

United States District Court
Northern District of California

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

X ONE, INC.,
Plaintiff,
v.
UBER TECHNOLOGIES, INC.,
Defendant.

Case No. 16-CV-06050-LHK
**ORDER CONSTRUING DISPUTED
CLAIM TERMS OF U.S. PATENT NOS.
8,798,593 AND 8,798,647**
Re: Dkt. No. 63

Plaintiff X One, Inc. (“X One” or “Plaintiff”) brings this action for patent infringement against Defendant Uber Technologies, Inc. (“Uber” or “Defendant”). The parties now seek construction of seven disputed terms used in the claims of the following patents-in-suit: U.S. Patent Nos. 8,798,647 (“’647 patent”) and 8,798,593 (“’593 patent”) (collectively, “X One Patents”).

I. BACKGROUND

A. Background and Description of the Invention

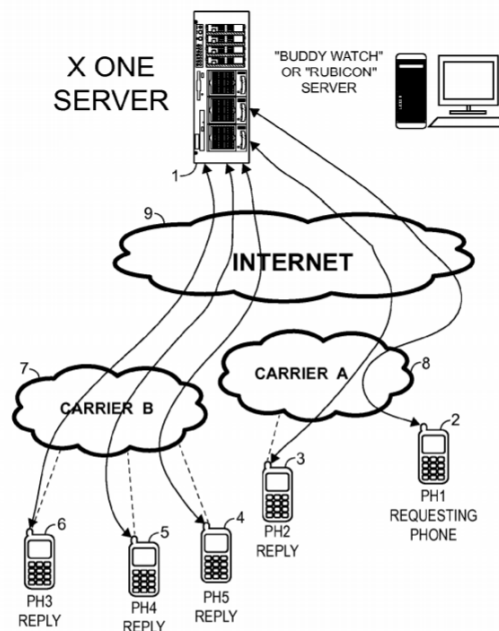
The ’593 patent is titled “Location Sharing and Tracking Using Mobile Phones or Other Wireless Devices.” ECF No. 1 (“Compl.”) Ex. B (’593 patent). The ’647 patent is titled “Tracking Proximity of Services Provider to Services Consumer.” Compl. Ex. A (’647 patent).

1 The '647 patent is a continuation of the '593 patent, and thus the two patents share the same
 2 specification. For simplicity, unless specifically referring to the '593 patent or the '647 patent, the
 3 Court's citations to the text and figures of the X One Patents refer to the '593 patent specification.

4 **1. Specification**

5 The X One Patents relate to “[a] system for exchanging GPS or other position data
 6 between wireless devices.” ’593 patent, Abstract. This system involves “phones [or] other
 7 wireless devices” that “are programmed with software . . . to allow mutual tracking and optional
 8 position mapping displays of members of groups.” *Id.*, col. 2:35–40. These devices “work with
 9 a . . . server coupled to the internet.” *Id.* These devices “must be web enabled to send and receive
 10 TCP/IP or other protocol packets over the internet to the . . . server.” *Id.*, col. 2:25–27. These
 11 devices also contain GPS receivers, and, in preferred embodiments, “sufficiently large liquid
 12 crystal displays.” *Id.*, col. 2:23–24.

13 Figure 2A illustrates exemplary communications between these devices according to the
 14 invention of the X One Patents:

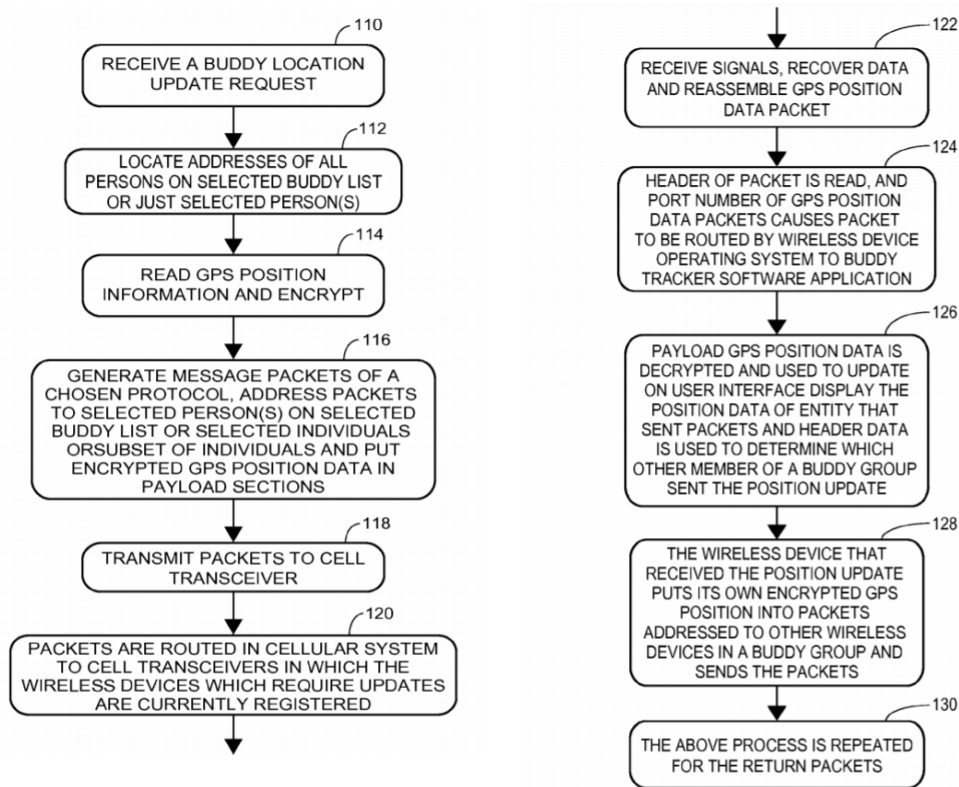


15 *Id.*, Fig. 2A.

16 As Figure 2A illustrates, the requesting phone sends packets through the local phone

1 carrier system, which are then relayed through the internet to a server. *Id.*, col. 5:59–6:28. The
 2 server then obtains the relevant data from the phones associated with individuals on a buddy list
 3 for the requesting phone. *Id.* The server then relays the requested information—location data for
 4 each phone associated with a “buddy” and a map showing that location—back to the requesting
 5 phone through the internet and carrier service. *See also id.*, col. 2:51–64 (“[T]he process of the
 6 invention [] allows exchanging and mapping of position data with persons on a Buddy List.”).

7 However, the specification is not solely limited to the use of a server, and outlines a more
 8 generalized process as well for the functioning of the invention. Figure 13 of the X One Patents
 9 provides a “flowchart of the method of exchanging GPS position data among cell phones of a
 10 watch list”:



23 *Id.*, Figs. 13A & 13B.

24
 25 In this illustrated method, a buddy location update request is received, the persons in the
 26 buddy list are identified, and the requesting device sends, through the cellular system, its location
 27

1 data to the phones in the buddy list. *Id.* Those phones receive the information, interpret it, and
2 display that location on a map, and then obtain their own position and send their location to the
3 people on their buddy list. *Id.*

4 **2. Asserted Claims**

5 Plaintiff asserts that Defendant infringes thirty-four (34) claims across the X One Patents.
6 Opening Br. 7. Five of these asserted claims are independent claims, namely claims 1 and 19 of
7 the '593 patent and claims 1, 22, and 28 of the '647 patent. *Id.* All of the disputed claim terms
8 appear in one or several of these independent claims. *See* ECF No. 63 (“Joint Statement”) at 2.

9 **B. Procedural History**

10 On October 19, 2016, Plaintiff filed the instant patent infringement suit. In its complaint,
11 Plaintiff alleged that Defendant “has infringed and continues to infringe one or more claims of the
12 [X One Patents].” Compl. ¶ 13. The products and services accused included “Uber’s mobile
13 device applications on iOS, Android, and Microsoft operating systems” as well as “the Uber ride-
14 sharing, car-pooling, and delivery services.” *Id.*

15 On December 9, 2016, Defendant moved to dismiss all of the asserted claims of the X One
16 Patents for failure to claim patent-eligible subject matter pursuant to 35 U.S.C. § 101. ECF No.
17 24. The Court denied Defendant’s motion on March 6, 2017. ECF No. 52.

18 On June 30, 2017, Plaintiff filed its Opening Brief on Claim Construction. ECF No. 64
19 (“Opening Br.” or “Opening Brief”). On July 17, 2017, Defendant filed its Responsive Claim
20 Construction Brief. ECF No. 66 (“Responsive Brief” or “Resp. Br.”). On July 21, 2017, Plaintiff
21 filed its Reply Brief. ECF No. 75 (“Reply Brief” or Reply Br.”). The Court held a tutorial and
22 claim construction hearing on August 17, 2017 (“Markman hearing”).

23 **II. LEGAL STANDARD**

24 **A. Claim Construction**

25 The Court construes patent claims as a matter of law based on the relevant intrinsic and
26 extrinsic evidence. *See Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d
27 1272 (Fed. Cir. 2014) (en banc); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

1 “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full
2 understanding of what the inventors actually invented and intended to envelop with the claim.”
3 *Phillips*, 415 F.3d at 1316 (internal quotation marks and citation omitted). Accordingly, a claim
4 should be construed in a manner that “stays true to the claim language and most naturally aligns
5 with the patent’s description of the invention.” *Id.*

6 In construing disputed terms, a court looks first to the claims themselves, for “[i]t is a
7 ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the
8 patentee is entitled the right to exclude.’” *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari*
9 *Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Generally, the words of a
10 claim should be given their “ordinary and customary meaning,” which is “the meaning that the
11 term[s] would have to a person of ordinary skill in the art in question at the time of the invention.”
12 *Id.* at 1312-13. In some instances, the ordinary meaning to a person of skill in the art is clear, and
13 claim construction may involve “little more than the application of the widely accepted meaning
14 of commonly understood words.” *Id.* at 1314.

15 In many cases, however, the meaning of a term to a person skilled in the art will not be
16 readily apparent, and a court must look to other sources to determine the term’s meaning. *See id.*
17 Under these circumstances, a court should consider the context in which the term is used in an
18 asserted claim or in related claims and bear in mind that “the person of ordinary skill in the art is
19 deemed to read the claim term not only in the context of the particular claim in which the disputed
20 term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313. The
21 specification “‘is always highly relevant’” and “[u]sually . . . dispositive; it is the single best
22 guide to the meaning of a disputed term.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conception*,
23 *Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Indeed, “the only meaning that matters in claim
24 construction is the meaning in the context of the patent.” *Trs. of Columbia Univ. v. Symantec*
25 *Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016). Where the specification reveals that the patentee has
26 given a special definition to a claim term that differs from the meaning it would ordinarily possess,
27 “the inventor’s lexicography governs.” *Id.* at 1316. Likewise, where the specification reveals an

1 intentional disclaimer or disavowal of claim scope by the inventor, the inventor’s intention as
2 revealed through the specification is dispositive. *Id.*

3 In addition to the specification, a court may also consider the patent’s prosecution history,
4 which consists of the complete record of proceedings before the United States Patent and
5 Trademark Office (“PTO”) and includes the cited prior art references. The prosecution history
6 “can often inform the meaning of the claim language by demonstrating how the inventor
7 understood the invention and whether the inventor limited the invention in the course of
8 prosecution, making the claim scope narrower than it would otherwise be.” *Id.* at 1317.

9 A court is also authorized to consider extrinsic evidence in construing claims, such as
10 “expert and inventor testimony, dictionaries, and learned treatises.” *Markman v. Westview*
11 *Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). Expert
12 testimony may be particularly useful in “[providing] background on the technology at issue, . . .
13 explain[ing] how an invention works, . . . ensur[ing] that the court’s understanding of the technical
14 aspects of the patent is consistent with that of a person of skill in the art, or . . . establish[ing] that
15 a particular term in the patent or the prior art has a particular meaning in the pertinent field.”
16 *Phillips*, 415 F.3d at 1318. Although a court may consider evidence extrinsic to the patent and
17 prosecution history, such evidence is considered “less significant than the intrinsic record” and
18 “less reliable than the patent and its prosecution history in determining how to read claim terms.”
19 *Id.* at 1317-18 (internal quotation marks and citations omitted). Thus, while extrinsic evidence
20 may be useful in claim construction, ultimately “it is unlikely to result in a reliable interpretation
21 of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1319. Any
22 expert testimony “that is clearly at odds with the claim construction mandated by the claims
23 themselves, the written description, and the prosecution history” will be significantly discounted.
24 *Id.* at 1318 (internal quotation marks and citation omitted). Finally, while the specification may
25 describe a preferred embodiment, the claims are not necessarily limited only to that embodiment.
26 *Id.* at 1323; *see also Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1151 (Fed. Cir.
27 2003) (“The general rule, of course, is that claims of a patent are not limited to the preferred

1 embodiment, unless by their own language.”).

2 **B. Indefiniteness**

3 Under 35 U.S.C. § 112, ¶ 2 (2006 ed.),¹ a patent must “conclude with one or more claims
4 particularly pointing out and distinctly claiming the subject matter which the applicant regards as
5 [the] invention.” Section 112, ¶ 2 includes what is commonly called the “definiteness”
6 requirement. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2125 (2014). In *Nautilus*,
7 the United States Supreme Court held that “a patent is invalid for indefiniteness if its claims, read
8 in light of the specification delineating the patent, and the prosecution history, fail to inform, with
9 reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus*, 134 S. Ct.
10 at 2124. As the Court observed, § 112, ¶ 2 “entails a ‘delicate balance.’” *Id.* (quoting *Festo Corp.*
11 *v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 731 (2002)). “On the one hand, the
12 definiteness requirement must take into account the inherent limitations of language.” *Id.* (citing
13 *Festo*, 535 U.S. at 731). “At the same time, a patent must be precise enough to afford clear notice
14 of what is claimed, thereby ‘appris[ing] the public of what is still open to them.’” *Id.* (quoting
15 *Markman*, 517 U.S. at 373). Thus, “the certainty which the law requires in patents is not greater
16 than is reasonable, having regard to their subject-matter.” *Id.* at 2129 (quoting *Minerals*
17 *Separation v. Hyde*, 242 U.S. 261, 270 (1916)).

18 The Federal Circuit applied the *Nautilus* standard in *Interval Licensing LLC v. AOL, Inc.*,
19 766 F.3d 1364 (Fed. Cir. 2014). The case involved two patents which covered an “attention
20 manager for occupying the peripheral attention of a person in the vicinity of a display device.” *Id.*
21 at 1366. In one embodiment, the patents involved placing advertising on websites in areas
22 surrounding the principal content of the webpage, for example in the margins of an article.
23 Several of the asserted claims included a limitation that the advertisements (“content data”) would
24 be displayed “in an unobtrusive manner that does not distract a user of the display device.” *Id.* at

25 _____
26 ¹ Paragraph 2 of 35 U.S.C. § 112 was replaced with newly designated § 112(b) when § 4(c) of the
27 America Invents Act (“AIA”), Pub. L. No. 112-29, took effect on September 16, 2012. Because
28 the applications resulting in the patents at issue in this case are continuations of applications that
were filed before that date, the Court refers to the pre-AIA version of § 112.

1 1368. The district court found that the terms “in an unobtrusive manner” and “does not distract
2 the user” were indefinite, and the Federal Circuit affirmed. *Id.* at 1368-69. The Federal Circuit
3 found that the “‘unobtrusive manner’ phrase is highly subjective and, on its face, provides little
4 guidance to one of skill in the art” and “offers no objective indication of the manner in which
5 content images are to be displayed to the user.” *Id.* at 1371. Accordingly, the Court looked to the
6 written description for guidance. The Court concluded that the specification lacked adequate
7 guidance to give the phrase a “reasonably clear and exclusive definition, leaving the facially
8 subjective claim language without an objective boundary.” *Id.* at 1373. Accordingly, the claims
9 containing the “unobtrusive manner” phrase were indefinite.

10 In applying the *Nautilus* standard, the Federal Circuit has cautioned that “the dispositive
11 question in an indefiniteness inquiry is whether the ‘claims,’ not particular claim terms” fail the
12 *Nautilus* test. *Cox Commc’ns, Inc. v. Sprint Commc’n Co. LP*, 838 F.3d 1224, 1231 (Fed. Cir.
13 2016). For that reason, a claim term that “does not discernably alter the scope of the claims” may
14 fail to serve as a source of indefiniteness. *Id.* For example, in *Cox Communications*, the Federal
15 Circuit determined that the term “processing system” did not render the method claims at issue
16 indefinite because “the point of novelty resides with the steps of these methods, not with the
17 machine that performs them.” *Id.* at 1229. Thus, the court reasoned, “[i]f ‘processing system’
18 does not discernably alter the scope of the claims, it is difficult to see how this term would prevent
19 the claims . . . from serving their notice function under § 112, ¶ 2.” *Id.*

20 The Court therefore reviews the claims, specification, and prosecution history to determine
21 whether the claims “inform, with reasonable certainty, those skilled in the art about the scope of
22 the invention.” *Nautilus*, 134 S. Ct. at 2124. Indefiniteness renders a claim invalid, and must be
23 shown by clear and convincing evidence. *See Halliburton Energy Servs. v. M-I LLC*, 514 F.3d
24 1244, 1249 (Fed. Cir. 2008); *cf. Nautilus*, 134 S. Ct. at 2130 n.10.

25 **III. DISCUSSION**

26 The parties request construction of four terms of the ’593 patent and three terms of the
27 ’647 patent. The Court discusses each in turn.

28

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

A. '593 Patent

1. “account” (claims 1 and 19)

X One’s Proposed Construction	Uber’s Proposed Construction
an arrangement for user-specific authenticated access	plain and ordinary meaning

The term “account” appears in claims 1 and 19 of the '593 patent. For example, claim 1 of the '593 patent recites:

1. An apparatus, comprising:

- a server;
- a database representing an **account** for a first individual, the **account** having an associated buddy list that identifies multiple users; and
- software responsive to a request from the first individual to obtain a map, to obtain a last known position for multiple users identified by the buddy list, and to plot the last known location of at least two of the multiple users on the map, and to transmit the map with plotted locations to the first individual;
- where the software is to request and store position information associated with cell phones of plural ones of the multiple users and where the software is to permit the first individual to change geography represented by the map and to transmit to the first individual a map representing the changed geography with plotted position of at least one of the multiple users, each in a manner not requiring concurrent voice communications; and
- wherein the software to obtain the map is to obtain the map in a manner having a default geographic resolution.

'593 patent, col. 28:51–29:4 (emphasis added).

X One argues that “account” should be construed as “an arrangement for user-specific authenticated access.” Opening Br. 8. Uber argues that this term should be given its plain and ordinary meaning. Responsive Br. 6. In responding to X One’s proposal, Uber acknowledges that an account must be “for a first individual,” but disagrees that an account must have “user-specific authenticated access.” *See id.* at 7-8. Thus, the parties appear to agree that an “account” must be user-specific, but dispute whether it requires “authenticated access.” For the reasons discussed below, the Court agrees with X One.

a. Intrinsic Evidence

i. Claim Language

At the outset, the Court observes that the claim language on its face does not require authenticated access. Rather, the claim language only requires that “account” is (1) “for a first individual”—i.e., is user-specific; (2) is “represent[ed]” by a “database;” and (3) “ha[s] an associated buddy list that identifies multiple users.” Thus, thus claim language, by itself, does not support X One’s “authenticated access” proposal. However, claims must be read in “light of the specification . . .” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Accordingly, the Court proceeds to consider the specification.

ii. Specification

Turning to the specification, the Court first notes that the word “account” does not itself appear in the specification. *See* ’543 patent, col. 1:20–28:48. Both parties acknowledge this. Opening Br. 9; Responsive Br. 7. Nevertheless, this does not prevent the Court from using the specification to construe “account” because the “*claims* must be read in view of the specification” and reading claims 1 and 19 in light of the specification informs the meaning of “account.” *Philips*, 415 F.3d at 1315 (quoting *Markman*, 52 F.3d at 978 (quotation marks omitted)) (emphasis added); *see also, e.g., HBAC Matchmaker Media, Inc. v. Google Inc.*, 650 F. App’x 990, 993 (Fed. Cir. 2016) (acknowledging the specification as helpful context even where the disputed claim term did not appear in the specification).

X One contends that the specification supports its position that “account” requires “authenticated access” because it discloses that location sharing is accomplished through user-specific authenticated access. Opening Br. 9–10. As support for this, X One points to embodiments where devices are first authenticated before location information is shared. *Id.* at 9 (citing, for example, ’593 patent, col. 10:7–8 (“The initiator and recipient are also authenticated—230, and the packets are forwarded to the recipients via the cell system.”)). X One also argues that user-specific authenticated access is required for the privacy features disclosed in the specification, such as the ability to selectively disable location sharing. *Id.* at 9–10. Uber, on the

1 other hand, argues that these citations refer only to preferred embodiments and that the claims
2 should not be so limited. Responsive Br. 7.

3 The Court agrees with X One that, when the term “account” is viewed in the context of the
4 specification, it becomes clear that it requires “authenticated access.” As discussed above, claims
5 1 and 19 recite apparatuses that include a “server.” ’593 patent, col. 28:53, col. 30:50. The
6 specification, however, is broader than this and discloses embodiments that both include a server
7 and ones that do not. *Compare, e.g., id.*, col. 8:12–9:65, *with id.*, col. 9:66–10:34. Thus, for the
8 purposes of construing terms in claims 1 and 19, the Court need only focus on the embodiments
9 that include a “server.” *See Aug. Tech. Corp. v. Camtek, Ltd.*, 655 F.3d 1278, 1285 (Fed. Cir.
10 2011) (construing claims in light of embodiments that used multiple wafers because the claim
11 language required using multiple wafers, even though the specification disclosed embodiments
12 that used both multiple dies and multiple wafers); *cf. Pacing Techs., LLC v. Garmin Int’l, Inc.*,
13 778 F.3d 1021, 1026 (Fed. Cir. 2015) (“[W]here the patent describes multiple embodiments, every
14 claim does not need to cover every embodiment.”).

15 Focusing on the embodiments that include a “server,” the specification consistently
16 discloses that, when a server is involved, it performs the step of authenticating the participating
17 devices. Walking through relevant portions of the specification² confirms this. First, in the
18 opening paragraph of its “Detailed Description” section, the specification discloses an initial
19 preferred embodiment that includes “[a] Buddy Watch or Rubicon server” that performs the step
20 of “valid[ating] the content of the IP packet to *authenticate* the sender as a registered Rubicon user
21 and to verify that the sending phone EIN matches the phone EIN stored in the server.” ’543
22 patent, col. 5:60, col. 6:7–11 (emphasis added). Next, the specification describes several
23 embodiments of a “process to receive buddy location update requests and process them.” *Id.*, col.
24 9:6–67. One of these embodiments uses a server, while the other does not. *Compare id.*, col.

25

26

27

28

² In particular, the Court walks through each portion of the specification that details server operations. These are the portions of the specification that would mention authentication, if authentication was indeed performed in that embodiment.

1 8:12–9:65, *with id.*, col. 9:66–10:34. In the embodiment that includes a server, the specification
2 discloses that “[t]he initiator and recipient are *authenticated*—230” *Id.*, col. 10:7–8
3 (emphasis added). Next, the specification discusses “Buddy Watch Server Functions.” *Id.*, col.
4 12:20. One of these functions, the specification discloses, is “to manage activate and deactivate
5 codes,” which the server uses to confirm that a participating device has a current subscription to
6 the Buddy Watch service. *See id.*, col. 12:43–45 (“The Buddy Watch application will be a service
7 which a cellular carrier offers on a subscription basis.”). Again here the specification mentions the
8 step of authenticating the participating devices to make sure that they are registered users in the
9 Buddy Watch system: “The Buddy Watch server . . . check[s] the *activation code status* each time
10 before communication with a phone is carried out.” *Id.*, col. 12:58–61 (emphasis added). Next,
11 the specification describes several embodiments of the Instant Buddy Setup process. *Id.*, col.
12 13:12–15:13. In the embodiments that include a server, the specification discloses authentication.
13 *Id.*, col. 13:40–43 (“Buddy Watch server *authenticates* the initiator and the recipient from data in
14 the packet as a [sic] Buddy Watch subscribers.”) (emphasis added), col. 14:60–61 (“Rubicon
15 server *authenticates* the initiator and recipient and forwards packets to cell system—258.”)
16 (emphasis added). Further on, the specification elaborates on how access codes and encryption
17 help the server ensure that only authenticated devices use the Buddy Watch service. *Id.*, col.
18 23:21–42. Next, the specification discusses attributes of “all species” within the “User Interface
19 Genus,” the “Server Genus,” and “Client Application Genus.” Notably, for the “Server Genus,”
20 the specification discloses that “[a]ll servers programmed with Buddy Watch software will have
21 the functionality to . . . store at least some preference data that defines who can use the server, e.g.
22 only those with a *valid* Buddy watch user ID and password.” *Id.*, col. 24:59–60, col. 25:8–10
23 (emphasis added). Finally, the specification describes embodiments of “TalkControl”
24 functionality, which works specifically with “walkie-talkie enabled phones” and uses a server. *Id.*,
25 col. 26:12–28:40. As with all the other server embodiments discussed above, here too the server
26 performs authentication. *Id.*, col. 26:59–61 (“One or more packets are sent to the Rubicon server
27 which *authenticates* the token and the recipient and creates a database entry.”) (emphasis added),
28

1 col. 27:25–28 (“ . . . Rubicon server which *authenticates* the initiator and recipient . . .”) (emphasis
 2 added), col. 27:49–51 (“ . . . Rubicon servers which *authenticate* the initiator and recipient . . .”) (emphasis added), col. 28:30–32 (“ . . . Rubicon server then *authenticates* the initiator and recipient
 3 . . .”) (emphasis added). Thus, all of the embodiments that include a server perform the step of
 4 authentication. “The fact that [authentication] is ‘repeatedly and consistently’ used to characterize
 5 the invention strongly suggests that it should be read as part of the claim.” *Virnetx, Inc. v. Cisco*
 6 *Sys., Inc.*, 767 F.3d 1308, 1318 (Fed. Cir. 2014); *see also GPNE Corp. v. Apple Inc.*, 830 F.3d
 7 1365, 1370 (Fed. Cir. 2016) (“[W]hen a patent ‘repeatedly and consistently’ characterizes a claim
 8 term in a particular way, it is proper to construe the claim term in accordance with that
 9 characterization.”) (citations omitted). Accordingly “account” should include “authenticated
 10 access.”
 11

12 Other aspects of the specification bolster this conclusion. Specifically, the specification
 13 discloses two objectives of the invention: (1) enforcing valid subscriptions; and (2) maintaining
 14 privacy. Construing “account” to require “authenticated access” furthers both of these objectives.
 15 *Cf. Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (“The
 16 construction that stays true to the claim language and most naturally aligns with the patent’s
 17 description of the invention will be, in the end, the correct construction.”). First, the specification
 18 discloses that it is important to ensure that only users with valid subscriptions use the disclosed
 19 invention. *See* ’543 patent, col. 2:51–54 (“the process of the invention only allows exchanging
 20 and mapping of position data with persons on a Buddy List programmed onto a Buddy Watch . . .
 21 device”). In order to know whether a device is a “Buddy Watch . . . device,” it would need to be
 22 authenticated or validated in some way. Second, the specification discloses that an important
 23 consideration in the X One Patents is privacy concerns. *See id.*, col. 2:8–13 (“To alleviate privacy
 24 concerns, it would be useful to be able to turn off location sharing . . .”). Requiring that an
 25 “account” includes “authenticated access” helps further this objective of protecting privacy,
 26 because it helps ensure that the people with whom location information is shared are who they
 27 purport to be. *See id.*, col. 2:51–53 (describing how the user must allow specific individuals “on
 28

1 his Buddy Lists to ‘see’ his location . . . and the user must request to see the location of others on
 2 his Buddy Lists to be able to have their positions reported and/or mapped”). Thus, “authenticated
 3 access” helps further objectives of the invention disclosed in the specification. *Compare, e.g.,*
 4 *World Class Tech. Corp. v. Ormco Corp.*, 769 F.3d 1120, 1125 (Fed. Cir. 2014) (affirming
 5 construction of “support surface” in orthodontic device patent that required engaging “the
 6 moveable member during the entire time that the member was slidingly moved” because it best
 7 aligned with specification and its discussion that the problem the invention solved). This supports
 8 the Court’s conclusion that “account” requires “authenticated access.”

9 Uber, nevertheless, argues that requiring “authenticated access” improperly imports
 10 limitations from the specification into the claims. Responsive Br. 7. The Court agrees that,
 11 ordinarily, limitations set forth in a preferred embodiment disclosed in a specification do not limit
 12 the scope of the claims. *See, e.g., Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 908 (Fed.
 13 Cir. 2004). However, here, the concept of “authenticated access” is not only consistently
 14 disclosed in every server-dependent embodiment, but is also a concept that flows naturally from
 15 the stated objectives of the invention. As such, the specification supports construing “account”
 16 such that it requires “authenticated access.” *See GPNE*, 830 F.3d at 1370 (affirming construction
 17 of “node” as a “pager” where “the words ‘pager’ and ‘pager units’ appear in the specification over
 18 200 times, and, apart from the Abstract, the specification repeatedly and exclusively uses these
 19 words to refer to the devices in the patented system”); *In re Abbott Diabetes Care Inc.*, 696 F.3d
 20 1142, 1149 (Fed. Cir. 2012) (holding that the conclusion that the claimed electrochemical sensor
 21 could not have external wires was supported by: (1) “every embodiment disclosed in the
 22 specification shows . . . [a] sensor without external cables or wires,” and (2) the discussion of the
 23 prior art in the specification identified external cables or wires as a deficiency in the prior art
 24 supported). Uber’s arguments to the contrary are unconvincing.³

25
 26 ³ At the Markman hearing, Uber also expressed concern that X One’s proposed construction
 27 injects a password-like requirement into “account” which requires that authentication itself is
 28 “user-specific.” Uber argued that such “user-specific authenticated access” excludes a preferred
 embodiment because the specification discloses that whole groups of people can be authenticated

1 In sum, because the specification consistently discloses server embodiments that include
2 authentication, the term “account” requires “authenticated access.”

3 **b. Extrinsic Evidence**

4 **i. Dictionary Definitions**

5 The conclusion that “account” requires “authenticated access” is also supported by the
6 dictionary definitions submitted by X One. The Federal Circuit has approved the use of
7 dictionaries—and especially technical dictionaries—“as among the many tools that can assist the
8 court in determining the meaning of particular terminology to those of skill in the art of the
9 invention.” *Phillips*, 415 F.3d at 1318. The Federal Circuit has observed that dictionaries can be
10 especially helpful where, as is the case here with “account,” a claim term does not itself appear in
11 the specification. *See, e.g., HBAC Matchmaker Media*, 650 F. App’x at 993 (relying on technical
12 dictionaries where the term “head end system” was “not defined or recited in the specification”).

13 Here, a computer dictionary from around the time of invention defines “account” as “a
14 record of a user’s name, password and rights to access a network or online system.” Mot. Ex. 2 at
15 XONE0104061. In addition, the non-technical Oxford English Dictionary defines “account” as
16 “an arrangement whereby a user is given (freq. personalized) access to a website, program,
17 system, etc., typically by entering username and password at a prompt; the data and setting
18 specific to each user of the website.” Mot. Ex. 1 at XONE0104061. A common thread in both of
19 these definitions is that an “account” includes some form of authenticated access. Although it is
20 true—as Uber points out, Responsive Br. 8—that at least the Oxford English Dictionary uses

21
22
23 using a single access code: “[l]arge groups with many phones, [sic] can ask for and receive access
24 codes that allow operation across a large number of phones.” ’593 patent, col. 23:33–35. The
25 Court agrees with Uber that the authentication mechanism need not be discrete for each individual
26 user. Instead, as Uber points out, multiple users could be authenticated using a single, shared
27 access code. *Id.* However, even with a single, shared access code, it is still the individual user
28 that is being authenticated. *See id.*, col. 23:30–39 (describing how “access codes”—whether
discrete or shared—“are downloaded to the phone from the cell provider’s server or emailed to the
user when the user provides their name, phone number, phone serial number and a form of
payment.”). In this sense, then, the authentication is “user-specific.” Thus, the Court finds that X
One’s proposed construction of “user-specific authenticated access” does not exclude this
embodiment.

1 qualifiers such as “freq[ue]ntly” and “typically,” the fact that “account” is generally associated
 2 with authenticated access suggests that a person of ordinary skill in the art would commonly read
 3 the term “account” in claims 1 and 19 to include “authenticated access.” This supports the Court’s
 4 conclusion that “account” requires “authenticated access.”

5 **ii. Dr. Bartone’s Testimony**

6 The testimony of Uber’s expert, Dr. Bartone, in its IPR petition is not inconsistent with this
 7 conclusion. Dr. Bartone opined that a “person of ordinary skill in the art would understand that an
 8 account is used to enable an individual to access data.” Mot. Ex. 3 ¶ 47. One way to *allow*
 9 individual access is through authentication. Thus, construing “account” to require “authenticated
 10 access” does not conflict with this testimony.

11 **c. Conclusion**

12 As set forth above, while the claim language does not explicitly require that “account”
 13 include “authenticated access,” the specification and relevant dictionary definitions support the
 14 conclusion that “account” includes “authenticated access.” The Court therefore adopts X One’s
 15 position and construes “account” to mean “an arrangement for user-specific authenticated access.”

16 **2. “buddy list” (claims 1 and 19)**

X One’s Proposed Construction	Uber’s Proposed Construction
user list	a list, corresponding to an account of the first individual, that identifies multiple other users whose location may be shared with the first individual and/or who may receive the location of the first individual

17 The term “buddy list” appears in claims 1 and 19. For example, claim 1 recites:

- 18 1. An apparatus, comprising:
- 19 a server;
- 20 a database representing an account for a first individual, the account having an associated **buddy list** that identifies multiple users; and
- 21 software responsive to a request from the first individual to obtain a map, to obtain a last known position for multiple users identified by the **buddy list**, and to plot the last known location of at least two of the multiple users on the map, and to transmit the map with plotted locations to the first individual;
- 22 where the software is to request and store position information associated with

1 cell phones of plural ones of the multiple users and where the software is to
2 permit the first individual to change geography represented by the map and to
3 transmit to the first individual a map representing the changed geography with
4 plotted position of at least one of the multiple users, each in a manner not
5 requiring concurrent voice communications; and

6 wherein the software to obtain the map is to obtain the map in a manner
7 having a default geographic resolution.

8 '593 patent, col. 28:51–29:4 (emphasis added).

9 X One argues that “buddy list” should be construed to mean a “user list.” Opening Br. 11.
10 Uber argues that “buddy list” should be construed to mean “a list, corresponding to an account of
11 the first individual, that identifies multiple other users whose location may be shared with the first
12 individual and/or who may receive the location of the first individual.” Responsive Br. 9. Hence,
13 the parties agree that “buddy list” is a list of users, but disagree as to whether a “buddy list”
14 (1) must identify multiple other individuals in addition to the first individual; (2) requires
15 information about location sharing; and (3) corresponds to an account of the first individual. The
16 Court addresses each of these disputes in turn.

17 **a. Whether the “buddy list” must identify multiple other individuals in addition
18 to the first individual**

19 The parties first dispute whether a “buddy list” must identify multiple other individuals in
20 addition to the first individual. X One contends that the “buddy list” can include just the “first
21 individual” and one other user. Opening Br. 12–14. Uber agrees that a “buddy list” can include
22 the “first individual,” Responsive Br. 14, but argues that it must also include at least two other
23 users who are not the “first individual,” *id.* 9–14. Here, the Court agrees with Uber.

24 **i. Claim Language**

25 The claim language modestly favors Uber’s position. Claim 1 recites an “account for a
26 first individual . . . having an associated buddy list that identifies multiple users.” It then recites:

27 software responsive to a request from the **first individual** to obtain a map, to
28 obtain a last known position for **multiple users** identified by the buddy list, and to
plot the last known location of **at least two of the multiple users** on the map, and
to transmit the map with plotted locations to the first individual

'543 patent, col. 28:57–61 (emphasis added). Although the claim simply says “multiple users”
and not “multiple other users,” the most common sense reading of this limitation is that the “at

1 least two of the multiple users” are users other than the “first individual.” The claim language
2 uses different words—“first individual” and “multiple users”—to refer to each. *See Bd. of*
3 *Regents of the U. of Texas System v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008)
4 (“Different claim terms are presumed to have different meanings.”) (citations omitted). Further, it
5 makes more sense that the first individual would want to “obtain the last known position” of other
6 individuals than he would his own.

7 This conclusion becomes stronger when claim 1 is compared with claim 4. *Rexnord Corp.*
8 *v. The Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) (“a claim term should be construed
9 consistently with its appearance in other places in the same claim or in other claims of the same
10 patent”); *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1159 (Fed. Cir. 1997) (“[W]e are
11 obliged to construe the term ‘elasticity’ consistently throughout the claims.”). Claim 4 recites:

12 4. The apparatus of claim 3, where the software provides a distance from the first
13 individual to each of the at least two of the multiple users.
14 ’543 patent, col. 29:11–13. It makes more sense that the first individual would want to know his
15 distance to two other users, rather than his distance to himself (i.e., 0) and one other user. Thus,
16 the claim language modestly favors Uber’s position.

17 Nevertheless, the claim language is not perfectly clear and does not entirely exclude the
18 possibility that the “first individual” is not one of the “multiple users.” Thus, the Court turns to
19 the specification for further guidance.

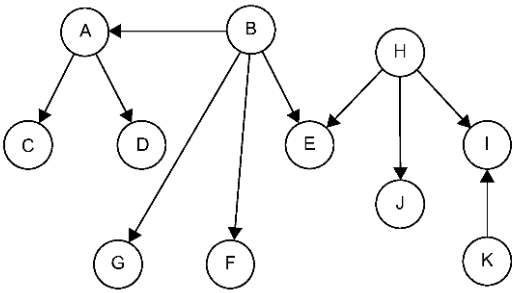
20 **ii. Specification**

21 Reviewing the specification’s disclosures of “buddy lists,” the Court finds that the
22 specification also supports Uber’s position. In a number of instances, the specification uses the
23 word “others”—plural—to refer to users on a buddy list. ’593 patent, col. 2:57–61 (“The user
24 must allow others on his Buddy Lists to ‘see’ his location . . . and the user must request to see the
25 location of *others* on his Buddy Lists to be able to have their positions reported and/or mapped.”)
26 (emphasis added), col. 7:24–26 (“the Buddy Tracker location sharing application software is
27 active and is sharing the location of the phone with *other members* of a designated group”)

1 (emphasis added), col. 8:12–14 (“the wireless devices in a group which has location tracking
 2 turned on periodically send their GPO position data to all the *other members* in the group.”)
 3 (emphasis added). In addition, the specification several times contrasts a buddy list of several
 4 users with just a single user. *Id.*, col. 8:31–33 (“The requested position update may be sent to
 5 everybody on a selected Buddy List or just a single person’s wireless device.”), col. 10:2–3
 6 (“Addresses of all persons on the buddy list or just a selected buddy are located in step 222.
 7 Message packets are generated in 224 addressed to the selected Buddy List or individuals, and
 8 encrypted position data is put in them.”). By contrast, there are no instances where the
 9 specification explicitly discloses a buddy list of one other user. *See generally id.*, col. 5:57–28:48.

10 X One nevertheless argues to the contrary that the specification does disclose a “buddy
 11 list” that contains only the first individual and one other user. It points to two instances: (1) Figure
 12 2B; and (2) the instant buddy relationship, *id.*, col. 11:50–12:9.⁴ Opening Br. 12–13. The Court
 13 finds that, on close examination, neither of these instances disclose a “buddy list” that contains
 14 only the first individual and one other user.

15 The Court turns first to Figure 2B. Figure 2B is shown below:



MATRIX OF BUDDY LIST

23 ⁴ In addition, at the Markman hearing, X One also identified Figure 13 and its use of
 24 “person(s)”—singular or plural—in step 112 as an additional example of a “buddy list” that
 25 contains only the first individual and one other user. The Court disagrees that Figure 13 provides
 26 such an example. In describing Figure 13, the specification makes clear that Figure 13 refers to a
 27 “buddy list” that includes multiple other users. ‘593 patent, col. 8:31–33. The “person(s)” in step
 28 112 refers to the specific buddy(ies) within a buddy list for which the first individual requests a
 location update. *Id.*, col. 8:35–40 (“Step 112 represents the process of looking up the addresses
 for all people on the selected Buddy List . . . or just a selected individual . . .”). Thus, Figure 13
 only shows that it is possible for a first individual to request a location update from a single buddy
 on a “buddy list” that includes multiple other users.

1 '593 patent, Fig. 2B. The specification discloses that “[i]n Figure 2B . . . [p]hone K has phone I
2 on its Buddy List and is set up to supervise phone I.” *Id.*, col. 7:45–46. However, this does not
3 mean that, in Figure 2B, phone K only has phone I on its buddy list. The specification makes
4 clear that the purpose of Figure 2B is simply to “illustrate[] a matrix or web of supervisory
5 relationships.” *Id.*, col. 3:64–65, col. 7:37–40. A phone’s buddy list can contain more than just
6 the phones over which it has a supervisory relationship. *See, e.g., id.*, col. 7:27–30 (describing
7 how a parent or supervisor can include a supervised phone in the buddy list), col. 17:31–35
8 (same). Because Figure 2B simply “illustrates . . . supervisory relationships,” it is impossible to
9 know whether phone K only has phone I on its buddy list or whether phone K also has other
10 phones on its buddy list. As such, the Court cannot rely on Figure 2B as an embodiment of a
11 “buddy list” that contains only the first individual and one other user.

12 The Court next turns to the instant buddy relationship. The specification defines the
13 instant buddy relationship as “temporary location sharing between phones on an ask and accept
14 basis which automatically expires after a configurable interval terminates.” *Id.*, col. 1:64–67.
15 Read in its entirety, the specification makes clear that the instant buddy relationship is a different
16 feature from the “buddy list.” It shows this in at least four different ways. First, the specification
17 consistently uses different terms to refer to each of these features: “Buddy List” and “Instant
18 Buddies,” both capitalized. *See, e.g., Id.*, col. 11:20–12:9. Second, the specification’s
19 descriptions of each are discrete. For example, in describing Figure 14, the specification
20 separately lists “Buddy Lists” and “Instant Buddies” as two of “several modes” and provides
21 separate, back-to-back descriptions of each. *Id.* Third, the specification describes “Instant
22 Buddies” as something separate that can be displayed alongside the contents of a “Buddy List.”
23 For example, Figure 3 illustrates a “typical screen showing a named buddy list’s contents.” *Id.*,
24 Fig. 3. This display “shows individuals on the phone’s Buddy List,” “a group of buddies which
25 has been given the name Tennis Team,” and “an instant buddy entry for an instant buddy named
26 Inst01.” *Id.*, col. 15:15–16, col. 15:26–27. Thus, the fact that an “Instant Budd[y]” is displayed *in*
27 *addition* to the “individuals on the phone’s Buddy List” shows that an instant buddy relationship

1 cannot itself be a “buddy list.” Fourth and finally, in describing the “Buddies Only Mode,” the
2 specification distinguishes a “buddy list” from the instant buddy relationship by describing that the
3 “Buddies Only Mode” feature is only available for a “Buddy List,” but not “Instant Buddies.” *Id.*,
4 col. 18:53–58 (describing how in “Buddies only mode . . . position reports are only received from
5 Buddies on a specifically named Buddy List with specifically named Buddies. No . . . Instant
6 Buddy position reports can be received in this mode.”). Thus, in at least four different ways, the
7 specification makes clear that the instant buddy relationship is a separate feature from the “buddy
8 list.” As such, the instant buddy relationship is not an example of a “buddy list” that contains only
9 the first individual and one other user.

10 In sum, the specification confirms what the claim language already modestly suggests: the
11 “buddy list” must include at least two other users who are not the “first individual.”

12 **iii. Conclusion**

13 The parties do not rely on prosecution history or extrinsic evidence to support their
14 positions. Thus, based on the claim language and specification, the Court agrees with Uber that
15 the “buddy list” must include at least two other users who are not the “first individual.”

16 **b. Whether the “buddy list” requires information about location sharing**

17 The parties next dispute whether the “buddy list” requires information about location
18 sharing. Uber’s proposed construction requires that the “multiple other users” are those “whose
19 location may be shared with the first individual and/or who may receive the location of the first
20 individual.” X One contends that “and/or who may receive the location of the first individual”
21 should not be included in the Court’s construction because this improperly introduces a two-way
22 location sharing feature, which is unsupported by the claims or specification. Opening Br. 14–15.
23 Uber defends its proposal as consistent with the specification and helpful to the jury. Responsive
24 Br. 13–14. For the reasons discussed below, the Court agrees with X One.

25 **i. Claim Language**

26 The claim language does not support including “and/or who may receive the location of the
27 first individual” within the meaning of “buddy list.” Claims 1 and 19 specifically recite that the

1 “multiple users” share their location information with the first individual. *See* ’593 patent, col.
2 28:56–29:2, col. 30:54–31:2. They do not, however, recite that data flows in the other direction—
3 i.e., that the first individual shares his location information with the “multiple users.” *See id.*
4 Thus, the phrase “and/or who may receive the location of the first individual” introduces a two-
5 way location sharing feature that is not supported by the plain language of claims 1 and 19.

6 **ii. Specification**

7 The specification also does not support including “and/or who may receive the location of
8 the first individual” within the meaning of “buddy list.” The specification discloses embodiments
9 where location sharing is unidirectional. *See, e.g., id.*, col. 7:32–37 (“This supervisory location
10 sharing can be hierarchical such that an employer can see the location of all its employees, and
11 each of the employees can be set up as supervisor of their children such that the employees can see
12 the locations of their children, but the employer of each employee cannot see the locations of the
13 children of each employee.”), col. 17:38–41 (“[T]he location information sharing is unidirectional
14 from employees to supervisor but each employee can see the location of other employees on their
15 phones but not the location of the supervisor.”). Requiring that the “multiple users” “receive the
16 location of the first individual” would exclude these embodiments. *See Victronics*, 90 F.3d at
17 1583 (a construction that excludes a preferred embodiment is “rarely, if ever, correct”).

18 The Court notes that Uber’s proposal is written in the permissive (“may”) and thus does
19 not go so far as to categorically exclude unidirectional location sharing. Nevertheless, even if
20 “and/or who may receive the location of the first individual” only suggests that two-way location
21 sharing is possible, the Court finds it proper to exclude this phrase because it would be confusing
22 and unhelpful to the jury. “‘Claim construction’ is for the purpose of explaining and defining
23 terms in the claims” *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1360 (Fed. Cir. 2008). A
24 construction written in the permissive suggesting that an additional feature “may” be part of the
25 invention does not serve this purpose. Thus, the Court finds that the best course of action is to not
26 include “and/or who may receive the location of the first individual” in its construction of “buddy
27 list.” In sum, the Court agrees with X One that “and/or who may receive the location of the first

1 individual” should not be included in the construction of “buddy list.”

2 **c. Whether the “buddy list” corresponds to an account of the first individual**

3 The parties’ final dispute is whether the “buddy list” corresponds to an account of the first
4 individual. Uber’s proposed construction requires that the “buddy list” is “a list, corresponding to
5 an account of the first individual.” Responsive Br. 9. X One argues that “corresponding” is an
6 improper redrafting of claims 1 and 19, which recite “a database representing an account for a first
7 individual, the account having an *associated* buddy list that identifies multiple users.” Opening
8 Br. 15–16. Uber defends “corresponding” as consistent with the plain meaning of the claim
9 language. Responsive Br. 14.

10 The parties largely agree on substance: whether the buddy list is “associated” with the first
11 individual or “corresponds” to the first individual, the broader point is that there is some
12 relationship between the two. However, because the claim language uses the word “associated”
13 and Uber makes no argument as to why “corresponding” would assist the jury or is otherwise a
14 superior choice, the Court sees no reason to change “associated” to “corresponding.” *See Abbott*
15 *Labs*, 544 F.3d at 1360 (“‘Claim construction’ is for the purpose of explaining and defining terms
16 in the claims . . .”). Thus, the Court will use “associated” in its construction.

17 **d. Conclusion**

18 As set forth above, the Court agrees with Uber that the “buddy list” must include at least
19 two other users who are not the “first individual.” However, the Court agrees with X One that
20 Uber’s proposed language of “and/or who may receive the location of the first individual” and
21 “corresponding” should not be included in the construction of “buddy list.” Accordingly, the
22 Court adopts a modified version of Uber’s proposal. The Court construes “buddy list” to mean “a
23 list, associated with an account of the first individual, that identifies multiple other users whose
24 location may be shared with the first individual.”

25 **3. “a database representing an account for a first individual, the account having an
26 associated buddy list that identifies multiple users” (claims 1 and 19)**

X One’s Proposed Construction	Uber’s Proposed Construction
A database including data related to a first	a database accessible by the server that

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

individual who is authorized to access and use the software. A buddy list is associated with the first individual's account.	includes an account for a first individual, the account having a list of multiple other users that identifies those users whose location may be shared with the first individual and/or who may receive the location of the first individual
--	--

The disputed phrase “a database . . .” appears in claims 1 and 19. For example, claim 1 recites:

1. An apparatus, comprising:
 - a server;
 - a database representing an account for a first individual, the account having an associated buddy list that identifies multiple users; and**
 - software responsive to a request from the first individual to obtain a map, to obtain a last known position for multiple users identified by the buddy list, and to plot the last known location of at least two of the multiple users on the map, and to transmit the map with plotted locations to the first individual;
 - where the software is to request and store position information associated with cell phones of plural ones of the multiple users and where the software is to permit the first individual to change geography represented by the map and to transmit to the first individual a map representing the changed geography with plotted position of at least one of the multiple users, each in a manner not requiring concurrent voice communications; and
 - wherein the software to obtain the map is to obtain the map in a manner having a default geographic resolution.

'593 patent at col. 28:51–29:4 (emphasis added).

Comparing the parties' proposals, the parties dispute two related issues: (1) whether the database must store the account; and (2) whether the database is accessible by the server.⁵ The Court addresses each of these disputes in turn.

a. Whether the database must store the account

The parties' first dispute is whether the database must store the account. X One argues that

⁵ In addition, in its Opening Brief, X One identified “whether the database must . . . also store a user's buddy list” as a disputed issue. Opening Br. 16. In its responsive brief, Uber rephrased this issue as “whether the account has a buddy list.” Responsive Br. 15. In comparing the parties' briefing on this topic, the Court discerns no actual dispute. X One's only argument in its briefing on this topic is that “the buddy list need not be stored in the same database as the account data.” Opening Br. 17. Uber agrees with this. Responsive Br. 16 (“Uber's proposed construction does not place a restriction on where or how the buddy list is stored”). Thus, the Court deems this issue resolved and adopts the parties' positions that the claimed “database” need not store the buddy list.

1 the database need only store “data related to a first individual”—not the account itself—because
 2 the claim language requires no more than this. Opening Br. 16–17. Uber argues that the database
 3 should store the account itself because in order for the database to “represent[.]” the account, it
 4 must include the account. Responsive Br. 16. For the reasons discussed below, the Court agrees
 5 with X One.

6 **i. Claim Language**

7 The claim language resolves the parties’ dispute. Claims 1 and 19 only require “a database
 8 *representing* an account.” ’593 patent, col. 28:53, col. 30:51 (emphasis added). A representation
 9 of a thing need not be the thing itself. *Compare, e.g., Tehrani v. Hamilton Med., Inc.*, 331 F.3d
 10 1355, 1361 (Fed. Cir. 2003) (“[T]he ordinary meaning of ‘representing’ is broad enough to include
 11 ‘symbolizing’ or ‘to stand for’ On the other hand, the statement that one item ‘represents’
 12 another cannot be interpreted so broadly as to include any case in which the two items are related
 13 in some way. Rather, the first item must be directly related to and stand for, or be a reasonable
 14 proxy for, the latter item.”); *ART+COM Innovationpool GmbH v. Google Inc.*, No. CV 1:14-217-
 15 TBD, 2016 WL 2945194, at *2 (D. Del. May 20, 2016) (“[T]he ordinary meaning of
 16 ‘representing’ is broader than ‘displaying on a screen’ and can include symbolizing, standing for,
 17 or being a reasonable proxy for a subsequent viewable image.”). Thus, unless the specification or
 18 prosecution history otherwise compel it, “representing” is entitled to the full scope of its plain and
 19 ordinary meaning. *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1281 (Fed. Cir.
 20 2017) (“It is axiomatic that we will not narrow a claim term beyond its plain and ordinary meaning
 21 unless there is support for the limitation in the words of the claim, the specification, or the
 22 prosecution history.”) (quoting *3M Innovative Proprs. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1333
 23 (Fed. Cir. 2013). Consistent with the Federal Circuit’s and other courts’ assessments of the word
 24 “representing,” this plain and ordinary meaning would require that the “represent[ation] of the
 25 account” is directly related to and standing for the account, but nothing more restrictive.

26 **ii. Specification and Prosecution History**

27 Neither party identifies anything in the specification or prosecution history that warrants a
 28

1 narrower construction of “representing.” Opening Br. 16–18; Responsive Br. 15–16. Thus, the
2 Court will not narrow its meaning beyond the plain and ordinary meaning discussed above.
3 Accordingly, the Court agrees with X One that the database need not store the actual account.

4 **b. Whether the database must be accessible by the server**

5 The parties’ next and final dispute is whether the database must be accessible by the server.
6 X One argues that the database need not be accessible by the server because the claim language is
7 silent on this point. Opening Br. 17–18. Uber argues that the database must be accessible by the
8 server because the specification discloses that this is the case. Responsive Br. 16. The Court
9 agrees with Uber.

10 **i. Claim Language**

11 Beginning with the claim language, the Court notes that the claims do not explicitly state
12 where the “database” is stored and whether it is accessible by the server. *See* ’593 patent, col.
13 28:51–29:4, col. 30:49–31:2. However, when “database” is read in context with the remainder of
14 the claim language, the claim language supports Uber’s position that the “database” is “accessible
15 by the server.” *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“[T]he
16 context of the surrounding words of the claim also must be considered in determining the ordinary
17 and customary meaning of those terms.”). Specifically, after the claims recite “a database
18 representing an account . . . having an associated buddy list . . .,” the claims immediately recite
19 operations that are performed by “software” using this “buddy list” information, such as
20 “obtain[ing] a last known position for multiple users identified by the buddy list.” ’593 patent,
21 col. 28:56–61, col. 30:54–58. As determined below with respect to “last known location,” this
22 “software” is run on the “server.” *See* Section III.A.4, *infra*. Thus, it makes sense that, in order
23 for the “software” to be able to perform the recited operations with respect to the “buddy list,” the
24 “database” must be accessible by the “server.” As such, the claim language supports Uber’s
25 position.

26 **ii. Specification**

27 The specification provides further support for Uber’s position. In its section on “The
28

1 Server Genus,” the specification discloses that “[a]ll servers programmed with the Buddy Watch
2 software will have functionality to . . . store user defined data that embodies each user’s buddy
3 lists and buddies and configuration data.” ’593 patent, col. 25:6–10. This statement does not
4 simply describe a preferred embodiment. Instead, it is an explicit characterization of all of the
5 “servers” in the invention. *See Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330 (Fed.
6 Cir. 2012) (A “clear expression [to define a claim term] need not be in *haec verba* but may be
7 inferred from clear limiting descriptions of the invention in the specification or prosecution
8 history.”); *see, e.g., Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1363 (Fed. Cir. 2007)
9 (holding that a district court correctly interpreted claims to require a feature based the
10 specification’s teaching of what “must” be present). Thus, the “server” in claims 1 and 19 must
11 have the “functionality . . . to store data that embodies each user’s buddy lists and buddies and
12 configuration data.” ’593 patent, col. 25:6–10. It follows that if the server can store this data, this
13 data is accessible to the server. This conclusion is bolstered by other portions of the specification,
14 which describe preferred embodiments where a database is accessible to a server. *Id.*, col. 6:11–
15 15 (describing how “[a] response to the request in the packet [from a device] is prepared using
16 information from a database maintained by the Rubicon server”), col. 12:39–40 (listing “database
17 access and maintenance” as a “function[] of the Buddy Watch server”). Accordingly, the claimed
18 “server” includes “functionality to . . . store data that embodies each user’s buddy lists and
19 buddies and configuration data.”

20 That said, the Court does not read the specification as requiring that the claimed “database”
21 is the same as the server’s “functionality . . . to store data that embodies each user’s buddy lists
22 and buddies and configuration data.” ’593 patent, col. 26:6–10. It may be, for example, that the
23 server has this “functionality . . .” but then additionally the claimed “database” is stored
24 somewhere else. Nevertheless, the fact that the server has this “functionality . . . to store data that
25 embodies each user’s buddy lists and buddies and configuration data,” *id.*, at least bolsters the
26 conclusion that the claimed “database” that contains “represent[at]ions of this data” is accessible
27 by the “server.”

1 Accordingly, the specification supports what the claim language already suggests: the
2 “database” must be accessible by the server.

3 **c. Conclusion**

4 In sum, the Court finds that (1) the “database” need not store the account; but (2) the
5 “database” must be accessible by the server. In addition, the parties agree that the “database” need
6 not store the buddy list. *Compare* Opening Br. 16, *with* Responsive Br. 16.

7 As the Court has resolved one dispute in favor of X One and one dispute in favor of Uber,
8 the Court must determine which of the parties’ competing constructions it should use as a model
9 for its own. On this point, the Court finds that the structure of Uber’s proposed construction
10 would be more clear and helpful to the jury. *See Abbott Labs*, 544 F.3d at 1360 (“‘Claim
11 construction’ is for the purpose of explaining and defining terms in the claims . . .”). Uber’s
12 proposed construction is a crisp phrase that parallels the grammatical structure of the disputed
13 limitation and incorporates the construction of “buddy list,” whereas X One’s proposed
14 construction consists of two bulky sentences that do not define “buddy list.” The Court will thus
15 adopt the structure of Uber’s proposal, but modify it to reflect the Court’s resolution of the parties’
16 dispute. The Court construes “a database representing an account for a first individual, the
17 account having an associated buddy list that identifies multiple users” to mean “a database
18 accessible by the server that includes data directly related to and standing for an account for a first
19 individual, the account having an associated list that identifies multiple other users whose location
20 may be shared with the first individual.”

21 **4. “last known location” (claims 1 and 19)**

X One’s Proposed Construction	Uber’s Proposed Construction
plain meaning	most-recent position stored on the server for a user at the time the user’s position is plotted on the map

22 The term “last known location” appears in claims 1 and 19. For example, claim 1 recites:

- 23 1. An apparatus, comprising:
- 24 a server;
- 25 a database representing an account for a first individual, the account having an

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

associated buddy list that identifies multiple users; and software responsive to a request from the first individual to obtain a map, to obtain a last known position for multiple users identified by the buddy list, and to plot the **last known location** of at least two of the multiple users on the map, and to transmit the map with plotted locations to the first individual; where the software is to request and store position information associated with cell phones of plural ones of the multiple users and where the software is to permit the first individual to change geography represented by the map and to transmit to the first individual a map representing the changed geography with plotted position of at least one of the multiple users, each in a manner not requiring concurrent voice communications; and wherein the software to obtain the map is to obtain the map in a manner having a default geographic resolution.

'593 patent, col. 28:51–29:4 (emphasis added).

X One argues that “last known location” requires no construction. Opening Br. 18–20. Uber argues that “last known location” should be construed to mean “most-recent position stored on the server for a user at the time the user’s position is plotted on the map.” Responsive Br. 16–20. Hence, the parties dispute whether (1) a user’s “last known location” is stored on the server; and (2) the “last known location” is determined at the time a user’s position is plotted on the map. The Court addresses each of these disputes in turn.

a. Whether the user’s “last known location” is stored on the server
i. Claim Language

Beginning with the claim language, the Court notes that it does not explicitly recite where the “last known location” is stored. Nevertheless, read in its entirety, the Court finds that the claim language, on balance, favors Uber’s position. Claims 1 and 19 recite a “server.” ’593 patent, col. 28:52, col. 30:50. Then, they recite “software” which performs server-like functions, such as “obtain a map,” “obtain a last known position for multiple users identified by the buddy list,” “plot the last known location of at least two of the multiple users on the map,” “transmit the map with plotted locations to the first individual,” and “request and store position information associated with cell phones of plural ones of the multiple users.” *Id.*, col. 28:57–64. Thus, the most logical reading of this claim language is that the “software” runs on the server. If this is true, this means that when the “software . . . request[s] and store[s] position information,” this “position

1 information”—including the “last known location”—is stored on the server. As such, reading
2 “last known location” in the context of the rest of the claims supports Uber’s position that “last
3 known location” is stored on the server.

4 **ii. Specification**

5 The specification confirms that the “software” is run on the server. In describing “The
6 Server Genus,” the specification lists many of the same functions that are attributed to the
7 “software” in claims 1 and 19 as functions of which “[a]ll servers programmed with Buddy Watch
8 software” will be capable. ’593 patent, col. 24:59–25:21 (disclosing that “[a]ll servers
9 programmed with Buddy Watch software will have functionality to . . . obtain pertinent map data,”
10 “request and receive update and regularly scheduled GPS location data from users,” “render buddy
11 locations on maplets based upon GPS location data,” and “serve the maplet data to Buddy Watch
12 enabled phones”). As stated above with respect to “database,” this is an explicit definitional
13 statement about all servers, not just a description of a preferred embodiment. *See* Section III.A.3,
14 *supra*. This is further bolstered by portions of the specification that explicitly disclose that the
15 server stores location information. *E.g.*, ’593 patent, col. 17:59–61 (“The server receives positions
16 reports from all the Buddy Watch phones registered with it and stores them and knows the Buddy
17 Lists for each phone.”). Thus, when read in light of the specification, the “software” in claims 1
18 and 19 is “software” that resides on the server.

19 As discussed above, the claims require that the “software . . . store position information,”
20 and wherever the software is run is also where the “position information” is “stor[ed].” Thus,
21 because, as discussed above, the specification makes clear that the “software” is run on the server,
22 the “position information”—including the “last known location”—is also stored on the server.

23 X One nevertheless argues that the “last known location” need not be stored on the server
24 because the specification discloses embodiments where a user’s last known location is not sent to
25 (and hence, not stored on) the server, but is instead sent directly from one device to another.

26
27
28

1 Opening Br. 19 (citing '543 patent, col. 8:40–9:65).⁶ However, as discussed above with respect to
2 “account,” claims 1 and 19 specifically require a “server.” *See* Section III.A.1, *supra*. Thus, in
3 construing claims 1 and 19, the Court must focus on disclosed embodiments in the specification
4 that include a server. Accordingly, the device-to-device embodiments that X One cites fall outside
5 the scope of claims 1 and 19 and have little relevance to their construction.

6 In sum, the specification confirms what the claim language modestly suggests: Uber is
7 correct that the “last known location” is stored on the server.

8 **b. Whether the “last known location” is determined at the time a user’s position**
9 **is plotted on the map**

10 The claim language is sufficient to end the parties’ dispute. Claims 1 and 19 recite a fluid
11 set of actions that occur “responsive to a request from the first individual.” “obtain[ing] a map,”
12 “obtain[ing] a last known position for multiple users,” and “plot[ting] the last known location of at
13 least two of the multiple users on the map.” '593 patent, col. 28:57–61, col. 30:60–64. Putting
14 these statements together, the “last known location” must be determined at the time of plotting. It
15 would not make sense for it to be determined before the time of plotting because that would mean
16 that the plotting was not “responsive” to the first individual’s request. It would also not make
17 sense for it to be determined after the time of plotting, because, in order to “plot[] the last known
18 location,” that “last known location” must first be determined. Thus, the “last known location” is
19 determined at the time of plotting.

20 Nevertheless, having determined that “last known location” is determined at the time of
21 plotting still leaves open the question of whether Uber’s proposed language of “most-recent
22 position stored on the server” better captures this meaning than the claim language itself. X One
23 argues that “most-recent position stored on the server” ignores the fact that a user may have
24 several “last known locations” depending on the buddy list: a user may choose to share his

26 ⁶ X One also cites to embodiments which X One describes as “sending a user’s last known
27 location to a server that, rather than storing it, simply forwards it to another user’s mobile device.”
28 Opening Br. 19 (citing '543 patent, col. 9:66–10:34). The Court disagrees that this embodiment
does not store the last known location. The specification does not support X One’s assertion.

1 location with one buddy all the time, whereas the user may choose to share his location with
2 another buddy only sometimes. Opening Br. 19–20; Reply Br. 8–9. Uber does not specifically
3 respond to this argument. Responsive Br. 16–20.

4 The Court agrees with X One that “most-recent position stored on the server” injects some
5 confusion into the meaning of “last known location” because different buddy lists could have
6 different “last known locations.” *Compare, e.g.*, ’593 patent, col. 11:12–19 (describing a buddy
7 list where location sharing is always on), *with id.*, col. 11:25–27 (describing a buddy list where
8 location sharing is only on during work hours). However, the Court finds that this problem can be
9 remedied by modifying “most-recent position” in Uber’s proposed construction to “most-recent
10 shared position,” which makes clear that “most-recent” is limited to only the location information
11 that that user has shared with a particular buddy list. Thus, the Court will adopt Uber’s proposed
12 construction, subject to this modification.

13 **c. Conclusion**

14 In sum, the Court finds that (1) a user’s “last known location” is stored on the server; and
15 (2) the “last known location” is determined at the time a user’s position is plotted on the map. The
16 Court, however, agrees with X One that “last known location” can be different depending on the
17 buddy list used. As such, the Court adopts a modified version of Uber’s proposed construction.
18 The Court construes “last known location” to mean “most-recent shared position stored on the
19 server for a user at the time the user’s position is plotted on the map.”

20 **B. ’647 Patent**

- 21 **1. “wherein the provider is selected in connection with the request for the desired
22 service” (claims 1 and 28) / “selecting the provider of the desired service” (claim
22 22)**

X One’s Proposed Construction	Uber’s Proposed Construction
plain meaning	wherein the requestor of the desired service selects the provider of the desired service / selecting the provider of the desired service by the requestor of the desired service

26 The phrase “wherein the provider is selected in connection with the request for the desired
27 service” appears in claims 1 and 28 of the ’647 patent. The phrase “selecting the provider of the
28

1 desired service” appears in claim 22. For example, claims 1 and 22 recite:

2 1. A method of tracking proximity of position associated with a first wireless
3 device relative to a position of a second wireless device, wherein one of the first
4 wireless device and the second wireless device is associated with a provider of a
5 desired service and the other of the first wireless device and the second wireless
6 device is associated with a requestor of the desired service, the method
7 comprising:

8 causing receipt of information on the first wireless device representing the
9 position of the second wireless device and a map associated with the position
10 associated with the first wireless device and the position of second wireless
11 device;

12 causing display of the map on the first wireless device with position
13 associated with the first wireless device and the position of the second
14 wireless device rendered thereon; and

15 causing receipt of information on the first wireless device representing
16 positional update of the second wireless device, and causing update of display
17 of the map on the first wireless device with the position associated with the
18 first wireless device and updated position of the second wireless device
19 rendered thereon;

20 wherein the causing of the update is to be performed to indicate proximity of
21 and direction between position of the provider of the desired service and
22 position associated with the requestor of the desired service;

23 wherein the method is invoked responsive to launching an application on the
24 first wireless device in connection with a request from the requestor for the
25 desired service; and

26 **wherein the provider is selected in connection with the request for the**
27 **desired service** and the method further comprises forming a use-specific
28 group to have the first wireless device and the second wireless device in
connection with the request for the desired service.

22. A method of tracking proximity of position associated with a first wireless
device relative to position of a second wireless device, wherein the first wireless
device is associated with a requestor of a desired service and the second wireless
device is associated with a provider of the desired service, the method
comprising:

selecting the provider of the desired service in association with an application
launched by the requestor on the first wireless device, wherein the second
wireless device is associated with the provider and is thereby selected in
associated [sic] with launch of the application;

causing receipt of information on the first wireless device representing
position of the provider, dependent on global positioning system (GPS)
position data provided by the second wireless device, and receipt of
information representing a map associated with the position associated with

1 the first wireless device and the position of the second wireless device;
2 causing display of the map on the first wireless device with the position
3 associated with the requestor and the position of the second wireless device
4 rendered thereon; and

5 causing receipt of information on the first wireless device representing
6 intermittent positional update dependent on GPS position data provided by the
7 second wireless device, and causing update of display of the map on the first
8 wireless device with respective position associated with the first wireless
9 device and positional update dependent on the GPS position data provided by
10 the second wireless device rendered thereon;

11 wherein **selecting the provider of the desired service** includes forming a
12 use-specific group to have the first wireless device and the second wireless
13 device in connection with the request for the desired service.

14 '647 patent, col. 28:50–29:19, col. 30:47–31:12 (emphasis added).

15 X One argues that the disputed phrases require no construction and should be given their
16 plain meaning. Opening Br. 20–21. Uber, on the other hand, argues that the phrase “wherein the
17 provider is selected in connection with the request for the desired service” in claims 1 and 28
18 should be construed to mean “wherein the requestor of the desired service selects the provider of
19 the desired service.” Responsive Br. 20–22. Uber argues that the phrase “selecting the provider
20 of the desired service” in claim 22 should be construed to mean “selecting the provider of the
21 desired service by the requestor of the desired service.” *Id.* Comparing these proposals, the
22 parties’ dispute boils down to a simple issue: whether anyone (X One’s position) or only the
23 “requestor” (Uber’s position) can select the service provider. For the reasons discussed below, the
24 Court agrees with X One.

25 **i. Claim Language and Specification**

26 The plain language of the claims only recites “selecting the provider” or that the “provider
27 is selected,” and does not specify who does the selecting. '647 patent, col. 30:47–31:12, col.
28 31:37–32:5. As a result, both sides focus on the specification. X One argues that the specification
not only discloses embodiments where the requestor selects the service provider, but also
embodiments where someone else—such as the service provider company—selects the service
provider. Opening Br. 20–21. In particular, X One points to two embodiments: (1) a “stranded
motorist or hiker” embodiment, '647 patent, col. 17:7–14; and (2) a skillset-based selection

1 embodiment, *id.*, col. 20:58–21:1. Uber responds that the “stranded motorist or hiker”
2 embodiment confirms that only the requestor selects the service provider. Responsive Br. 21–22.
3 Uber does not address the skillset-based selection embodiment. *See id.*

4 Upon reviewing each of the identified embodiments, the Court finds that the specification
5 does not support an inference that only the “requestor” can select the service provider. Turning
6 first to the “stranded motorist or hiker” embodiment, the specification discloses that:

7 Typically, a stranded motorist or hiker will call a tow truck or 911 and get the
8 caller ID and carrier of the tow truck driver or rescuer. The stranded motorist or
9 hiker will then enter this information in boxes 72 and 76. Box 70 shows an
instant buddy ID which is automatically assigned by the system. After entering
the information, the request command shown at 80 is selected.

10 ‘647 patent, col. 17:7–14. The key to the parties’ dispute is the first sentence: after calling a tow
11 truck or 911, the stranded motorist or hiker “get[s]” the caller ID and carrier of his specific tow
12 truck driver or rescuer. *Id.*, col. 17:8–10. This phrase is ambiguous as to who does the selecting:
13 in some cases, it may be that the 911 operator selects a tow truck or rescue service; in other cases,
14 it may be that the stranded motorist or hiker himself requests a particular tow truck or rescue
15 service, either by virtue of calling a particular tow truck service or by telling the 911 operator
16 which service they would like to use. Thus, it does not support limiting the claims such that only
17 the “requestor” may select a particular service provider.

18 Turning next to the skillset-based selection embodiment, the specification discloses that:

19 The Buddy Watch server is configured and programmed to be compatible with
20 business applications where the customer may desire to find individuals based
21 upon their capabilities, certifications or the equipment they are carrying. By
22 making the Buddy Watch fields of the Buddy Watch database available for search
23 and/or integration into other business databases, a company such as a *service
based organization can determine which individuals* have the proper certification
to work on a specific problem and/or who have the appropriate tools and where
those individuals are located relative to a site to which the company wishes them
to be dispatched.

24 *Id.*, col. 20:58–21:1 (emphasis added). In its plainest reading, this passage discloses that the
25 “service based organization” can select a service provider. Specifically, the fact that the “service
26 based organization *can determine* which individuals” have the fitting skillset implies that, through
27 making this determination, the “service based organization” selects those individuals—i.e., service

28

1 providers. *See id.*, col. 20:64–21:1. Thus, the skillset-based selection embodiment supports
2 Uber’s position that entities other than the “requestor” can select the service provider.

3 **ii. Conclusion**

4 In sum, the claims are silent as to who can select the service provider and the specification
5 supports the inference that entities other than the “requestor” can select the service provider.
6 Accordingly, the Court agrees with X One that anyone—not just the “requestor”—can select the
7 service provider. The claims, written in the passive voice, best reflect this meaning. Accordingly,
8 the Court will not construe them further.

9 **2. “responsive to launching an application” (claims 1 and 28) / “in association with
10 an application launched” (claim 22)**

X One’s Proposed Construction	Uber’s Proposed Construction
plain meaning	in association with the running of the application

11
12 The phrase “responsive to launching an application” appears in claims 1 and 28 of the ’647
13 patent. The phrase “in association with an application launched” appears in claim 22. For
14 example, claims 1 and 22 recite:

15 1. A method of tracking proximity of position associated with a first wireless
16 device relative to a position of a second wireless device, wherein one of the first
17 wireless device and the second wireless device is associated with a provider of a
18 desired service and the other of the first wireless device and the second wireless
19 device is associated with a requestor of the desired service, the method
20 comprising:

21 causing receipt of information on the first wireless device representing the
22 position of the second wireless device and a map associated with the position
23 associated with the first wireless device and the position of second wireless
24 device;

25 causing display of the map on the first wireless device with position
26 associated with the first wireless device and the position of the second
27 wireless device rendered thereon; and

28 causing receipt of information on the first wireless device representing
positional update of the second wireless device, and causing update of display
of the map on the first wireless device with the position associated with the
first wireless device and updated position of the second wireless device
rendered thereon;

wherein the causing of the update is to be performed to indicate proximity of
and direction between position of the provider of the desired service and

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

position associated with the requestor of the desired service;
wherein the method is invoked **responsive to launching an application** on the first wireless device in connection with a request from the requestor for the desired service; and
wherein the provider is selected in connection with the request for the desired service and the method further comprises forming a use-specific group to have the first wireless device and the second wireless device in connection with the request for the desired service.

22. A method of tracking proximity of position associated with a first wireless device relative to position of a second wireless device, wherein the first wireless device is associated with a requestor of a desired service and the second wireless device is associated with a provider of the desired service, the method comprising:

- selecting the provider of the desired service **in association with an application launched** by the requestor on the first wireless device, wherein the second wireless device is associated with the provider and is thereby selected in associated [sic] with launch of the application;
- causing receipt of information on the first wireless device representing position of the provider, dependent on global positioning system (GPS) position data provided by the second wireless device, and receipt of information representing a map associated with the position associated with the first wireless device and the position of the second wireless device;
- causing display of the map on the first wireless device with the position associated with the requestor and the position of the second wireless device rendered thereon; and
- causing receipt of information on the first wireless device representing intermittent positional update dependent on GPS position data provided by the second wireless device, and causing update of display of the map on the first wireless device with respective position associated with the first wireless device and positional update dependent on the GPS position data provided by the second wireless device rendered thereon;
- wherein selecting the provider of the desired service includes forming a use-specific group to have the first wireless device and the second wireless device in connection with the request for the desired service.

'647 patent, col. 28:50–29:19, col. 30:47–31:12 (emphasis added).

X One argues that the disputed phrases require no construction and should be given their plain meaning. Opening Br. 21–23. Uber, on the other hand, argues that the disputed phrases should be construed to mean “in association with the running of the application.” Responsive Br. 22–23. Thus, the parties dispute whether the claimed functions must be performed in association

1 with the *running* of an application, or simply in association with either “*launching* an application”
2 or “an application *launched*.” For the reasons discussed below, the Court agrees with X One.

3 **i. Claim Language and Specification**

4 The plain language of the claims is silent as to what relation the claimed actions have to
5 whether an application is *running*. See ’647 patent, col. 28:50–29:19, col. 30:47–31:12, col.
6 31:37–32:5. Hence, if there is any support for Uber’s proposed construction, it must be found in
7 the specification. Upon review of the specification, the Court finds that it does not require the
8 “*running*” modification that Uber proposes. In general, the specification describes the
9 functionality of embodiments relating to service providers (i.e., embodiments relating to claims 1,
10 22, and 28) in the abstract, and does not specify what happens while an application is actively
11 running. See, e.g., ’647 patent, col. 15:27–38, col. 17:7–27. Moreover, the specification discloses
12 that it is possible for devices to be temporarily disabled where the application would not be
13 running. *Id.*, col. 10:50–11:4, col. 22:5–11, col. 22:44–23:20. Accordingly, the specification also
14 does not require the “*running*” modification that Uber proposes.

15 In its briefing, Uber does not make an affirmative case for why the Court should adopt its
16 “*running*” modification. Instead, it devotes most of its briefing to arguing why X One’s plain
17 meaning position is incorrect. Although the Court has already rejected Uber’s proposed “*running*”
18 modification, it additionally finds that none of Uber’s arguments against X One’s plain meaning
19 approach is persuasive. It discusses each in turn.

20 First, Uber argues that the phrases “responsive to launching” or “in association with an
21 application launched” are vague. Responsive Br. 22–23. The Court disagrees. “Responsive to
22 launching” simply places a temporal relationship on launching and the other claimed functions:
23 they happen in response to launching. “In association with an application launched” is broader,
24 and just requires some relationship between launching and the claimed functions. Thus, in both
25 cases, how the claimed functions relate to launching is sufficiently clear. It may be that the claims
26 are not as narrowly scoped as Uber would like, but this is not a reason to adopt a narrowing
27 construction.

28

1 Second, Uber argues that the specification does not provide written description support for
2 “responsive to launching” and “in association with an application launched.” Responsive Br. 23.
3 The Court disagrees. As Uber admits in its briefing (Responsive Br. 22–23), the specification
4 discloses launching an application. *See, e.g.*, ’647 patent, col. 6:29–31 (“On startup, each handset
5 starts its GPS sampler and the Buddy Watch application program.”). Then, as Uber also admits
6 (Responsive Br. 23), the specification discloses “display of [a] map.” *See, e.g.*, ’647 patent, col.
7 6:31–41 (describing “show[ing] the Mapit page”), col. 15:26–38 (describing showing a tow truck
8 driver and a stranded motorist on a moving map), col. 17:6–27 (same). The fact that these
9 embodiments may require user action between the launching of the application and, for example,
10 the display of the map does not negate the fact that the display of the map is at least indirectly
11 “responsive to” or “in association with” launching. *Cf. Pozen Inc. v. Par Pharm., Inc.*, 696 F.3d
12 1151, 1167 (Fed. Cir. 2012) (“As this court has explained, ‘[i]n order to satisfy the written
13 description requirement, the disclosure as originally filed does not have to provide in *haec verba*
14 support for the claimed subject matter at issue Nonetheless, the disclosure . . . must convey
15 with reasonable clarity to those skilled in the art that . . . [the inventor] was in possession of the
16 invention.’”) (quoting *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir.
17 2000)). Thus, there is written description support for “responsive to launching” and “in
18 association with an application launched.”

19 Third and finally, Uber argues that “responsive to launching” or “in association with an
20 application launched” excludes a preferred embodiment. Responsive Br. 23. The Court disagrees.
21 As an initial matter, Uber does not specifically identify what this preferred embodiment is, but
22 simply refers to it as “the preferred embodiment which requires user input while the application is
23 running.”⁷ Nevertheless, even without specifically addressing this purportedly excluded
24 embodiment, the Court can conclude that it would not be excluded. “Responsive to launching” or
25

26 ⁷ The Court can only guess that Uber is referring to one of the preferred embodiments discussed in
27 other portions of its briefing, such as the “stranded motorist or hiker” embodiment, ’647 patent,
28 col. 15:26–38, col. 17:7–27.

1 “in association with an application launched” does not mean that the application cannot be
 2 running. Thus, a preferred embodiment which requires user input while the application is running
 3 would not be automatically excluded by “responsive to launching” or “in association with an
 4 application launched.”

5 **ii. Conclusion**

6 In sum, neither the claim language nor the specification warrants Uber’s proposed
 7 construction. Instead, the Court finds that the claim language is sufficiently clear. The phrases
 8 “responsive to launching an application” and “in association with an application launched” shall
 9 be given their plain meaning and not construed further.

10 **3. “forming a use-specific group” (claims 1 and 22) / “formation of a use-specific
 11 group” (claim 28)**

X One’s Proposed Construction	Uber’s Proposed Construction
plain meaning	Indefinite

13 The phrase “forming a use-specific group” appears in claims 1 and 22 of the ’647 patent.
 14 The phrase “formation of a use-specific group” appears in claim 28. Those claims recite:

15 28. A method of tracking proximity of position associated with a first wireless
 16 device relative to a position of a second wireless device, wherein one of the
 17 first wireless device and the second wireless device is associated with a
 18 provider of a desired service and the other of the first wireless device and the
 19 second wireless device is associated with a requestor of the desired service,
 20 the method comprising:

21 causing receipt of information on the first wireless device representing the
 22 position of the second wireless device and a map associated with the position
 23 associated with the first wireless device and the position of second wireless
 24 device;

25 causing display of the map on the first wireless device with position
 26 associated with the first wireless device and the position of the second
 27 wireless device rendered thereon; and

28 causing receipt of information on the first wireless device representing
 positional update of the second wireless device, and causing update of display
 of the map on the first wireless device with the position associated with the
 first wireless device and updated position of the second wireless device
 rendered thereon;

wherein the causing of the update is to be performed to indicate proximity of
 and direction between position of the provider of the desired service and

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

position associated with the requestor of the desired service;
wherein the method is invoked responsive to launching an application on the first wireless device in connection with a request from the requestor for the desired service; and
wherein the provider is selected in connection with the request for the desired service and the method further comprises **forming a use-specific group** to have the first wireless device and the second wireless device in connection with the request for the desired service.

22. A method of tracking proximity of position associated with a first wireless device relative to position of a second wireless device, wherein the first wireless device is associated with a requestor of a desired service and the second wireless device is associated with a provider of the desired service, the method comprising:

selecting the provider of the desired service in association with an application launched by the requestor on the first wireless device, wherein the second wireless device is associated with the provider and is thereby selected in associated [sic] with launch of the application;

causing receipt of information on the first wireless device representing position of the provider, dependent on global positioning system (GPS) position data provided by the second wireless device, and receipt of information representing a map associated with the position associated with the first wireless device and the position of the second wireless device;

causing display of the map on the first wireless device with the position associated with the requestor and the position of the second wireless device rendered thereon; and

causing receipt of information on the first wireless device representing intermittent positional update dependent on GPS position data provided by the second wireless device, and causing update of display of the map on the first wireless device with respective position associated with the first wireless device and positional update dependent on the GPS position data provided by the second wireless device rendered thereon;

wherein selecting the provider of the desired service includes **forming a use-specific group** to have the first wireless device and the second wireless device in connection with the request for the desired service.

28. An apparatus comprising instructions stored on non-transitory machine-readable media, the instructions when executed operable to:

cause receipt of information on the first wireless device representing position of the second wireless device and a map associated with position associated with the first wireless device and the position of the second wireless device;

cause display of the map on the first wireless device with the position association with the first wireless device and the position of the second wireless device rendered thereon; and

1 cause receipt of information on the first wireless device representing
2 positional update of the second wireless device, and cause update of display of
3 the map on the first wireless device with the position associated with the first
4 wireless device and updated position of the second wireless device rendered
5 thereon;

6 wherein one of the first wireless device and the second wireless device is
7 associated with a provider of a desired service, wherein the update of the
8 display is to [be] performed to indicate proximity of and direction between the
9 provider of the desired service and a position associated with a requestor of
10 the desired service, wherein the causing of the receipt of the information
11 representing the position, the causing of the display, and the causing of the
12 receipt of information representing positional update are invoked responsive
13 to launching an application on the first wireless device in connection with a
14 request by the requestor for the desired service, wherein the provider is
15 selected in connection with the request for the desired service, wherein the
16 instructions when executed are to cause **formation of a use-specific group** to
17 have the first wireless device and the second wireless device in connection
18 with the request for the desired service.

19 '647 Patent at col. 28:50–29:18, col. 30:47–31:12, col. 31:37–32:5 (emphasis added).

20 X One argues that plain meaning governs. Opening Br. 23–25. Uber, on the other hand,
21 argues that “[forming / formation of] a use-specific group” renders the asserted claims of the '647
22 patent indefinite. Responsive Br. 23–25.

23 In support of indefiniteness, Uber argues that the phrase “use-specific group” appears
24 nowhere in the X One Patents and that the specification fails to explain what it means to “form[]”
25 such a group. *Id.* On this latter point, Uber argues that neither the tennis team embodiment, '647
26 patent, col. 15:39–16:8, nor the employee/supervisor embodiment, *id.*, col. 18:8–51, informs the
27 meaning of “use-specific group” because these embodiments do not relate to service providers and
28 thus are not covered by claims 1, 22, and 28. Responsive Br. 24. Uber also argues that the
“stranded motorist or hiker” embodiment, '647 patent, col. 15:26–38, col. 17:7–27, does not
inform the meaning of “use-specific group” because this embodiment simply suggests that “use-
specific group” is something that “allow[s] the two-way sharing of location information,” which is
superfluous with other claim language. Responsive Br. 24–25. Uber also argues that the
specification fails to elucidate “use-specific group” because the specification exclusively uses the
word “group” to refer to embodiments where individuals on a buddy list share information,

1 whereas the specification uses the phrase “Instant Buddies” to refer to a relationship between a
2 service provider and a requestor. *Id.* at 25.

3 For the reasons discussed below, the Court finds that “use-specific group” does not render
4 the asserted claims of the ’647 patent indefinite. Instead, the Court adopts X One’s proposal and
5 construes this phrase according to its plain meaning.

6 **i. Claim Language**

7 The Court begins with the claim language. Claims 1, 22, and 28 all recite that the “first
8 wireless device” and the “second wireless device” are associated with “a provider of a desired
9 service” and “a requestor of the desired service.” ’647 patent, col. 28:50–56, col. 30:47–52, col.
10 31:55–60. Then, in referring to “use-specific group,” they recite “forming a use-specific group to
11 have the first wireless device and the second wireless device in connection with the request for the
12 desired service.” *Id.*, col. 29:13–18, col. 31:9–12, col. 31:66–32:5. Reading these limitations
13 together, it is plain that the “group” is the pairing of the “first wireless device” and the “second
14 wireless device” and it is “use-specific” because it is formed for the purpose of facilitating or
15 effectuating the “desired service.” The claims recite no other entities that could be part of the
16 “group” or no other aspects of their relationship that would muddy why their pairing is “use-
17 specific.” As such, a person of ordinary skill in the art would be able to read claims 1, 22, and 28
18 and understand the meaning of “use-specific group” such that they would be informed about the
19 scope of the invention with reasonable certainty. *See Nautilus*, 134 S. Ct. at 2124.

20 The same holds true for “forming.” The claim language surrounding “[forming / formation
21 of] a use-specific group” recites “selecting the provider of the desired service” and “to have the
22 first wireless device and the second wireless device in connection.” ’647 patent, col. 29:13–18,
23 col. 31:9–12, col. 31:66–32:5. Read in context, it is clear that “forming” simply refers to this
24 process of connecting the first and second wireless devices. A skilled artisan would be able to
25 know the range of what it means for two wireless devices to be “connect[ed].” Thus, a person of
26 ordinary skill in the art would also be able to read claims 1, 22, and 28 and understand the
27 meaning of “forming” such that they would be informed about the scope of the invention with

1 reasonable certainty. *See Nautilus*, 134 S. Ct. at 2124.

2 **ii. Specification**

3 The specification bolsters these conclusions. As discussed in other sections above, one of
4 the service provider-specific embodiments disclosed in the specification is the “stranded motorist
5 or hiker” embodiment. ’647 patent, col. 15:26–38, col. 17:7–27. In this embodiment,

6 the user’s car breaks down. The user calls a towing service, and finds out the tow
7 truck driver has a cell phone with Buddy Tracker on it. The user dials the tow
8 truck driver’s cell phone and requests to be an instant buddy of the tow truck
9 driver’s phone. His phone is then set up as an instant buddy on the user’s phone.
After both phones are set up as instant buddies, each phone shows the location of
the other phone on its moving map. This allows the tow truck driver to find the
user tow truck customer and the user customer to know where the tow truck driver
is.

10 *Id.*, col. 15:29–38. How “use-specific group” maps onto this example is plain: the “group” is the
11 tow truck driver and the user, and it is “use-specific” because the pairing is set up for the specific
12 purpose of helping to provide the towing service. Thus, reading the claims in light of this
13 disclosure further elucidates the meaning of “use-specific group.” It would not be unreasonable
14 for a skilled artisan to take this example and know what other types of “use-specific groups” are
15 covered by the claims.

16 The same can be said of “forming.” Here, in this example, the two wireless devices that
17 “form[]” the “use-specific group” are cell phones. There is a discrete range of possible ways the
18 cell phones can connect with one another, all of which would be familiar to a skilled artisan. The
19 skilled artisan would also be able to take this example and infer, for other types of “use-specific
20 groups” involving other types of “wireless devices,” the range of ways of connecting that would
21 be covered by “forming.” Thus, the specification further helps inform the meaning of “[forming /
22 formation of] a use-specific group.” As such, the Court concludes that “[forming / formation of] a
23 use-specific group” does not make it such that the “claims, read in light of the specification
24 delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those
25 skilled in the art about the scope of the invention.” *Nautilus*, 134 S. Ct. at 2124.

26 Uber’s arguments to the contrary, Responsive Br. 24–25, are unpersuasive. First, whether
27

1 the phrase “use-specific group” appears in the specification of the X One Patents is irrelevant. *See*
2 *Cox Commc’ns*, 838 F.3d at 1231 (explaining that “the dispositive question in an indefiniteness
3 inquiry is whether the ‘claims,’ not particular claim terms” fail the *Nautilus* test). Second, as
4 discussed above, the Court finds that the “stranded motorist or hiker” embodiment does inform the
5 meaning of “use-specific group” because it gives a concrete example of a “group” (the motorist
6 and the tow truck driver) and how it is “use-specific” (towing services). Finally, the fact that the
7 specification uses “group” to refer to something other than the embodiments covered by claims 1,
8 22, and 28 is irrelevant. Even if there are differences between the use of the word “group” in the
9 specification and the claims, a person of ordinary skill in the art would be able to read these words
10 in context and understand that these are different things. As long as that person can discern the
11 scope of the claims with reasonable certainty, the claims are not indefinite. *Nautilus*, 134 S. Ct. at
12 2124. Such is the case here.

13 Accordingly, “[forming / formation of] a use-specific group” does not render the claims
14 indefinite. The Court instead adopts X One’s position and construes this phrase according to its
15 plain meaning.

16 **IV. CONCLUSION**

17 For the foregoing reasons, the Court construes the disputed claim terms as follows:

18 ’593 patent:

- 19 1. “account” as “an arrangement for user-specific authenticated access;”
- 20 2. “buddy list” as “a list, associated with an account of the first individual, that
21 identifies multiple other users whose location may be shared with the first individual;”
- 22 3. “a database representing an account for a first individual, the account having an
23 associated buddy list that identifies multiple users” as “a database accessible by the server that
24 includes data directly related to and standing for an account for a first individual, the account
25 having an associated list that identifies multiple other users whose location may be shared with the
26 first individual;”
- 27 4. “last known location” as “most-recent shared position stored on the server for a

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

user at the time the user’s position is plotted on the map;”

’647 patent:

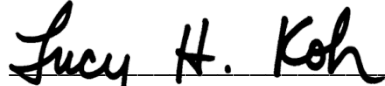
5. “wherein the provider is selected in connection with the request for the desired service” as plain meaning; “selecting the provider of the desired service” as plain meaning;

6. “responsive to launching an application” as plain meaning; “in association with an application launched” as plain meaning;

7. “forming a use-specific group” as plain meaning; and “formation of a use-specific group” as plain meaning.

IT IS SO ORDERED.

Dated: August 18, 2017



LUCY H. KOH
United States District Judge