

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA**

CASE NO: 14-80651-CV-MIDDLEBROOKS

ADVANCED GROUND INFORMATION
SYSTEMS, INC.,

Plaintiff,

v.

LIFE360, INC.,

Defendant.

MARKMAN ORDER

On November 4, 2014, the Court held a claim construction hearing. Based on the Parties' submissions and arguments at the hearing, the Court issues the following claim construction order.

I. BACKGROUND.

On May 16, 2014, Plaintiff Advanced Ground Information Systems, Inc. ("AGIS") filed a complaint, alleging patent infringement by Defendant Life360, Inc. ("Life360"). (DE 1). Life360 has developed a smartphone software application, that AGIS alleges infringes the following four patents: U.S. Patent No. 7,031,728 (the "'728 Patent"); U.S. Patent No. 7,672,681 (the "'681 Patent"); U.S. Patent No. 7,764,954 (the "'954 Patent"); and U.S. Patent No. 8,126,441 (the "'441 patent") (collectively, "patents-in-suit").¹ While the specifications vary from another, the patents-in-suit relate to a method and apparatus for establishing a communication network for participants having mobile devices. The '728 patent was filed first,

¹ The named inventor of the patents-in-suit, Malcolm K. Beyer, Jr. ("Applicant"), is the founder and CEO of AGIS.

while the '681 patent, the '954 patent, and the '441 patent were filed as continuations-in-part of the '728 patent. AGIS alleges that Life360 infringes claims 3, 7 and 10 of the '728 patent, claims 1, 5, and 9 of the '681 Patent, claims 1 and 2 of the '954 Patent, and claims 1-8 of the '441 Patent.

A. The '728 Patent.

The '728 Patent describes a mobile device with a display screen. *See, e.g.*, '728 Patent, 1:6-15, 11:10-42. The screen depicts the location and status of other participants in the communication network on a map. *Id.* at 11:10-42. Symbols are generated on each of the participants' cellular phones representing the latitude and longitude of other participants. *Id.* at 3:46-48. A participant in the communication network may initiate a telephone call, send a text message, or exchange data or pictures with other participants on the network by touching a symbol representative of the other participant on the screen. *Id.* at 11:10-42.

B. The '681 Patent.

The '681 Patent claims priority from the '728 Patent as a continuation-in-part, and claims a system and method for creating and modifying the items displayed on the touch screen displays of the participants' mobile devices. *See, e.g.*, '681 Patent, 9:60-11:56. Specifically, the focus of the '681 Patent is to enable "a designated administrator using a personal computer (PC) or other input device" to "reprogram all user and network participants' cell phone devices to change, modify or create new virtual soft switch names and symbols for a different operating environment." *Id.* at 1:64-2:14.

C. The '954 Patent.

The '954 Patent expands upon the teachings of the '728 Patent and describes systems that allow users "to set up either a public peer to peer communications network where all can access

or a private peer to peer communications network” ‘728 Patent at 1:52-57. In one embodiment, the ‘954 Patent claims a method wherein a participant’s mobile device may communicate with a computer server from which the participants may download map information to their mobile devices. *See id.* at 7:25-64, 10:32-44. In another embodiment, the ‘954 Patent discloses a method wherein soft switches are depicted on the touch screen display of the mobile device, but also may be hidden in order to increase the available display area for other purposes. *Id.* at 10:56-11:16.

D. The ‘441 Patent.

The ‘441 Patent further adds to the ideas of the ‘728 Patent. In one embodiment, the ‘441 Patent claims a “polling” method in which a first participant sends a polling message to a second participant which causes the second participant’s information, such as their location, to be reported to the other participants in the network. *See, e.g.,* ‘441 Patent, 8:29-63. In another embodiment, the ‘441 Patent claims a method for creating a communication network wherein the participants share a common interest such as, for example, friendship. *Id.* at 9:19-58.

II. LEGAL STANDARD.

A. Claim Construction.

Claim construction is a question of law to be determined by the Court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996). Claim construction analysis begins by looking to the words of the claims. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). The words of the claims are “generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed.

Cir. 2005). The ordinary and customary meaning of a claim term may be determined solely by viewing the term within the context of the claim's overall language. *See Phillips*, 415 F.3d at 1314 (“[T]he use of a term within the claim provides a firm basis for construing the term.”). Moreover, the use of the term in other claims may provide guidance regarding its proper construction. *See id.* (“Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.”). Claims should be construed “without reference to the accused device.” *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (emphasis omitted). Once the proper meaning of a term used in a claim has been determined, the term must have the same meaning for all claims in which it appears. *See Phillips*, 415 F.3d at 1314 (citations omitted).

A claim should also be construed in a manner that is consistent with the patent's specification. *See Markman*, 52 F.3d at 979 (“Claims must be read in view of the specification, of which they are a part.”). Typically, the specification is the best guide for construing the claims. *See Phillips*, 415 F.3d at 1315. Precedent forbids, however, a construction of claim terms that imposes limitations not found in the claims or supported by an unambiguous restriction in the specification or prosecution history. *Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1347 (Fed. Cir. 1998).

Another tool to supply proper context for claim construction is the prosecution record and any statements made by the patentee to the United States Patent and Trademark Office (“PTO”) regarding the scope of the invention. *See Markman*, 52 F.3d at 980. A patent's “prosecution history . . . consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317 (citation omitted). However, the Federal Circuit has warned that “because the prosecution history

represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* “Nonetheless, the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* However, in order to conclude that a patentee narrowed his claim, the disclaimer must have been with “reasonable clarity and deliberateness.” *Superguide Corp. v. Directv Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (quotations omitted).

District courts may also consider extrinsic evidence, such as dictionaries or technical treatises, to help understand the underlying technology and the manner in which one skilled in the art might use claim terms. *See Phillips*, 415 F.3d at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert’s conclusory, unsupported assertions as to a term’s definition is entirely unhelpful to a court. *Id.* Ultimately, however, extrinsic evidence is “less significant than the intrinsic record in determining the legally operative meaning of claim language,” and a court should discount any extrinsic evidence “that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.” *Id.* at 1317-18 (quotations omitted).

B. Means-Plus-Function Claims.

a. Invocation of 35 U.S.C. § 112(6).

It is axiomatic that patent claims must “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention.” *Function Media, L.L.C v. Google, Inc.*, 708 F.3d 1310, 1317 (Fed. Cir. 2013) (citing 35 U.S.C. § 112(2) (2006)).² However, pursuant to 35 U.S.C. § 112, paragraph 6, a claim element can be expressed as a means for performing a specified function without reciting the structure or material that performs the claimed function. 35 U.S.C. § 112(6). “The price that must be paid for use of that convenience is limitation of the claim to the means specified in the written description and equivalents thereof.” *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). If the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee “has not paid that price but is rather attempting to claim in functional terms unbounded by any reference to structure in the specification,” which is “impermissible under the statute.” *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1212 (Fed. Cir. 2003).

Whether an element of a claim is in means-plus-function form is a claim construction question. *See Inventio AG v. Thyssenkrupp Elevator Am. Corp.*, 649 F.3d 1350, 1356 (Fed. Cir. 2011). Use of the term “means” creates a presumption that the element is to be construed in accordance with § 112(6). *See Betcon, Dickinson & Co. v. Healthcare Grp.*, 616 F.3d 1249, 1262 (Fed. Cir. 2010) (citations omitted). This presumption may be rebutted, however, when the claim element recites sufficiently definite structure or material to perform the claimed function.³

² Because the patents-in-suit were issued prior to the enactment of the Leahy–Smith America Invents Act (“AIA”), Pub.L. No. 112–29, 125 Stat. 284 (2011), the citations to § 112 in this opinion refer to the statute as it existed prior to the AIA.

³ To determine whether a claim term that lacks the word “means” is subject to § 112 the court must consider the words of the claims themselves, the written description, the prosecution history, and any relevant intrinsic evidence. *See Inventio AG*, 649 F.3d at 1356.

See Inventio AG, 649 F.3d at 1356. Simply put, use of the word “means” creates a rebuttable presumption that the drafter intended to invoke § 112(6), while failure to use the words “means” creates a rebuttable presumption that the drafter did not intend the claims to be governed by § 112(6). *See Personalized Media Communications v. Int’l Trade Comm’n*, 161 F.3d 696, 704 (Fed. Cir. 1998). In determining whether these presumptions have been rebutted, the challenger must establish by a preponderance of the evidence that the claims are to be governed by § 112(6). *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371 (Fed. Cir. 2003).

Once the Court determines § 112(6) applies, construction of a means-plus-function limitation involves two steps. First, the court must identify the claimed function. *See Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1324 (Fed. Cir. 2001). After identifying the claimed function, the court must then determine what structure, if any, disclosed in the specification corresponds to the claimed function. *See id.* In order to qualify as corresponding, the structure must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function. *See Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002) (citations omitted). If the specification does not disclose sufficient structure to perform a claimed function, the claim term may be indefinite. *See id.* at 1113-19.

b. Indefiniteness of Means-Plus-Function Claims.

For computer-implemented systems and methods invoking 35 U.S.C. § 112(6), the corresponding structure(s) or act(s) in the specification must amount to “more than simply a general purpose computer or microprocessor” to satisfy the definiteness requirement of 35 U.S.C. § 112(2). *Aristocrat Techs. Australia v. Intern. Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). The mere disclosure of a general purpose computer or microprocessor that performs

a recited function is insufficient to avoid the prohibition on “pure functional claiming.” *Id.* Rather, in instances where functions are to be performed by conventional computer hardware and data processing equipment, it is a software process being executed by the hardware that performs the function. *Id.* A means-plus-function limitation corresponding to the mere disclosure of software implemented on a computer is invalid as indefinite without the disclosure of some corresponding algorithm that is executed by that computer. *See Function Media*, 708 F.3d at 1318. The specification must include such an algorithm, expressed “in any understandable terms including as a mathematical formula, in prose, or a flow chart, or in any other manner that provides sufficient structure.” *Noah Sys., Inc. v. Intuit, Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012).

The requirement for a specific algorithm is imposed on computer-implemented patent claims invoking § 112(6) “[b]ecause general purpose computers can be programmed to perform very different tasks in very different ways,” and “simply disclosing a computer as the structure” is insufficient. *Aristocrat*, 521 F.3d at 1333. Without disclosing any corresponding structure, “one of skill simply cannot perceive the bounds of the invention.” *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1341 (Fed. Cir. 2008). As a result, the Federal Circuit has typically analyzed means-plus-function claim limitations corresponding to software, or hardware having software, as indefinite for a lack of corresponding structure. *See, e.g., Blackboard v. Desire2Learn*, 574 F.3d 1371, 1382-87 (Fed. Cir. 2009).

III. DISCUSSION.

A. Means-Plus-Function Claims.

i. “*symbol generator*”

AGIS's Proposed Construction	Life360's Proposed Construction	Claims
Ordinary meaning, no construction necessary Does not implicate 35 U.S.C. § 112(6)	Invokes 35 U.S.C. § 112(6) and is indefinite. Structure: An undisclosed algorithm or software function. Function: generate symbols that represent each of the participants' cell phones in the communication network on the display screen ('728 Patent, claim 3; '681 Patent, claim 5); generates symbols on said touch display screen ('728 Patent, claim 10; '681 Patent, claim 9).	'728 Patent, claims 3, 10 '681 Patent, claims 5, 9

The term “symbol generator” appears in claims 3 and 10 of the '728 Patent, and claims 5 and 9 of the '681 Patent. Life360 argues the terms “symbol generator . . . that can generate symbols” and “symbol generator . . . for generating symbols” are generic placeholders for the claimed functions and should be interpreted under 35 U.S.C. § 112(6). (DE 47 at 14). Life360 asserts claims 3 and 10 of the '728 Patent, and claims 5 and 9 of the '681 Patent, are indefinite under 35 U.S.C. § 112(2)⁴ because the specification fails to disclose an algorithm for generating symbols. (*Id.*). AGIS refutes this argument, and asserts that the term “symbol generator” itself connotes a definite structure to those skilled in the art and, therefore, there is no basis for the application of § 112(6). (DE 48 at 7).

Here, the specification fails to mention or describe the definition of “symbol generator.” *See Grobler v. Apple Inc.*, 12-cv-01534, 2014 WL 1867043, at *8 (N.D. Cal. May 6, 2014) (finding a lack of description in the specification of a particular term to be relevant in finding a software “verification mechanism” invokes § 112(6)). A plain reading of the term in context of

⁴ The second paragraph of 35 U.S.C. § 112 reads:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

the relevant claim language suggests the term “symbol generator” is analogous to a “means for generating symbols” because the term is simply a description of the function performed. *See Blackboard*, 574 F.3d at 1383. Importantly, the term is not “used in common parlance or by persons of skill in the pertinent art to designate structure.” *See Lighting World, Inc. v. Birchwood Lighting, Inc.*, 383 F.3d 1354, 1359 (Fed. Cir. 2004). AGIS’s own expert, Dr. Benjamin Goldberg (“Dr. Goldberg”), is “not aware” whether the term “symbol generator” has a meaning in computer science. *See Goldberg Depo.* at 22:7-12. In fact, at the *Markman* hearing, Dr. Goldberg testified he was aware of the terms “symbol” and “generator” separately, but was unaware of use the specific term “symbol generator” within the field of computer science. (DE 71 at 50). Accordingly, despite lacking the word “means,” the Court finds the term “symbol generator” is a “coined term lacking clear meaning” that falls within the scope of § 112(6). *See Personalized Media*, 161 F.3d at 704.

1. Indefiniteness.

Concluding that the claim term “symbol generator” invokes § 112(6), the Court must attempt to construe the terms by identifying the “corresponding structure . . . described in the specification” to which the claim term will be limited. *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1097 (Fed. Cir. 2008). “If there is no structure in the specification corresponding to the means-plus-function limitation in the claims, the claim will be found invalid as indefinite.” *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). Life360 argues that the specifications of the ‘728 Patent and ‘681 Patent do not disclose any corresponding structure for the “symbol generator” recited by the claims. AGIS refutes this argument, stating “the structure of a symbol generator is standard software code module that is well known in the art for simply creating symbols to be placed on a display screen.” (DE 48 at 8) (citing Goldberg

Depo. ¶ 21). Additionally, AGIS points to the following description of the “symbol generator” as defining its “structure”:

The communication device is also given a database that includes a geographical display on the LCD display and software that coordinates the x and y coordinates on the LCD display touch screen with the geographical display. There is also software that places the symbols on the geographical display that represent other cellular phone users that are part of the communications net.

‘728 Patent, 10:44-46.⁵

While the specification does describe, in general terms, that symbols are generated based on the latitude and longitude of the participants, it fails to contain an “algorithm” or description as to how those symbols are actually “generated.” *See Aristocrat*, 521 F.3d at 1333 (finding that, even though the specification and claims clearly restricted a “game control means” to “algorithms” that produced a specific result, the lack of an explicit algorithm rendered the claims indefinite). The mere disclosure of a general purpose computing device in the ‘728 Patent is not structurally sufficient because such devices “can be programmed to perform very different tasks in very different ways,” and “simply disclosing a computer as the structure” is insufficient. *Id.* at 1333; *accord Blackboard*, 574 F.3d at 1386.

Additionally, the Court is unpersuaded by Dr. Goldberg’s testimony. Dr. Goldberg contends that one skilled in the art “would have known how to utilize common graphics libraries along with corresponding application programming interfaces (‘APIs’) to generate images on a display.” (DE 48-5 at 6). However, this analysis seems to go to the issue of enablement, not indefiniteness, by focusing on what one skilled in the art *could* devise based on the specification. *See Function Media*, 708 F.3d at 1319 (noting that “it is well established that proving that a

⁵ The Court notes that as a continuation-in-part, the ‘728 Patent, the ‘681 Patent incorporates the references in the ‘728 Patent. Thus, if the ‘728 Patent denotes sufficient structure, then the claim term, as it appears in the ‘681 Patent, likewise has sufficient structure to one skilled in the art.

person of ordinary skill could devise some method to perform the function is not the proper inquiry as to definiteness – that inquiry goes to enablement”) (citing *Blackboard*, 574 F.3d at 1385). As the Federal Circuit has noted:

A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function. To allow that form of claiming under section 112, paragraph 6, would allow the patentee to claim all possible means of achieving a function.

Id. The graphics libraries and APIs that supposedly perform this function are not mentioned by the patents, much less disclosed. Thus, the disclosure of “software that coordinates the x and y coordinates on the LCD display touch screen” seems to describe a function, not structure. Accordingly, the Court finds the term “symbol generator” is indefinite.⁶

ii. “CPU software for selectively polling other participants”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
Ordinary meaning, no construction necessary Does not implicate 35 U.S.C. § 112(6)	Invokes 35 U.S.C. § 112(6) and is indefinite. Structure: An undisclosed algorithm or software function residing in the CPU of the cellular phone. Function: selectively polls other participants [<i>see agreed-to construction</i>]	‘728 Patent, claim 10

The term “CPU software for selectively polling other participants” appears in claim 10 of the ‘728 Patent. The Parties have agreed to a construction of “selectively polling other participants” as “selectively sending a command to the cellular phones of other participants to

⁶ Often, when a court finds a means-plus-function claim term is indefinite, the court will invalidate the claim in which the term appears. *See, e.g., Net MoneyIn, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008) (upholding district court’s finding of invalidity after determining a means-plus-function claim term was indefinite). Here, Life360 has not asked for a finding of invalidity, nor have the parties briefed the issue. The Court, therefore, refrains from addressing the issue of invalidity in this order.

which those cellular phones respond.” (DE 45 at 2). Accordingly, the Parties’ dispute focuses on the phrase “CPU software for.”

AGIS argues the words “CPU software for” describes a structure that selectively polls other participants. (DE 48 at 8). AGIS contends “this is easily understood from the ordinary English meaning of the claim language, and this term does not require construction.” (*Id.*) (citing Goldberg Decl., ¶¶ 23-25). Additionally, AGIS asserts Dr. Goldberg’s testimony establishes that “CPU software for selectively polling other participants” connotes sufficient structure to one of ordinary skill in the art. Dr. Goldberg opines that “one of ordinary skill in the art would have understood ‘CPU software for’ to be a standard module of software code that was well known in the art.” (Goldberg Decl., ¶ 24). Dr. Goldberg further explains that:

One of ordinary skill in the art would have understood that there existed classes of software subroutines that programmers would have used to selectively send a command to the cellular phones of other participants whose cellular phones respond. For example, one of ordinary skill in the art would have known how to utilize common networking and user interface libraries along with corresponding APIs to select a user via a user interface, such as a touch screen, and then to send that user’s cellphone polling message via a known networking interface.

(*Id.*). Dr. Goldberg then concludes that “it is my opinion that the term ‘CPU Software’ would have been sufficient to identify these modules of program code to one of ordinary skill in the art.” (*Id.* at ¶ 25). Accordingly, AGIS argues that “CPU software” is not a “nonce” word or a “coined” term lacking a clear meaning and should not be construed under §112(6). (DE 58 at 6) (citing Goldberg Decl., ¶¶ 23-25).

Life360 disagrees, and argues the term “CPU software for” is a generic placeholder term, analogous to “module for,” “machine for” or “device for,” lending itself to interpretation as a means-plus-function limitation. (DE 47 at 18). Life360 contends that the word “for” indicates the Applicant’s decision to phrase the claims purely in terms of function, rather than structure.

(*Id.*). Additionally, Life360 notes that Dr. Goldberg testified during deposition that the specifications did not describe “any specific subroutines or software libraries . . . used to selectively poll.” (DE 57 at 5) (citing Goldberg Depo. at 28:25-29:8).

Here, the claim language does not recite the term “means,” and the presumption that the limitation does not invoke §112(6) applies. *See Personalized Media Comms.*, 161 F.3d at 702. The claim term in dispute requires “CPU software for selectively sending a command to the cellular phones of other participants to which those cellular phones respond.” (DE 45 at 2). The natural reading of this claim term suggests some type of “CPU software” serves the function of selectively polling other participants in the network. The central issue is, therefore, whether the term “CPU Software” provides sufficient structure to avoid the application of § 112(6).

The claimed structure for achieving the “polling” function is “CPU Software.” The Patent claims and specification do not define “CPU,” “software,” or “CPU Software.” Without guidance from the intrinsic record, the Court turns to extrinsic evidence. Here, Dr. Goldberg opines that the term “CPU software” denotes sufficient structure for one of ordinary skill in the art. However, Dr. Goldberg’s testimony only seems to discuss how the claim language is sufficient to enable one skilled in the art to create software for “selectively polling other participants.” *See Function Media*, 708 F.3d at 1319. “[A]ttempting to fill in the gaps of the specification by importing off the shelf software or asserting that individuals of ordinary skill in the art would understand how to accomplish the function described with the assistance of such off the shelf software does not solve the inadequacy of the disclosure.” *See Manual of Patent Examining Procedure (MPEP)*, Ninth Ed. (March 2014), § 2181(2)(B).

With little guidance from the intrinsic and extrinsic record, it appears the term “CPU software for” is used to refer to a generic software function or algorithm. The term “software”

standing alone connotes no more structure than the term “means.” See MPEP, § 2181(1)(A) (noting the following terms as examples of non-structural generic placeholders that may invoke § 112(6): “mechanism for,” “module for,” “device for,” “unit for,” “component for,” “element for,” “member for,” “apparatus for,” “machine for,” or “system for.”). The Court, therefore, finds that Life360 has overcome the presumption against applying § 112(6) because “the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *CCS Fitness v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002) (internal citations omitted). Accordingly, the term “CPU software for” is subject to interpretation as a means-plus-function claim.

1. Indefiniteness.

Life360 argues that the specification of the ‘728 Patent does not disclose any corresponding structure for the “CPU software” recited by the claims. (DE 47 at 20). With regard to claim 10 of the ‘728 Patent, Life360 asserts the specification only generally describes the function of “selectively polling participants” but contains no algorithm for how this is actually carried out. (*Id.*). Additionally, Life360 argues the disclosure of a CPU in the ‘728 Patent “is not structurally sufficient to avoid indefiniteness because such devices “can be programmed to perform very different tasks in very different ways’ and ‘simply disclosing a computer as the structure’ is insufficient.”” (*Id.*) (citing *Aristocrat*, 521 F.3d at 1333).

AGIS disagrees, and argues that the claim term is “not indefinite because the specification of the ‘728 patent adequately discloses an algorithm sufficient to describe the structure.” (DE 58 at 7) (citing Goldberg Decl., ¶¶ 26-27). The algorithm reads as follows:

To initialize the communications net, the cellular phone one operator selects, from a list, the other users (or all of the), that the operators desires to be part of the communications net. The system then polls the selected phones to activate and

become part of the communications net. The selected phones then transmit their positions to all the other phones in the established net.

‘728 Patent, 4:39-46.

The Court does not find that this “algorithm” connotes sufficient structure to render the claim term definite. Indeed, an applicant may express the algorithm in any understandable terms including as a mathematical formula, in prose, in a flow chart, or “in any other manner that provides sufficient structure.” *Finisar*, 523 F.3d at 1340. However, the algorithm cited by AGIS does not describe with any specificity how the software achieves the “polling function.” Additionally, the mere disclosure of a CPU is not sufficient to avoid indefiniteness because such devices “can be programmed to perform very different tasks in very different ways,” and “simply disclosing a computer as the structure” is insufficient. *Aristocrat*, 521 F.3d at 1333. For the forgoing reasons, the term “CPU software for selectively polling other participants” is indefinite for a lack of corresponding structure in the specification.

iii. “CPU software that causes the exchange of data with other participants with a cellular phone”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
Ordinary meaning, no construction necessary Does not implicate 35 U.S.C. § 112(6)	Invokes 35 U.S.C. § 112(6) and is indefinite. Structure: An undisclosed algorithm or software function residing in the CPU of the cellular phone. Function: causes the exchange of data with other participants with a cellular phone	‘681 Patent, claim 9

The term “CPU software that causes the exchange of data with other participants with a cellular phone” appears in claim 9 of the ‘681 Patent. Life360 argues that the term invokes § 112(6). (DE 47 at 18). Specifically, Life360 asserts “CPU software that” is a generic nonce term that serves as a mere placeholder for “means.” (*Id.*). Further, Life360 argues that the term

“that” in claim 9 of the ‘681 Patent “indicates the Applicant’s decision to phrase the claims purely in terms of function rather than structure.” (*Id.* at 19) (citing *Raytheon Co.*, 724 F.2d at 967) (holding that functional claim language introduced by “so that” invokes § 112(6)).

AGIS argues that Life360’s proposed construction should be rejected “because this claim term does not implicate 35 U.S.C. § 112, ¶ 6.” (DE 48 at 14). AGIS asserts the words “CPU software” “describe the structure that causes the exchange of data with other participants.” (*Id.*). Additionally, Dr. Goldberg opined “CPU software that causes the exchange of data with other participants with a cellular phone” would have been understood by one of ordinary skill to be specific software code that was well known in the art. (DE 58 at 8) (citing Goldberg Decl., ¶¶ 32-34).

As with the previous “CPU software” term, this claim limitation does not recite the word “means,” and the presumption that the limitation does not invoke §112(6) applies. *See Personalized Media Comms.*, 161 F.3d 696, 702 (Fed. Cir. 1998). The claim term in dispute requires “CPU software that causes the exchange of data with other participants with a cellular phone.” The natural reading of this claim term suggests some type of “CPU software” serves the function of exchanging data with other participants with a cellular phone. For the reasons stated previously, the Court finds that the use of the term “CPU software” invokes § 112(6) because it “recites function without reciting sufficient structure for performing that function.” *Mass. Inst. of Tech.*, 462 F.3d at 1353 (quotation marks omitted).

1. Indefiniteness.

Having construed the claim as “means-plus-function,” AGIS argues that the claim term is definite because “the specification of the ‘681 Patent adequately discloses algorithms sufficient to connote structure.” (DE 58 at 9) (citing Goldberg Decl., ¶¶ 35-36). For example, AGIS

asserts “the ‘681 patent describes a “[c]onventional PDA/cellular phone[]” that includes conventional “digital messaging software” that transmits information to other cellular phone devices.” (*Id.*). AGIS cites the following “algorithm” for data exchange:

Upon receiving a soft switch activation message, the ACS accesses the appropriate task execution software which accomplishes the required tasks including: entry of track data, entry of track amplification data, transmission of alpha/numeric messages, photographs, videos, display of messages to be read, selection of map types, placing voice calls, placing conference calls and 800 conference calls, presenting different potential operator selections, control of the display actions, polling network participants, establishing nets of participants (groups) so that communications with all in the group can be accomplished with a single soft switch action, and dropping a previously entered track.

‘681 Patent, 9:43-54. Additionally, AGIS contends that the following exemplary embodiment discloses sufficient structure:

The method, device and system include the ability of a specific user device to provide polling in which other cellular phone devices, using SMS, internet or WiFi, report periodically based on criteria such as time, speed, distance traveled, or a combination of time, speed and distance traveled. The user can manually poll any or all of the cell phone devices that are used by all of the participants in the communication network having the same devices. The receiving cellular phone device application code responds to the polling command with the receiving cellular phone device’s location and status, which could include battery level, GPS status, signal strength and entered track data. Optionally, the cell phone device users can set their cell phone devices to report automatically, based on time or distance traveled intervals or another criterion.

Id. at 9:5-19.

Life360 argues that the specification of the ‘681 Patent does not disclose any corresponding structure for the “CPU software.” (DE 47 at 20). Specifically, Life360 argues “the specification only generally describes that data is exchanged between participants with cellular phones but does not include any specific algorithm for such an exchange.” (*Id.*). The Court agrees. The “algorithms” cited by AGIS further describe the data exchange *function*, but do not detail how the software operates to achieve the desired function. The Court also reviewed

the testimony of Dr. Goldberg, and is unconvinced that the ‘681 Patent discloses sufficient structure to one of ordinary skill in the art to know the boundaries of the claimed invention. Accordingly, the Court finds the claim term “CPU software that causes the exchange of data with other participants with a cellular phone” is indefinite.

B. Remaining Claims for Construction.

i. “entered items of interest”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
Ordinary meaning, no construction necessary	“items that have been added by, and are of interest to, one or more of the network participants” An “entered item of interest” is not a fixed location such as a business, house, hospital, or street location.	‘728 Patent, claim 3 ‘681 Patent, claim 5

The term “entered items of interest” appears in claim 3 of the ‘728 Patent and claim 5 of the ‘681 Patent. While AGIS argues that the term “entered items of interest” does not require construction, Life360 argues that the Court should construe the term to mean “items that have been added by, and are of interest to, one or more of the network participants.” (DE 47 at 10). Life360 further argues that an “entered item of interest” is not a fixed location such as a business, house, hospital, or street location.

“Entered items of interest” does not appear to have a specialized or technical meaning in the context of the asserted patents. A review of the ‘728 and ‘681 Patents demonstrates the term refers to items that can be entered on the map displayed on the participants’ devices. *See* ‘728 Patent 10:65-67. AGIS does not appear to contest the portion of Life360’s proposal that construes “entered items of interest” as “items that have been added by, and are of interest to, one or more of the network participants.” (DE 58 at 10). Because the first portion of Life360’s

proposal captures the meaning and scope of “entered items of interest” in a manner which is consistent with the intrinsic evidence, the Court adopts the first sentence of Life360’s construction.

Additionally, Life360 proposes that an “entered item of interest” is *not* a fixed location such as a business, house, hospital, or street location. (DE 47 at 10). Life360 argues that this limitation is necessary because the claims and written description of the ‘728 and ‘681 Patents distinguish between “entered items of interest” and “fixed locations.” (*Id.*). Because the terms “entered items of interest” and “fixed locations” are listed separately in the claims, Life360 asserts each are presumed to have separate and distinct meanings. (DE 47 at 11) (citing *CAE Screenplates v. Heinrich Fiedler GmbH*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (holding that the use of different terms in a claim creates a presumption that the terms have different meanings).

Indeed, the terms “entered items of interest” and “fixed locations” are presumed to have different meanings. However, contrary to Life360’s contentions, there is nothing in the patent specifications to suggest that the terms are mutually exclusive. In fact, Life360’s proposed construction, which seeks to exclude “fixed location[s],” such as businesses, houses, hospitals, or street locations, directly contradicts the disclosure of the patent specifications. The specifications of the ‘728 and ‘681 Patents provide that each participant may use their cellular device to “enter other entities (locations of people, vehicles, buildings, facilities, and other entities) into its database.” ‘728 Patent, 3:48-52; ‘681 Patent, 7:19-25. The Federal Circuit has cautioned against reading negative limitations into claims where there is no express disclaimer or independent lexicography in the written description or prosecution history that would justify adding the negative limitation. *See Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1322-24 (Fed. Cir. 2003). Here, there is no such disclaimer, lexicography, or any other basis for the

proposed negative limitation. Accordingly, the Court declines to adopt the second portion of Life360’s proposed construction, and, therefore, construes the term “entered item of interest” as “items that have been added by, and are of interest to, one or more of the network participants.”

ii. “*soft switch*”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
“a temporary or changeable switch”	“A virtually displayed switch on a touch screen that, when activated, performs a function.” A soft switch associated with a symbol is different than the symbol itself.	‘681 Patent, claims 1, 5, 9 ‘954 Patent, claims 1, 2

The term “soft switch” is used in claims 1, 5, and 9 of the ‘681 Patent, and claims 1 and 2 of the ‘954 Patent. AGIS argues its proposed construction of “soft switch” closely tracks and covers the various inventive embodiments in the specifications of the ‘681 and ‘954 Patents, and is consistent with the ordinary artisan’s understanding of “soft” in the context of switches. (DE 48 at 10). Specifically, AGIS asserts that an individual of ordinary skill in the art would have understood the prefix “soft” to mean “temporary or changeable.” (DE 48-7) (citing Computer Dictionary 365 (2d ed. 1994) (defining the prefix “soft” in the computing context as “an adjective meaning temporary or changeable”)). Life360 proposes a similar construction, but includes a distinction between the “soft switches” and the “symbols” that are associated with those soft switches. (DE 47 at 28). Similar to its previous arguments, Life360 asserts that because the claims separately refer to “symbols” and “soft switches,” the patent specifications indicate that these elements correspond to separate and distinct elements. (DE 47 at 28) (citing *Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1254 (Fed. Cir. 2010)).

AGIS's proposed construction that a "soft switch" must be "temporary" is contradicted by the patent specifications. While the specification of the '681 Patent does indicate that soft switches can be changed, it explicitly states that some soft switches "are always present on the display" and "virtually fixed." *See id.* at 4:11-15 ("a row of primary software created 'soft switches' that are always present on the display"); *id.* at 9:29-33 ("The bottom row of soft switches displayed on the touch screen remains visually fixed"); *see also* '954 Patent at 7:24-44 ("a row of primary software created 'soft switches' that are always present on the display to appear."). Accordingly, the Court declines to accept AGIS's proposed construction.

Rather, the Court is inclined to adopt the first sentence of Life360's construction. As Life360 points out, the specification of the '681 Patent states that "[t]he virtually displayed switches on the touch screen are called soft switches." *Id.* at 1:51-52. Further, the specifications of the '681 and '954 patents consistently refer to "soft switches" as elements that are "activated" upon being touched, and that perform functions such as zooming in and out, centering, calling, and causing other soft switches to appear. *See* '681 Patent at 5:58-60, 6:66-7:1; '954 Patent 5:15-27. However, Life360's entire proposal cannot be correct because it limits the claims to the embodiments where soft switches only perform a "function." AGIS notes correctly that the specifications of the '681 and '954 patents describe soft switches as performing both "functions" and "actions." *See, e.g.,* '681 Patent, 9:29-42; '954 Patent, 8:50-64. Aside from this minor point, AGIS does not contest the first sentence of Life360's proposed construction. Accordingly, the Court construes "soft switch" as "virtually displayed switch on a touch screen that when activated, performs a function or action."

Life360 also seeks to add a negative limitation stating, "a soft switch associated with a symbol is different than a symbol itself." However, Life360 fails to cite any clear disavowal

justifying the inclusion of this negative limitation. In fact, such a limitation appears inconsistent with the specifications because it fails to capture the embodiments where the soft switch is visually defined by a symbol representing a network user. *See* ‘681 Patent, 6:36-59, Fig. 1; ‘954 Patent, 5:63-6:17. A construction which reads preferred embodiments out of the claims is almost never correct. *See Accent Packaging, Inc. v. Leggett & Platt, Inc.*, 707 F.3d 1318, 1326 (Fed. Cir. 2013) (“a claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct”). Accordingly, the Court declines to adopt the second part of Life360’s proposed construction and, therefore, construes “soft switch” as “a virtually displayed switch on a touch screen that, when activated performs a function or action.”

iii. “Soft switch matrix”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
Ordinary meaning, no construction necessary	“a collection of soft switches presented in a series of rows and columns”	‘954 Patent, claim 2

The term “soft switch matrix” appears in claim 2 of the ‘954 Patent. Adopting the construction of “soft switch” discussed above, the dispute with regard to this claim term pertains to the meaning of “matrix.” AGIS contends that the term “matrix” “is readily understood by the Court and the jury, and construing it would be redundant.” (DE 48 at 12). Yet, it is not apparent that a person of ordinary skill in the art would understand the word “matrix” to have only one meaning. This is evidenced by the Parties’ disagreement over whether a single row or column falls under the definition of a “matrix.”

Life360 proposes the Court construe the term as “a collection of soft switches presented in a series of rows and columns.” Life360 correctly notes that Figure 2 of the ‘728 Patent (the

parent of the ‘954 Patent) depicts the “soft switch matrix” (16cc) as arranged in a series of rows and columns having letters and numbers. (DE 47 at 32). However, the “matrix” depicted in Figure 2 is merely an example. There is no other intrinsic evidence to suggest that the “soft switch matrix” must comprise of a series of rows and columns. Because the Patent does not otherwise restrict the definition of “soft switch matrix,” the Court declines to adopt the portion of Life360’s construction that precludes the possibility of a single row or single column “matrix.” The Court does, however, find the first part of Life360’s definition (*i.e.*, “a collection of soft switches”) properly denotes the definition of “soft switch matrix” in the ‘954 Patent. Accordingly, the Court construes the term “soft switch matrix” as “a collection of soft switches.”

iv. “*private . . . network*”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
“a network where access is limited”	“a network where access is limited to those having a password and/or a particular phone number”	‘954 Patent, claim 1

The term “private . . . network” appears in claim 1 of the ‘954 Patent. In context, this term appears as follows:

accessing with a remote network server from a system website for the purpose of establishing either public or *private networks* that can then enable those who have accessed the website the ability to define public and *private* peer to peer, *networks* each with its own symbols and soft switches.

‘954 Patent, claim 1.

The Parties have agreed to construe “public . . . network” as “a network which anyone can access.” (DE 45 at 2, ¶3). AGIS argues that its proposed construction of “private . . . network” complements the construction of “public . . . network” by contrasting “a network

which *anyone can access*” with “a network *where access is limited*.” (DE 48 at 15). Life360’s proposed construction is similar to AGIS’s, except that it imports the requirement of a “password and/or a particular phone number” for limiting access.

Life360 argues that AGIS’s proposed construction is overly broad because “a network where access is limited” overlaps with the scope of the agreed construction for “public network.” (DE 47 at 24). Specifically, Life360 argues that under Plaintiff’s proposal, “a network where access is limited” can conceivably include a public network that limits access based on time, duration, or other parameters that do not affect whether access is limited to only certain individuals. (*Id.*). Rather, Life360 argues the Court should adopt its proposed construction because the specification of the ‘954 Patent mentions the term “private network” as a network for which one “has to have a password and/or a particular phone number to access.” (DE 47 at 23) (citing ‘954 Patent at 1:52-57).

Although the embodiment in the ‘954 Patent discusses the possibility of limiting access to the network via password or phone number, there does not appear to be any disclaimer or limitation of claim scope in the specification or prosecution history that requires a password or phone number to be the only permissible tools by which access may be limited. The Court does not, therefore, find grounds for limiting the scope of the term “private network.” Both Parties agree that at a minimum, a “private network” is a “network where access is limited,” and the Court agrees this is the proper construction of the term because it (1) differentiates from a “public network,” and (2) does not impose additional limitations on the claim.

v. “peer to peer network”

AGIS's Proposed Construction	Life360's Proposed Construction	Claims
"a network in which client devices exchange information with each other"	"a network in which devices exchange information directly without using a server"	'954 Patent, claim 1

This term appears in claim 1 of the '954 Patent. Based on the proposed constructions, the Parties appear to agree that the term "peer to peer network" requires at least "a network in which client devices exchange information with each other." The primary difference between the proposals is that Life360's proposal also requires that such information be exchanged "directly without using a server."

The Court is unpersuaded by Life360's argument that a "peer to peer network" cannot include the use of a server. The '954 specification contemplates the use of a "static IP routable server" in peer to peer communications. *Id.* 2:65-67. The Court does not find support within the intrinsic record for limiting the term "peer to peer network" to exclude the use of a server. Accordingly, the Court construes "peer to peer network" as "a network in which devices exchange information with each other as equals."⁷

vi. *"establishing, over a private remote server excluding a website or a web browser, a communications network"*

AGIS's Proposed Construction	Life360's Proposed Construction	Claims
"establishing a communications network over a private remote server and not through a website or web browser"	Indefinite and not amenable to construction. Alternative: "establishing a communications network over a private remote server that is not accessible by a web browser or through a website"	'441 Patent, claims 1, 4

⁷ At the *Markman* hearing, Life360 agreed that, should the Court decline to adopt its proposed construction, the proper interpretation of "peer to peer network" is "a network in which devices exchange information with each other as equals." (DE 71 at 31). AGIS did not object to this construction.

This phrase appears in claims 1 and 4 of the ‘441 Patent. In full, the relevant claim limitation containing the phrase in dispute recites “*establishing, over a private remote server excluding a website or a web browser, a communications network* among the communication devices whereby the participants are capable of exchanging and displaying identity data, location data, and personal data through the advanced communications software.” ‘441 Patent, claim 1 (emphasis added). Life360 contends this phrase is indefinite under 35 U.S.C. § 112. (DE 47 at 44).

A claim is invalid under 35 U.S.C. § 112 for indefiniteness if it, when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). Life360 argues the phrase “establishing, over a private remote server excluding a website or a web browser, a communications network” falls within the standard of indefiniteness “by failing to provide notice to the public of what activities are at risk of infringement.” (DE 47 at 45). Specifically, Life360 asserts the “phrase is indefinite because it creates uncertainty over what ‘excluding’ modifies, and could therefore lead to two conflicting interpretations.” (*Id.* at 47). Life360 contends that AGIS’s proposed construction attempts to rewrite the claim to save it from invalidity by modifying “establishing” to indicate that a network is established by some means other than through a website or web browser. (*Id.*).

AGIS refutes this argument, noting that “the commas around the phrase ‘over a private remote server excluding a website or a web browser’ turn this phrase into a prepositional phrase that modifies the gerund ‘establishing.’” (DE 58 at 22). That is, AGIS argues, the phrase “over a private remote server excluding a website or a web browser” modifies how the communications

network is established. The Court agrees. The phrase, “over a private remote server excluding a website or a web browser” modifies the word “establishing.” That is, a plain reading of the phrase indicates that the communications network is established over a private remote server that is not a website or web browser. The Court, therefore, does not find the phrase to be indefinite.

The Court also declines to adopt Life360’s alternative proposal. Life360 argues that, upon a finding that the term is definite, it must be construed as “establishing a communications network over a private remote server that is not accessible by a web browser or through a website.” The Court does not find support for the adding the negative limitation “accessible by.” Because the Court will not construe a claim when the meaning or scope of the words is clear, the Court finds that no construction is necessary. *See Phillips*, 415 F.3d at 1315.

vii. “SMS polling message”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
“a Short Message Service message sent from one device to another that commands a response from the recipient device”	“a Short Message Service message sent from one device to another that commands a response from the recipient device” The SMS polling message cannot be an IP message.	‘441 Patent, claim 1

The term “SMS polling message” appears in claim 1 of the ‘441 Patent. The Parties agree on the construction of “SMS polling message” as “a Short Message Service sent from one device to another that commands a response from the recipient device.” (DE 47 at 33). However, Life360 seeks to add a negative limitation that “the SMS polling message cannot be an IP message.”

Life360 cites the patentee's distinction of a prior art reference to Crowley⁸ in the prosecution history to support the inclusion of this negative limitation. (DE 47 at 33). The full passage from the prosecution history reads as follows:

Crowley et al. makes extensive use of SMS text messages which are sent to and received from the server. Applicant's method does not use text messages in establishing its remote private ACS IP server network but only uses IP message traffic to send to the ACS server the latitude and longitude, status and identity information. This data is then automatically and continuously relayed to all on the network. In all claims, except the Applicant's Claim 2, SMS messages are not used but rather all communications are IP to the ACS Server. In the Applicant's Claim 2, SMS messages are used to poll network participants to commence continuously and automatic reporting of their location status and identity information to the remote private ACS IP server for retransmission to all on the network.

(DE 48-7) ('441 Patent File History, Response and Amendment dated Feb. 23, 2011, p. 11).

After reviewing the relevant prosecution history, the Court is not convinced that an SMS message cannot be sent over the internet as an IP message. Specifically, the passage cited by Life360 merely states that there are IP messages that are not SMS messages, those IP messages must be used in all claims except claim 2, and that SMS messages are used in claim 2. Absent a clear disavowal that an SMS message can never be sent as an IP message, there is no support for Life360's proposed negative limitation. *See, e.g., Northern Telecom Ltd. v. Samsung Elecs. Co.*, 215 F.3d 1281, 1293-95 (Fed. Cir. 2000) (finding that the applicant's statements in response to the Examiner's rejection were not a clear disavowal of claim scope). For these reasons, the Court adopts AGIS's proposed construction that an "SMS polling message" is "a Short Message Service sent from one device to another that commands a response from the recipient device."

viii. "automatically transmitting"

⁸ United States Patent Number 7,593,740.

AGIS's Proposed Construction	Life360's Proposed Construction	Claims
"transmitting without human intervention"	"transmitting involuntarily and without regard for the participants' ability or willingness to do so, or knowledge of the existence of other participants"	'441 Patent, claims 1, 4

This term appears in claims 1 and 4 of the '441 Patent. In its entirety, the relevant claim limitation reads "in response to receiving the SMS polling message, the polled unit continuously and *automatically transmitting* according to a set time interval, distance traveled, or sensor input" Life360 argues that AGIS's construction is incorrect because "it attempts to reclaim claim scope that was expressly disavowed." (DE 47 at 35). During the prosecution of the '441 Patent, the patent Applicant distinguished the claimed invention from the "Mayer"⁹ reference. The Mayer reference discloses a system in which location information for a user is automatically and voluntarily transmitted to other users on a "contactee list." (DE 48-11). The Applicant argued that:

In other words, in Mayer, users can only view the location information of those people the user knows exists on the system, i.e. those on the particular user's "contactee list." In claims 11, 14 and 17, location information is constantly retrieved by the remote server from each participant and transmitted by the remote server to every other participant *involuntarily* and *without regard to whether a participant knows another participant exists*. This is a critical aspect of the present invention in that it solves the problem of being able to track the whereabouts of group participants, *regardless of their ability and/or willingness to provide such whereabouts*.

(DE 47 at 35) (citing DE 47-6 at 10) (emphasis added). In light of these comments, Life360 argues that the construction for "automatically transmitting" must "require that location information is transmitted involuntarily and without regard for the participants' ability or willingness to do so, or knowledge of the existence of other participants." (DE 47 at 36).

⁹ United States Patent Number 2003/0093495.

AGIS disagrees, and instead argues that the passage cited by Life360 refers “only to the communications being relayed by the private server to the other participants.” (D58 at 17). AGIS argues the claim limitation “does not refer to all communications, and it does not refer specifically to the communications from participants to the private server that claim 1 requires be automatically transmitted.” (*Id.*). Accordingly, AGIS argues that Life360’s proposal that all communications be transmitted involuntarily without the knowledge of the participants is unwarranted.

After reviewing all of the intrinsic evidence for the ‘441 Patent, it is clear that Life360’s proposal is unduly restrictive in scope. The Court does not find support for the proposition that the *participant’s knowledge* is somehow related to the automatic transmissions. The specification of the ‘441 Patent explains that the “receiving cellular phone application code responds to the polling command with the receiving cellular phone’s location and status” ‘441 Patent, 7:46-449. The automatic transmission, then, stems from the communication between *devices*. Accordingly, the Court declines to adopt Life360’s proposed construction. Rather, the Court finds the plain and ordinary meaning of “automatically transmitting” is readily apparent to those of ordinary skill in the art, and no construction of the term is necessary.

ix. “without any selection criteria or manual input of relationship data”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
“without participants having to re-input selection criteria or relationship data”	“without the participants having input any preference to receive the identify and location data of other participants, or having to have knowledge of the existence of the other participants”	‘441 Patent, claims 1, 4

This phrase appears in claims 1 and 4 of the ‘441 Patent. Life360 asserts AGIS’s proposal attempts to “reclaim the scope that was expressly disavowed” during prosecution. (DE

47 at 38). Life360 contends the Applicant intended that “without any selection criteria or manual input of relationship data” means that “the remote server must transmit the location and identity data to other participants without them having input preference to receive the identity and location data of other participants, or having to have knowledge of the existence of other participants.” (*Id.*). In distinguishing “Mayer” from claims 1 and 4 of the ‘441 Patent, the Applicant stated:

In other words, in Mayer, users can only view the location information of those people the user knows exists on the system, i.e. those on the particular user’s “contactee list.” In Claims 11, 14 and 17, location information is constantly retrieved by the remote server from each participant and transmitted by the remote server to every other participant involuntarily and without regard to whether a participant knows another participant exists. This is a critical aspect of the present invention in that it solves the problem of being able to track the whereabouts of group participants, regardless of their ability and/or willingness to provide such whereabouts.

(DE 47-6) (‘441 Prosecution History, Response dated Oct. 7, 2011 at 11). The Applicant also distinguished Crowley by stating that Crowley required the receiving user to “have an acquaintance relationship to the first user,” which was argued to be different in that:

The present invention, and particularly claims 14 and 17, does not require a particular participant to even know of the existence of a particular user, let alone have an “acquaintance relationship,” because the remote server handles the retrieval and transmission of location information to and from all users (or, in the cause of claim 17, all users having a particular common interest) automatically.

(*Id.* at 11). Further, Life360 argues that the Applicant took the express position that “[t]he new claims more clearly demonstrate that the present invention requires . . . no entry of acquaintances data,” and that the prior art did not disclose such a feature. (DE 47 at 39-40) (citing *id.* at 10).

AGIS disagrees with Life360’s proposed construction. First, AGIS explains that the Mayer discussion “refers to communications relayed from the private server to other participants.” (DE 58 at 19). Specifically, “[i]t is these relayed communications that have to be

‘involuntary,’ without the recipients needing to know all of the other participants from which the identity and location data are collected.” (*Id.*). Additionally, AGIS argues that Life360’s construction is inconsistent with the rest of the claim language. (*Id.*). AGIS asserts that the claims require input of at least some preference, which Life360’s construction would “categorically exclude.” (*Id.*).

When considering whether a statement in the prosecution history is a clear disavowal, contradictory evidence such as the plain language of the claims may serve to limit the disclaimer. *See, e.g., Inverness Med. Switzerland GmbH v. Princeton Biomeditech Corp.*, 309 F.3d 1365, 1372 (Fed. Cir. 2002). The Court finds that Life360’s proposed construction does not account for the claim limitations that require the participant input certain preferences. This is an improper practice in claim construction because “[a]ll the limitations of a claim must be considered meaningful.” *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562 (Fed. Cir. 1991). Specifically, Life360’s proposed construction ignores that the ‘441 Patent describes a “communications network.” *See* ‘441 Patent, 1:13-22, claims 1, 4. To receive a communication, a participant must join a network through the remote server. *Id.* at 3:15-24, 9:19-46. The process of joining a network, common interest or otherwise, is in and of itself an expression by the participant of a preference to receive identity and location data of other participants. According to Life360’s proposed construction, participants can never input any preference to receive identity and location data of other participants.

Further, to the extent Life360’s proposed construction excludes participants from having knowledge of one another, such a construction is foreclosed by the specification of the ‘441 Patent and its claims. Specifically, claims 7 and 8, which depend from claim 4, describe common interest networks comprised of “friends and family,” respectively. *See id.* at 9:37-46;

see also Wright Med. Tech., Inc. v. Osteonics Corp., 122 F.3d 1440, 1445 (Fed. Cir. 1997) (“[W]e must not interpret an independent claim in a way that is inconsistent with a claim which depends from it . . .”). A group of friends or family members would certainly have knowledge of the existence of one another. Accordingly, the Court declines to adopt Life360’s proposed construction.

AGIS proposes that the term be construed to mean “without participants having to re-input selection criteria or relationship data.” (DE 48 at 23). Read in full, the pertinent limitation of claim 1 recites “each time the polled participant’s data is received, the private remote server transmitting to each of the other participant devices in IP communications with the server, at least the identity data and the location data of each of the participants, on the polling network, without any selection criteria or manual input of relationship data.” One embodiment of the ‘441 Patent describes a communications network wherein participants may communicate with one another using portable devices. *See, e.g.*, ‘441 Patent, 1:13-22. A communication server forwards communications between all portable devices. *See, e.g., id.* at 3:15-24. Thus, AGIS argues, once the participants have established the communication network, all communications are sent to all participants in the network. (DE 48 at 23).

Life360 argues against adopting AGIS’s proposed construction. Specifically, Life360 notes that the ‘441 Patent does not use the term “selection criteria.” The term “selection” is “only used to refer to selecting phones to poll, selecting different map types, and in the context of ‘presenting different potential operator selections.’” (DE 47 at 38) (citing ‘441 Patent at 8:12-14, 8:30). Additionally, Life360 notes that the term “relationship data” also fails to appear in the specification, and the term “relationship” “only appears in the context of describing participants having ‘a common interest or relationship,’ ‘establishing social relationships with strangers,’ and

‘establish[ing] selectable anonymous relationships.’” (*Id.*) (citing ‘441 Patent at 1:21-22, 9:61, 12:1-2).

While the Court agrees with AGIS, the Court is not prepared to construe a claim term with two terms which are not defined in the Patent and would potentially require their own constructions. Rather, the Court finds that AGIS’s analysis points to the plain and ordinary meaning as understood by a person of ordinary skill in the art. The Court therefore declines to construe the term “without any selection criteria or manual input of relationship data.”

x. “common interest network”

AGIS’s Proposed Construction	Life360’s Proposed Construction	Claims
“a network in which the participants share a common interest or relationship”	“a network in which the inclusion of participants is based on a shared interest among the participants rather than the identity of the participants”	‘441 Patent, claim 4, 6

The term “common interest network” appears in claims 4 and 6 of the ‘441 Patent. Life360 relies on the specification and prosecution history to argue that the “common interest” feature selects network participants based on their interests, as opposed to their identity. (DE 47 at 42). Specifically, Life360 argues its construction should be adopted because during the prosecution of the ‘441 Patent, the Applicant explained that a “common interest network” does not require “a particular participant to even know the existence of a particular user” or for there to be an “acquaintance relationship” between participants. (*Id.*) (citing DE 47-6 at 10, ‘441 Prosecution History, Response dated Oct. 7, 2011). Life360 asserts that a “common interest network” can only be established based on a shared interest.

AGIS argues that the cited prosecution history merely states that the invention “does not require a particular participant to even know of the existence of a particular user . . .” (DE 58 at

20). AGIS asserts this “does not mean that the claimed network cannot include any known participants, or even that a network meeting the claim language cannot be comprised entirely of persons known to each other.” (*Id.*). The Court agrees that this exclusion is not supported by the plain meaning of the claim language, the patent specification, or the prosecution history. Accordingly, the Court declines to adopt the portion of Life360’s proposal excluding the possibility that a participant may know the identities of others in the networks.

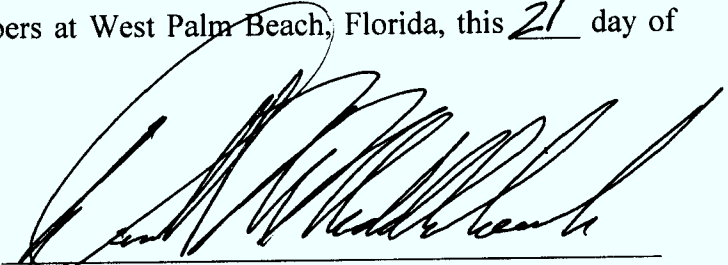
Life360 argues the Court should not adopt AGIS’s proposed construction because it is “untenably broad.” (DE 47 at 43). Specifically, Life360 asserts “[i]t is insufficient to simply specify that participants in a common interest network share a common interest or relationship because the shared interest or relation could conceivably be incidental to the establishment of the network.” (*Id.*). The Court agrees, and instead, finds the first portion of Life360’s proposed construction best captures the meaning of “common interest network.” Thus, the Court construes “common interest network” to mean “a network in which the inclusion of participants is based on a shared interest among the participants.”

In conclusion, it is hereby

ORDERED AND ADJUDGED that the disputed terms shall have the constructions set forth herein.

DONE AND ORDERED in Chambers at West Palm Beach, Florida, this 21 day of November, 2014.

cc: Counsel of Record


DONALD M. MIDDLEBROOKS
UNITED STATES DISTRICT JUDGE