification and the claim language, it is reasonable that a person skilled in the art would understand a map processing platform to be a data processing system capable of processing map data as described in the claim language.

The court concludes that "map processing platform" means "**data processing system capable of processing map data.**"

13. "geographically substantially similar"

Defendants claim that this term is indefinite and cannot be construed. The court disagrees. "[R]ead in light of the patent's specification . . . and the prosecution history," the patent does not "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.* 572 U.S. ____, 134 S. Ct. 2120 (2014). The specification's description of Figure 4 provides a workable definition in context of a preferred embodiment: "Map2 is a vector map showing substantially the same region . . .maps displayed are not required to cover identical geographic regions, as long as they share some geographic area in common." The court finds that this description provides substantial guidance for a person skilled in the art to understand the bounds of the term "geographically substantially similar."

The court concludes that this term is **not indefinite**. No further definition is proposed by the parties and the court need not provide further construction.

14. "the network"

Defendants claim that "the network," as used in the '604 Patent's Claim 12, lacks antecedent basis and is thus indefinite. SourceProse argues that Claim 12 contains a scrivener's error and that Claim 12 should properly recite "the system of claim 11 wherein . . ." instead of "the system of claim 1 wherein . . . ." Thus, SourceProse argues, the patentee intended for Claim 12 to depend from Claim 11, where the antecedent basis for "a network" was introduced. Further, SourceProse argues,

Claim 1 does not contain a reference to "a network," so it would not make sense that Claim 12 would depend from Claim 1. SourceProse's position is bolstered by a close examination of Claims 13 and 14 of the same patent. Following a similar structure and referencing "a network" and "the network," Claim 13 is dependent upon independent Claim 1 and Claim 14 is then dependent upon Claim 13. Here, the antecedent basis is introduced correctly.

The court concludes that, based on a consideration of the claim language, surrounding claims, specification, and prosecution history, Claim 12 contains a typographical error that the court may correct. *See Novo Industries, L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003) (holding that, under certain circumstances, district court may correct error in patent where no certificate of correction has been issued). The court's interpretation is not contradicted by anything in the prosecution history or intrinsic record, nor is it subject to reasonable debate. *Id* at 1357. The court believes that a person skilled in the art would almost certainly have read the patent claims in context of the entire patent and realized that Claim 12 was intended to be dependent upon Claim 11 of the '604 patent. The Defendants' arguments to the contrary are unavailing.

For this reason, the court concludes that this disputed term is **not indefinite** and requires no further construction.

C. Summary Table of Adopted Constructions

Claim Term/Phrase	Court's Construction
geographic coordinates; geographic coordinate set ('604 Patent, all claims) ('217 Patent, all claims)	**latitude and longitude or other coordinates that define a position on the earth**
map ('604 Patent, all claims) ('217 Patent, all claims)	**[No construction necessary]**
boundary ('217 Patent, all claims)	**Something that indicates or fixes a limit or extent. A point cannot be a boundary.**
1. georeferencing function ('604 Patent, all claims) ('217 Patent, all claims)	**a function used to derive a mathematical relationship between map coordinates and geographic coordinates without the use of a lookup table or other predetermined correspondences**
2. Map coordinates ('604 Patent, all claims) ('217 Patent, all claims)	**coordinates that specify the location of a point on a map**
3. second map ('604 Patent, all claims) ('217 Patent, all claims)	**a second map, distinct from the first map**
4. map image ('217 Patent, all claims)	**a graphic representation of a map**
5. synchronizing; synchronize ('217 Patent, all claims)	**[plain and ordinary meaning]**

6. selecting a boundary; select a boundary ('217 Patent, all claims)	**[plain and ordinary meaning]**
7. determining a boundary; determining . . . at least one boundary ('604 Patent, Claim 15)	**[plain and ordinary meaning]**
8. automatically adjust[ing] a boundary of the second map to correspond to the selected boundary in the first map when the boundary is selected in the first map; automatically adjusting a boundary of the second map to correspond to the selected boundary when the boundary is selected in the first map ('217 Patent, all claims)	**[plain and ordinary meaning]**
9. annotating ('604 Patent, all claims)	**"adding to a map text, graphics, or other data that is visible when the map is visible"**
10. annotation; annotation entry ('604 Patent, all claims)	**"text, graphics, or other data on a map that is visible when the map is visible"**
11. [automatically] annotating a second map when a first map is annotated ('604 Patent, all claims)	**[plain and ordinary meaning]**
12. map processing platform ('604 Patent, Claim 1) ('217 Patent, Claim 11)	**"data processing system capable of processing map data"**
13. geographically substantially similar ('604 Patent, Claims 1, 16, 17, 19)	**[not indefinite]**
14. the network ('604 Patent, Claim 12)	**[not indefinite]**

IV. Conclusion

For the above reasons, the court construes the claims as noted and so **ORDERS**. No further claim terms require construction.

IT IS FURTHER ORDERED that this case is set for a **Scheduling Conference** on **Friday, August 8, 2014, at 9:30 a.m.**, in Courtroom 7, Seventh Floor, United States Courthouse, 501 W. 5th Street, Austin, Texas 78701. The parties shall meet and confer in advance of that date in an attempt to settle this case. If the case is not settled, the parties shall confer in an attempt to reach agreement on a schedule to follow for the remainder of this case. The court will render a scheduling order as a result of the August 8, 2014 conference.

SIGNED this 24th day of June, 2014.

LEE YEAKEL
UNITED STATES DISTRICT JUDGE