IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

GEOSCOPE TECHNOLOGIES PTE. LTD., Plaintiff, vs. GOOGLE LLC, Defendant.	Civil Action No. 1:22-cv-01331-MSN-JFA **JURY TRIAL DEMANDED**
GEOSCOPE TECHNOLOGIES PTE. LTD., Plaintiff, v. APPLE INC., Defendant.	Civil Action No. 1:22-cv-01373-MSN-JFA[1] **JURY TRIAL DEMANDED**

PLAINTIFF GEOSCOPE TECHNOLOGIES PTE. LTD.'S
OPENING CLAIM CONSTRUCTION BRIEF

[1] Google and Apple, the defendants in the above-captioned cases (collectively, "Defendants"), have taken identical positions on claim construction and stated that they are submitting identical claim construction briefs. Plaintiff Geoscope Technologies Pte. Ltd. ("Geoscope") includes both case captions above to indicate that it is filing an identical brief on both dockets given that the issues in dispute are the same across both cases. By doing so, Geoscope does not suggest that the cases against Google and Apple are consolidated.

GOOGLE EXHIBIT 1023
Google v. Geoscope

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I. INTRODUCTION

The claims of a patent define its scope. The terms used in those claims—the words the inventor chose, and the Patent Office approved—should be given their ordinary and customary meaning. While that meaning is informed by how those skilled in the technological art would understand those words in light of the intrinsic record—*i.e.*, the context of the claims, the teaching of the specification, the prosecution history before the Patent Office—those words themselves still control. It is a bedrock principle of patent law that ***other*** limitations of the specification (or from extrinsic evidence such as inventor testimony) cannot be forced into the claim to limit the invention, nor the scope of the patent limited to the exemplary embodiments shown.

Defendants' claim construction proposals violate this defining principle, and try to rewrite and limit the patent claims to manufacture an infringement defense where none otherwise exists. This is improper for claim construction, as the Federal Circuit has made clear: "the role of a district court in construing claims is not to redefine claim recitations or to read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims." *Am. Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324, 1331 (Fed. Cir. 2011). And where the meaning of claim terms is understandable on their face, no construction is needed by the Court.

Defendants' attempts to limit "data" to specific data reports, restrict "network" to only "cellular networks," and rewrite "wireless device" to exclude disclosed examples, violate multiple canons of claim construction as discussed in detail below. But, at heart, they all embody the same flaw—improperly limiting the claim scope to deny terms their plain and ordinary meaning in order to try to distinguish their accused products. This contravenes controlling precedent, and the Court should reject this approach and construe the claims as written.

II. BACKGROUND AND TECHNOLOGY OVERVIEW

Geoscope has asserted that the Defendants infringe multiple claims of U.S. Patent Nos. 7,561,104 (Dkt. No. 1-1, "'104 Patent"), 8,400,358 (Dkt. No. 1-2, "'358 Patent"), 8,786,494 (Dkt. No. 1-3, "'494 Patent"), 8,406,753 (Dkt. No. 1-4, "'753 Patent"), 9,097,784 (Dkt. No. 1-5, "'784 Patent"), and 8,320,264 (Dkt. No. 1-6, "'264 Patent") (collectively, "Asserted Patents"). As described in further detail below, the inventions claimed in the Asserted Patents relate to the geolocation of mobile devices and provide solutions to specific problems in that field.

A. '104, '358, and '494 Patents

The related '104, '358, and '494 Patents claim priority to the same original application and are all directed to methods and systems for determining a location of a mobile device using information related to wireless networks. To accomplish this, the claimed inventions recite providing a database of "calibration data" and collecting "network measurement data" observed by the mobile device. *See, e.g.*, Dkt. No. 1-1 ('104 Patent) at claim 1; Dkt. No. 1-2 ('358 Patent) at claim 1; Dkt. No. 1-3 ('494 Patent) at claim 1.[2] The observed network measurement data is then modified to account for varying conditions and other variables that may be caused by, for example, environmental factors or signals propagating indoors. *See*, *e.g.*, Dkt. No. 1-1 ('104 Patent) at 3:43-49. Once modified, the observed network measurement data is compared with the database of calibration data to determine the location of the mobile device. *Id*. Thus, the claimed inventions directly improved on prior art systems by mitigating the negative effects of disparities between calibration data and observed network measurement data that can arise due to various factors, including the environment in which the network measurements were made.

[2] The '104, '358, and '494 Patents share a common specification but have different claims. For ease of readability, only citations to the specification of the '104 Patent (Dkt. No. 1-1) are provided herein despite identical language existing in the '358 and '494 Patents.

B. '753 Patent

The '753 Patent is directed to methods and systems for determining the location of a mobile device using information related to wireless networks and what it refers to as "grid points." The claimed invention involves generating grid points based on calibration data and then using those grid points to determine the location of the mobile device. Dkt. No. 1-4 ('753 Patent) at claim 1. The '753 Patent explains that these grid points—which "do not necessarily have to be part of a uniform grid and usually will not be uniformly distributed throughout [a] geographic region"—are determined based on analyzing calibration data and then associated with a particular set or sets of calibration data. *Id*. at 2:31-35, 2:43-50. The determination of grid points allows the creation of a more robust and denser "map" of locations that can be used to geolocate a mobile device. These dynamic and non-uniform grid points can also be updated over time as more data is collected, to continue to improve accuracy. This addressed problems in the prior art related to having a sparse set of locations to use for geolocation of a mobile device, which could result in reduced accuracy, and enabled more efficient handling of the data used for geolocation. *Id*. at 2:21-26.

C. '784 Patent

The '784 Patent is directed to methods and systems for generating a calibration database that can be used in conjunction with known map data for determining the location of a mobile device. Dkt. No. 1-5 ('784 Patent) at claim 1. The claimed invention of the '784 Patent uses map data to verify and improve calibration data that can later be used for geolocation of mobile devices. *Id*. at 3:39-50. Measurements made as part of generating calibration data may have errors based on, for example, malfunctions of equipment or signal degradation at particular times. *Id*. at 1:25-37. These errors can cause inaccuracies in the resulting calibration data which can, in turn, cause inaccuracies in the geolocation of a mobile device. The invention of the '784 Patent addressed this problem in the prior art by using maps data and the status of the mobile device to

correct errors that result in inaccurate calibration data. As a result, the claimed invention mitigates the negative effects of errors in calibration data caused by a variety of factors, including shortcomings in the equipment and techniques used to generate calibration data.

D. '264 Patent

The '264 Patent is directed to a method and system for "determining a path loss value of a signal transmitted by a wireless device and received by a receiver" where the "wireless device and the receiver operate within a wireless communication system." Dkt. No. 1-6 ('264 Patent) at Abstract, claim 1. As the '264 Patent explains, "[p]ath loss is a measure of signal attenuation" constituting "the difference between the transmitted signal power and the received signal power." *Id*. at 1:19-21. Path loss can be used in connection with geolocating mobile devices—such devices can receive a number of different types of signals from various transmitters and use path loss values to determine their position in relation to those transmitters. The claimed invention of the '264 Patent describes an approach to determining path loss while a wireless device and receiver are actively communicating as part of a wireless communication system without disabling any other communication channel. *Id*. at claim 1. This improved on prior art systems which "determine[d] the path loss value by assigning a dedicated frequency channel to the wireless device and disabling interfering frequency channels within the wireless communication system" because "[s]etting aside a dedicated frequency channel also requires revising the frequency use plan for the entire geographic area which is costly and inefficient." *Id*. at 3:39-45. The claimed invention avoids these inefficiencies by forgoing the use of a dedicated channel for path loss determination.

III. RELEVANT LEGAL STANDARDS

Claim language is typically given its "ordinary and customary meaning as understood by a person of ordinary skill in the art ["POSA"]" at the time of the invention. *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313

(Fed. Cir. 2005) (en banc). It is well-settled that a court, in interpreting a patent claim, should look to the intrinsic evidence—*i.e.*, the patent claims, the specification, and the prosecution history—with the language of the claims being of primary import. *Phillips*, 415 F.3d at 1313-14. "[T]he role of a district court in construing claims is not to redefine claim recitations or to read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims." *Am. Piledriving Equip.*, 637 F.3d at 1331.

"The specification need not describe every embodiment of the claimed invention and the claims should not be confined to the disclosed embodiments—even when the specification discloses only one embodiment." *Woods v. DeAngelo Marine Exhaust, Inc.*, 692 F.3d 1272, 1283 (Fed. Cir. 2012) (internal citations omitted). "We do not read limitations from the specification into claims; we do not redefine words." *Thorner*, 669 F.3d at 1366. Only when a patentee clearly sets out a definition and acts as his own lexicographer, or when the patentee disavows the full scope of a claim term in the specification or during prosecution, should a claim term be construed to include limitations not otherwise inherent in the claim. *Woods*, 692 F.3d at 1283; *Thorner*, 669 F.3d at 1365, 1367. "[A]lthough the specification often describes very specific embodiments of the invention, ***we have repeatedly warned against confining the claims to those embodiments***." *Philips*, 415 F.3d at 1323 (emphasis added).

Extrinsic evidence, such as testimony, may be considered, but is "less reliable than the patent and its prosecution history in determining how to read claim terms." *See Phillips*, 415 F.3d at 1317-18. "Whether an inventor's testimony is consistent with a broader or narrower claim scope, that testimony is still limited by the fact that an inventor understands the invention but may not understand the claims, which are typically drafted by the attorney prosecuting the patent application." *Howmedica Osteonics Corp. v. Wright Med. Tech. Inc.*, 540 F.3d 1337, 1346-47

(Fed. Cir. 2008). The Federal Circuit similarly has cautioned courts to "discount any expert testimony" that is conclusory or that contradicts the intrinsic evidence (*see Phillips*, 415 F.3d at 1318), explaining that legal error arises where a court relies on extrinsic evidence that contradicts the intrinsic record. *See Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1290 (Fed. Cir. 2021). Indeed, "if the meaning of a claim term is clear from the intrinsic evidence, there is no need to resort to extrinsic evidence." *Id.* at 1287.

IV. DISPUTED CLAIM TERMS FROM THE '104, '358, AND '494 PATENTS

A. "observed network measurement data" ('104 Patent, cl. 1, 11; '358 Patent, cl. 1, 15, 41, 49; '494 Patent, cl. 1, 25, 32)

Geoscope's Construction	Defendants' Construction
Plain and ordinary meaning (no construction necessary); *in the alternative*, measurement data representing at least one network characteristic observed by a mobile device	measurement data from a network measurement report (i.e., a report used in cellular networks which provides the results of a measurement from a mobile device on one or more cells)

The term "observed network measurement data" is readily understandable to a POSA and requires no construction. "Observed network measurement data" is just that—measured data that is observed from a network. The words themselves do not limit the term to data from "a network measurement report" nor do they limit it to data from "cellular networks," as Defendants propose. The plain and ordinary meaning of the term is clear from its face, and no construction is necessary.

To the extent the Court determines that construction would be appropriate, the term should be construed as "measurement data representing at least one network characteristic observed by a mobile device." This is consistent with the broad usage of the term in the intrinsic evidence, including the specification ("The network measurement data may include received base station power and timing advance, ***as well as other network characteristics observable by a mobile station***.") and during reexamination before the U.S. Patent & Trademark Office ("USPTO") ("'Observed network measurement data' is discussed in the current specification as ***representing***

a network characteristic observed (measured) by a mobile station at a particular region."). Dkt. No. 1-1 ('104 Patent) at 10:58-63 (emphasis added); *see also id*. at 9:44-47, 11:23-25; Ex. 1 at GEOSCOPE-A-003283 (emphasis added). And it is consistent with the usage of broader terms like "wireless network" and "mobile station" in the claims—as opposed to, for example, "cellular network" and "cellular device." In fact, certain types of "mobile stations" described in the Patents, such as "laptop computers," (Dkt. No. 1-1 ('104 Patent) at 1:13-17) typically did not use cellular networks at the time of the invention, further confirming that limiting the claims to "cellular networks" is improper since it would exclude examples of the invention that the patentee taught. *See Nobel Biocare Servs. AG v. Instradent USA, Inc.*, 903 F.3d 1365, 1381 (Fed. Cir. 2018), *as amended* (Sept. 20, 2018) ("[T]here is a strong presumption against a claim construction that excludes a disclosed embodiment.").

The plain meaning of the term, including the individual words like "network," is clear on its face and the intrinsic evidence confirms that no narrowing scope was intended. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1372 (Fed. Cir. 2003) (holding that district court "erred in not considering the meaning of the individual words" in a claim term). It is indisputable that the plain meaning of "network" encompasses more than a cellular network, else the latter phrase would not be necessary. Although the '104, '358, and '494 Patents indicate that the invention is in the context of a "wireless network," even that term encompasses more than a cellular network. *See*, *e.g.*, Dkt. No. 1-1 ('104 Patent) at claim 1 (referring to a "wireless network"). It was well-understood as of the time of the invention (late-2006 to early-2007) that there are wireless networks other than cellular networks—*e.g.*, WiFi networks. Ex. 2 at 553; Ex. 3 at 98-99; Ex. 4 at 572. Intrinsic evidence such as prior art cited and overcome by the patentee during prosecution of the '104, '358, and '494 Patents further confirms this. Ex. 5 at ¶¶ 41-42 (referring to other "wireless

telecommunications systems" including "IEEE 802.11 WiFi, 802.16 WiMax, Bluetooth," which are not cellular networks).

Importantly, the '104, '358, and '494 Patents make clear that "observed network measurement data" need not come exclusively from a "network measurement report," refuting Defendants' proposed construction. In describing Figure 2, the Patents state that "[t]he observed [network measurement] data would typically be the same or ***similar to*** the data in a network measurement report," indicating that the observed network measurement data is ***not*** limited to data from a network measurement report, and drawing a divide between the two. Dkt. No. 1-1 ('104 Patent) at 9:40-44 (emphasis added). Thus, Defendants' proposal must be rejected as it improperly contradicts the intrinsic evidence. *ERBE Elektromedizin GmbH v. Int'l Trade Comm'n*, 566 F.3d 1028, 1034 (Fed. Cir. 2009) ("We generally do not construe claim language to be inconsistent with the clear language of the specification.").

Defendants' proposal to narrow this term has two fatal flaws—(1) limiting the term "measurement data" to a "network measurement report" and (2) limiting the term "network" to "cellular networks"—both of which are inconsistent with the plain meaning of the term. To justify their drastic departure from the claim's full plain and ordinary meaning, Defendants must satisfy an "exacting" standard to demonstrate that the patentee expressly disavowed the full scope of the term. *Thorner*, 669 F.3d at 1365-67; *see also Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1358-59 (Fed. Cir. 2016) (quoting *Thorner*). Defendants cannot do so.

As to limiting the term to data from "network measurement reports," Defendants cannot demonstrate that the patentee disclaimed all "data" outside of those reports, as explained above. *See supra* (citing Dkt. No. 1-1 ('104 Patent) at 9:40-44). At best, Defendants may contend that the discussion of "network measurement reports" in the specification somehow imposes a limitation

on the separate term "observed network measurement data." Or Defendants may point to extrinsic evidence such as inventor testimony and inventor documents—which has little probative weight during claim construction—regarding "network measurement reports" to narrow a different term. *Howmedica*, 540 F.3d at 1346-47; *InterDigital Commc'ns, LLC v. Int'l Trade Comm'n*, 690 F.3d 1318, 1328 (Fed. Cir. 2012) (refusing to narrow a claim term based on "the inventors' 'conception documents'"). But disavowal requires more. *Thorner*, 669 F.3d at 1365-66 (explaining that the fact that "the only embodiments, or all of the embodiments, contain a particular limitation" does not amount to disavowal). In any event, the patentee used "data" to refer to data beyond just the subset of data in "network measurement reports," confirming that it would be improper to restrict the former to the latter.

As to limiting the term "network" to "cellular networks," Defendants' proposal fails for the same reasons. They cannot demonstrate disavowal that justifies excluding networks other than cellular networks from the plain meaning of "observed network measurement data." That exemplary embodiments in the '104, '358, and '494 Patents relate to cellular networks is insufficient to narrow the term. *Woods*, 692 F.3d at 1283 ("[T]he claims should not be confined to the disclosed embodiments—even when the specification discloses only one embodiment."); *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372-73 (Fed. Cir. 2014) (refusing to "import limitations from the specification into the claims" in the absence of intrinsic evidence that "makes clear that the invention is limited"). And extrinsic evidence such as inventor testimony and inventor documents cannot narrow a term that the intrinsic evidence demonstrates is used broadly. *Seabed Geosolutions*, 8 F.4th at 1287-90 ("Given the clarity of the intrinsic evidence, resort to extrinsic evidence is unnecessary.").

Had the patentee intended to limit the term "observed network measurement data" to data from "network measurement reports" or data from "cellular networks," it could have done so explicitly. *Aventis Pharma S.A. v. Hospira, Inc.*, 675 F.3d 1324, 1330-31 (Fed. Cir. 2012). The patentee did not do that and there is no justification for Defendants' proposed *post hoc* narrowing of the term. Accordingly, the Court should reject Defendants' proposal and decline to construe this term or adopt Geoscope's proposed construction.

B. "calibration data"('104 Patent, cl. 1-2; '358 Patent, cl. 1, 4, 15, 18, 41, 42; '494 Patent, cl. 1, 4, 9-10, 25-26; and '753 Patent, cl. 1, 7, 32, 38)

Geoscope's Construction	Defendants' Construction
Plain and ordinary meaning (no construction necessary); *in the alternative*, information based on prior network measurements	network measurement data associated with a defined geographic location

"Calibration data" is another term readily understood by a POSA and requires no construction. By its plain meaning, "calibration data" is not limited exclusively to "network measurement data," as Defendants contend. Indeed, the plain meaning of the term is broader, encompassing data that may be ***based on*** measurement data without itself being measurement data. Should the Court decide to construe the term, it should be construed as "information based on prior network measurements," which is consistent with the broad usage of the term in the '104, '358, and '494 Patents, as well as the other Asserted Patents. The '104, '358, and '494 Patents provide several different examples of calibration data such as "signal strength, round trip time, time difference of arrival (TDOA), etc." Dkt. No. 1-1 ('104 Patent) at 1:23-24. These examples include calibration data that is not network measurement data itself—"The [calibration] database may be a collection of data from uniform or non-uniform grids that contain network measurements ***with associated location estimates***." *Id*. at 10:52-58 (emphasis added). Indeed, the '104, '358, and '494 Patents expressly teach that calibration data may include measurement data that has been "altered," "modified," or otherwise processed. *See id*. at 1:43-45, 3:46-47. The related '784 Patent confirms

this as well. Dkt. No. 1-5 ('784 Patent) at Abstract ("To ensure the integrity of the collected calibration data, a data modification and/or data replacement algorithm may be implemented to enhance the accuracy of the collected data.").

Notably, during a reexamination of the '104 Patent before the USPTO, the patentee drew a distinction between "calibration data" and "network measurement data." Ex. 1 at GEOSCOPE-A-3291 ("Claim 5 requires the collection of **observed network measurement data, not calibration data** within a structure.") (emphasis in original). Moreover, the patentee distinguished prior art as only disclosing "calibration data"—and failing to disclose "observed network measurement data"—because the "information" in the prior art reference identified by the USPTO was not "measured at the mobile station." *Id*. at GEOSCOPE-A-3286. Thus, neither the plain meaning of "calibration data" nor the intrinsic evidence limits the term to "network measurement data." To the contrary, the intrinsic evidence confirms that the term encompasses information that is based on network measurements even if not measurement data itself.

Defendants' proposal that "calibration data" be limited to "network measurement data" violates a fundamental claim construction principle that claim terms should not be construed to omit disclosed embodiments. *Nobel Biocare*, 903 F.3d at 1381; *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1333 (Fed. Cir. 2013) ("This court has clarified that an interpretation which 'excludes a [disclosed] embodiment from the scope of the claim is rarely, if ever, correct.'"). As explained above, the '104, '358, and '494 Patents disclose embodiments in which calibration data is not just "network measurement data" but Defendants seek to improperly read those out. Additionally, Defendants' incorporation of the term "network measurement data" into the term "calibration data" directly contradicts the distinction made by the patentee during the reexamination of the '104 Patent. Moreover, to the extent Defendants are incorporating into

"calibration data" their construction of "observed network measurement data," which incorporates their construction of "network measurement report," there are even more flaws in their proposal that are addressed in the sections corresponding to those terms. *Supra* at § IV.A; *infra* at § V.B. At a minimum, nothing in the plain meaning of "calibration data" or in the intrinsic evidence justifies narrowing the term to data from a "network measurement report" or data from "cellular networks." For these reasons, the Court should reject Defendants' proposal and not construe this term or adopt Geoscope's proposed construction.

C. "positioning determining equipment" ('358 Patent, cl. 1, 41)

Geoscope's Construction	Defendants' Construction
equipment that processes received information to locate a position of a mobile device (35 U.S.C. § 112 ¶ 6 does not apply) Should 35 U.S.C. § 112 ¶ 6 apply: **Function**: comparing said modified network measurement data with said database of calibration data to thereby determine the location of the mobile station **Structure**: a processor, microprocessor or ASICS, including but not limited to those implementing the algorithms of Figs. 2-3, 7-10, specifically steps 202-203, 303, 304, 307, 309, 707, 807, 909, 1005, 1007, 1009, and described textually at 2:12-14, 2:24-28, 2:38-40, 2:63-67, 3:2-13, 4:49-61, 6:20-21, 6:60-62, 7:44-48, 8:4-9:16, 9:26-34, 9:35-50, 9:58-64, 10:3-8, 11:13-17, 11:29-31, 11:40-44 and 11:50-61, and structural equivalents	Subject to 35 U.S.C. § 112 ¶ 6. **Function**: comparing said modified network measurement data with said database of calibration data **Structure**: Indefinite

Consistent with the specification of the '358 Patent, the term "positioning determining equipment" should be construed in accordance with Geoscope's proposal. The specification describes in detail how positioning determining equipment receives as an input modified network measurement data and compares said network measurement data with a database of calibration

data to determine the location of a mobile device. *See, e.g.*, Dkt. No. 1-2 ('358 Patent) at 4:41-61, 9:58-64, 10:3-8, Figs. 2-3, 7-10. From this disclosure, a POSA would understand the term to mean "equipment that processes received information to locate a position of a mobile device."

Defendants' means-plus-function argument, in contrast, ignores (1) the plain language of the claim, which lacks the word "means," and (2) the disclosures in the specification. It is well-settled that where a claim term lacks the word "means," there is a presumption that § 112 ¶ 6 does not apply. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). Here, because the term "positioning determining equipment" does not utilize the word "means," Defendants bear the burden of overcoming the presumption that § 112 ¶ 6 does not apply.

To overcome this presumption, a challenging party must demonstrate with evidentiary support that "the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function" *Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003, 1007-08 (Fed. Cir. 2018) (internal quotation marks and citation omitted). The Federal Circuit has recognized that structure can be described in various forms, including from descriptions of the term's operation, such as its input or output. *See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1364-65 (Fed. Cir. 2013). Here, the specification describes the input, comparison function, and output for positioning determining equipment. *See, e.g.*, Dkt. 1-2 ('358 Patent) at 2:12-14, 2:24-28, 2:38-40, 2:63-67, 3:2-13; 4:41-61, 9:58-64, 10:3-8, Figs. 2-3, 7-10. From this disclosure, a POSA would understand the term to designate sufficiently definite structure. *See Power Integrations*, 711 F.3d at 1364-65 (finding the specification sufficiently described the input, a comparison function, and output "to suggest to the ordinarily skilled artisan a defined class of structures" to "avoid the ambit of means-plus-function claiming"). Thus, Defendants cannot overcome the presumption that § 112 ¶ 6 does not apply.

Even if "positioning determining equipment" is subject to § 112 ¶ 6, Defendants ignore that the '358 Patent discloses corresponding structures for performing the recited function. For example, the specification describes that the comparison of modified network measurement data with the calibration database to determine the location of the mobile station "may be performed by a processor, microprocessor or ASICS" as well as the algorithms implemented by these structures. *See, e.g.*, Dkt. No. 1-2 ('358 Patent) at 11:13-16, Figs. 2-3, 7-10. Accordingly, a POSA would understand that the disclosed structures, and their structural equivalents, are within the scope of the claims. Because Defendants fail to account for these disclosed structures, Defendants' indefiniteness argument is without merit and should be rejected even if § 112 ¶ 6 applies.

V. DISPUTED CLAIM TERMS FROM THE '753 PATENT

A. "grid point" (cl. 1, 32)[3]

Geoscope's Construction	Defendants' Construction
locations or areas that are determined and associated with a particular set or sets of calibration data	a point associated with representative calibration data for an area

The Court should adopt Geoscope's proposed construction of "grid point," which closely tracks how the term is used in the '753 Patent as well as the other related Asserted Patents. For example, the '753 Patent provides a near-definitional statement regarding "grid points":

> The location of a wireless mobile device may be estimated using, at least in part, one or more pre-existing Network Measurement Reports ("NMRs") which include calibration data for a number of locations within a geographic region. The calibration data for these locations is gathered and analyzed so that ***particular grid points within the geographic region can be determined and associated with a particular set or sets of calibration data*** from, for example, one or more NMRs. Dkt. No. 1-4 ('753 Patent) at Abstract, 2:31-35, 9:31-39 (emphasis added).

[3] The term "grid point" is also used in claim 2 of the '104 Patent, claims 4, 18, and 42 of the '358 Patent, and claims 4 and 26 of the '494 Patent. Geoscope's proposed construction also applies to the term as used in those claims.

The patentee reiterated this statement during prosecution of the '753 Patent, stating "the claimed subject matter gathers calibration data for these locations and analyzes the calibration data so that ***particular points (e.g., 'grid points') within the geographic region can be generated and associated with a particular set or sets of calibration data*** from, for example, the one or more NMRs." Ex. 6 at GEOSCOPE-A-001681 (emphasis added).

Geoscope's proposed construction is ground in this language but clarifies one issue that is clear from the intrinsic evidence—namely, that "grid points" are not limited only to points in a mathematical sense but rather can encompass defined areas. The related '784 Patent and its Figure 6 most clearly show this. The '784 Patent explains that "[g]rid points (e.g. NUGs) are another way to organize and/or realize information related to a wireless networking environment" and then depicts in Figure 6, shown below with annotations, "a geographical region (R) having NUGs represented by NUG1, NUG2 and NUG3."[4] Dkt. No. 1-5 ('784 Patent) at 6:13-34, Figure 6.

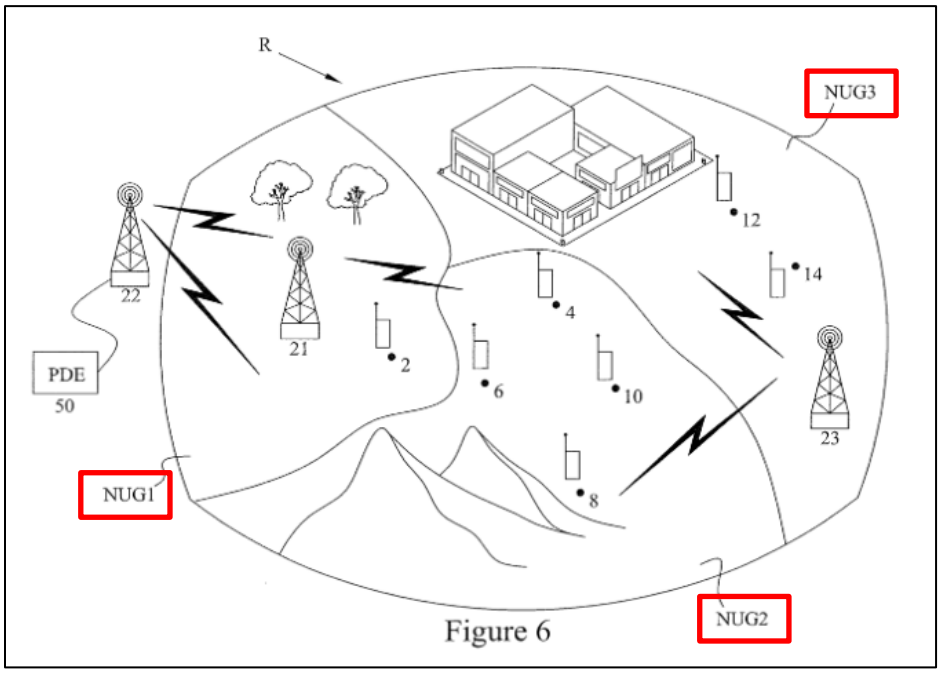

Figure 6

[4] The '753 Patent also describes "non-uniform grid points" which it refers to as "NUGs." Dkt. No. 1-4 ('753 Patent) at 2:43-50.

As is readily apparent from the figure, non-uniform grid points 1, 2, and 3—referred to as NUG1, NUG2, and NUG3—are not just "points;" they encompass a broader area comprising multiple "points." The '104, '358, and '494 Patents similarly describe "a non-uniform grid point (NUG)" as extending beyond a mere mathematical point, explaining in an example that "NUG1" includes an area containing "MS [mobile station] 11 and BS [base station] 20." Dkt. No. 1-1 ('104 Patent) at 3:50-60. Thus, here the intrinsic evidence unambiguously shows that the patentee intended the term "grid point" to cover more than a singular, zero-dimensional "point."

Defendants' proposal has multiple flaws and should be rejected. *First*, as explained above, the intrinsic evidence confirms that "grid point"—as the term is used in the Asserted Patents—is not limited to a single point. *Second*, Defendants' proposal omits any concept of "grid points" being ***determined*** despite that being a key aspect repeated multiple times in the specification and in the file history, as shown in the quoted language above. *Third*, unlike Geoscope's proposal, Defendants' proposal is not grounded in language found in the intrinsic evidence. The phrase "representative calibration data" is not used in the '753 Patent or any of the other Asserted Patents. It appears that Defendants are relying on language in the '104 Patent stating "a non-uniform grid point (NUG) may represent the signal characteristics and/or calibration data over a given region." Dkt. No. 1-1 ('104 Patent) at 3:50-3:52. However, their proposed construction omits parts of that language—*e.g.*, "signal characteristics"—and twists its meaning. That "a non-uniform grid point (NUG) ***may*** represent the signal characteristics and/or calibration data over a given region" is a different concept entirely from a "grid point" ***necessarily*** being "associated with representative calibration data for an area." *Id*. (emphasis added). Thus, the Court should reject Defendants' proposal and adopt Geoscope's, which is supported by the intrinsic evidence.

B. "network measurement report" (cl. 1, 7, 32)

Geoscope's Construction	Defendants' Construction
collection of data associated with a wireless communication network or mobile device	a report used in cellular networks which provides the results of a measurement from a mobile device on one or more cells

The words of the term "network measurement report" describe exactly what it is—a report of network measurements. For clarity, Geoscope has proposed construing the term as a "collection of data associated with a wireless communication network or mobile device," tracking the '753 Patent's explanation that "the present subject matter relates to the problem of estimating the location of a wireless mobile device using information from one or more Network Measurement Reports ('NMRs') which may be generated by a wireless communications network or the mobile device." Dkt. No. 1-4 ('753 Patent) at 1:18-21. The intrinsic evidence does not limit the term further. Accordingly, Defendants' attempt to limit this term to a report that provides ***only*** "the results of a measurement from a mobile device on one or more cells" and is ***only*** used in "cellular networks" must be rejected.

The broad usage of the term in the intrinsic evidence and the context of the claims in which the term is found support Geoscope's construction. The '753 Patent, as well as related Asserted Patents using this term such as the '104, '358, and '494 Patents, is directed to determining the location of a mobile device in a "wireless communications network" (or "wireless network"). *See* Dkt. No. 1-4 ('753 Patent) at 1:15-23; *see also* Dkt. No. 1-1 ('104 Patent) at claim 1 (referring to a "wireless network"). As previously explained, the words "network"—and even "wireless network"—indisputably encompass more than cellular networks including, as one example, WiFi networks. *Supra* at § IV.A.

The application of the claimed inventions generally to wireless networks is also clear from the Asserted Patents defining "mobile devices" (or "mobile stations") to include devices like

"laptop computers" that do not typically use cellular networks or, at a minimum, use cellular networks ***in addition to*** other types of wireless networks (*e.g.*, WiFi networks). Dkt. No. 1-4 ('753 Patent) at 1:24-28; Dkt. No. 1-1 ('104 Patent) at 1:13-16. Given that the claims in the '753 Patent are directed to determining the location of such "mobile devices," the claims themselves refute that a "network measurement report" is exclusively used in cellular networks. Dkt. No. 1-4 ('753 Patent) at claim 1 ("A method for determining the location of a ***mobile device***…") (emphasis added); *see IGT v. Bally Gaming Int'l, Inc.*, 659 F.3d 1109, 1117 (Fed. Cir. 2011) ("Extracting a single word from a claim divorced from the surrounding limitations can lead construction astray. ***Claim language must be construed in the claim in which it appears***.") (emphasis added); *see also Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) ("When construing claims, however, the intrinsic evidence and ***particularly the claim language are the primary resources***.") (emphasis added).

The specification of the '753 Patent confirms this point too. In describing the use of "network measurement reports," the '753 Patent explains "the present subject matter overcomes the limitations of the prior art by estimating the location of a ***wireless mobile device*** using, at least in part, one or more pre-existing Network Measurement Reports ('NMR') which include calibration data for a number of locations within a geographic region." Dkt. No. 1-4 ('753 Patent) at 2:26-31. Yet again, the intrinsic evidence confirms that "network measurement reports" relate to the expansive category of "wireless mobile devices"—not just devices that use cellular networks. Despite this, Defendants' proposal would improperly read out embodiments using "mobile devices" that do not use cellular networks. *Nobel Biocare*, 903 F.3d at 1381; *Broadcom*, 732 F.3d at 1333. Thus, the intrinsic evidence makes clear that Defendants' attempt to drastically narrow this claim term is improper. Even if embodiments described in the '753 Patent use "network

measurement report" in the manner proposed by Defendants, that does not justify Defendants' restrictive construction—it is blackletter law that limitations from the specification are not to be imported into the claims. *Phillips*, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments."); *Woods*, 692 F.3d at 1283; *Thorner*, 669 F.3d at 1365, 1367.

Even as the term is used in the art—outside the context of the intrinsic evidence—it is not limited to a particular type of report, or even to cellular networks. Rather, the term encompasses different types of reports for different types of networks. *See*, *e.g.*, Ex. 7 at 20 ("A network measurement report (NMR) is an instance of RSS data measurement conveyed by a wireless terminal. An NMR usually contains multiple entries, each of which is the pair of a BS or AP identifier and the RSS of the BS's pilot signal (for WCDMA/GSM) ***or the AP's beacon frame (for Wi-Fi)***.") (emphasis added). This extrinsic evidence is consistent with the broad use in the specification—the "network" of the "network measurement report" is not limited to cellular.

That some extrinsic evidence may be contrary cannot compel a different result—extrinsic evidence is "less reliable" than intrinsic evidence and cannot be used to contradict the intrinsic evidence. *Phillips*, 415 F.3d at 1318-19. The Federal Circuit has repeatedly emphasized the limited probative value of extrinsic evidence including *post hoc* inventor testimony, inventor documents, and expert testimony during claim construction. *Howmedica*, 540 F.3d at 1346-47 (addressing inventor testimony); *Cont'l Cirs. LLC v. Intel Corp.*, 915 F.3d 788, 799 (Fed. Cir. 2019) (addressing "inventor documents"); *Sequoia Tech., LLC v. Dell, Inc.*, 66 F.4th 1317, 1324-25 (Fed. Cir. 2023) (addressing expert testimony). Indeed, extrinsic evidence should not even be consulted for this term given that the intrinsic evidence clearly refutes Defendants' proposal. *Seabed*

Geosolutions, 8 F.4th at 1287-90. Accordingly, the Court should reject Defendants' proposal and adopt Geoscope's proposed construction.

VI. DISPUTED CLAIM TERM FROM THE '784 PATENT

A. Order of "obtaining" and "determining" steps (cl. 2, 10, 11, 21, 22)[5]

Geoscope's Construction	Defendants' Construction
No construction necessary; *in the alternative*, "obtaining ..." must occur before "determining said most likely street …" which must occur before "determining a first point of said plural points …"	"obtaining . . ." must occur before "determining…a most likely one of plural streets," which must occur before "determining said most likely street," which must occur before "determining a first point of said plural points"

The "general rule" is that a "claim is not limited to performance of the steps in the order recited, unless the claim explicitly or implicitly requires a specific order." *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1345 (Fed. Cir. 2008). Any required order in the steps of claim 1 of the '784 Patent is clear from the claim language and does not require construction. But should the Court construe the order, the only dispute is whether the "obtaining…" step must occur before the "determining from said status…" step.

Nothing in the claim itself requires the "obtaining…" to occur before the "determining from said status…" step. To argue the contrary, Defendants appear to rely on a flawed antecedent basis argument, contending that because the end of the "obtaining…" limitation recites "wherein said region contains ***plural streets***," the "obtaining…" step must occur before the "determining from said status a most likely one of ***said plural streets*** upon which said wireless device is located" step because "said streets" refers to "plural streets." Dkt. No. 1-5 ('784 Patent) at claim 1 (emphasis added). However, the antecedent basis for the "region" that "contains plural streets" is in the step

[5] Because Geoscope is not asserting independent claims of the '784 Patent, the dependent claims using this claim term based on their dependency from the independent claims are identified here instead.

reciting "receiving at a wireless device an attribute of a signal transmitted by a wireless transmitter to a mobile station in a ***region***." *Id*. (emphasis added). Part of the "obtaining…" limitation recites that this "region" "contains plural streets" but the "obtaining…" step itself is independent of that. In other words, "obtaining location data of a plurality of geographic locations situated with said region" does not somehow cause the region to contain "plural streets"—as claimed, the "region" contains "plural streets" regardless of when that "obtaining…" step occurs. Thus, there is no requirement that the "obtaining…" step occur before the "determining from said status…" step and Defendants fail to overcome the presumption that there is no specific order for those steps.

VII. DISPUTED CLAIM TERMS FROM THE '264 PATENT

A. "wireless device" (cl. 1, 11, 13)

Geoscope's Construction	Defendants' Construction
a device capable of communicating using a wireless network [including a wireless transmitter, radio frequency transmitter, mobile telephone, cellular telephone, text messaging device, portable computer, laptop computer, personal digital assistant, vehicle security device, vehicle tracking device and pager]	a mobile device configured to communicate while unattached to any physical wires

The Court should adopt Geoscope's proposed construction of "wireless device" as "a device capable of communicating using a wireless network."[6] The intrinsic evidence, including the claims of the '264 Patent, focus heavily on the ***communication*** between a "wireless device" and a "receiver" that "operate within a ***wireless communication system***," reciting that the "wireless device is actively ***communicating*** with said receiver." Dkt. No. 1-6 ('264 Patent) at claims 1, 13,

[6] The list of exemplary "wireless devices" explicitly recited in the '264 Patent is included in Geoscope's proposal for clarity but need not be part of the construction. Dkt. No. 1-6 ('264 Patent) at claim 6, 5:39-43. The core of Geoscope's proposal is "a device capable of communicating using a wireless network" which encompasses these exemplary "wireless devices."

23 (emphasis added); *see also id*. at Abstract, 3:51-60. Thus, the claims—which are of primary importance in construing terms (*Kara Tech.*, 582 F.3d at 1348)—demonstrate that "wireless device" should be defined based on the capability of a device to communicate using a wireless network (referred to in the claims as a "wireless communication system"), as Geoscope proposes.

Defendants, on the other hand, propose a construction focused on the physical structure and configuration of a device despite those aspects not being addressed in the claims or specification. For example, the '264 Patent does not discuss "wires" or whether devices are attached to wires. Further, Defendants' proposed construction improperly excludes devices that are expressly identified as "wireless devices"—for example, a "radio frequency transmitter" may be attached to physical wires but still communicate using a wireless network. *Nobel Biocare*, 903 F.3d at 1381. Moreover, Defendants' proposed construction is unhelpful because, as one example, "cellular telephones" and "laptop computers" may be attached to wires (*e.g.*, charging cables) for various reasons, potentially confusing a jury on the scope of the term. Thus, the Court should adopt Geoscope's proposed construction which avoids this confusion and defines the term "wireless device" in the context of the claims in which it is found, as required by Federal Circuit law.

B. "indication of transmission signal strength of said signal" (cl. 1, 13)

Geoscope's Construction	Defendants' Construction
Plain and ordinary meaning (no construction necessary); *in the alternative*, information regarding the transmission signal strength of the signal	information specifying the strength (e.g., in dBm) at which said signal was transmitted by the wireless device

The language used in the term "indication of transmission signal strength of said signal" can be understood in accordance with its plain and ordinary meaning and does not require construction. Should the Court construe this term, it should be construed to mean "information regarding the transmission signal strength of the signal," consistent with the clear language of the claim and the specification. This term is part of independent claims 1 and 13, which recite, in part,

"receiving at said receiver an ***indication of transmission signal strength*** of said signal" and "measuring at said receiver the received signal strength of said signal." *See* Dkt. No. 1-6 ('264 Patent) at cl. 1, 13 (emphasis added). It is blackletter law that claim construction should give meaning to all of the words in the claim. *Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1119-20 (Fed. Cir. 2004) ("While not an absolute rule, all claim terms are presumed to have meaning in a claim."). Geoscope's construction does just that, giving meaning to the words "indication of," which show that the term "indication of signal strength" is broader than just "transmission signal strength."

Defendants, in contrast, violate fundamental principles of claim construction by proposing that "transmission signal strength" and "indication of transmission signal strength" have the same scope, effectively reading the words "indication of" out of the claim term. *Id.* Moreover, Defendants' construction ignores the disclosure of the specification, which describes the exemplary embodiments of the invention using the same clear language as the claim term. *See, e.g.*, Dkt. 1-6 ('264 Patent) at 1:65-2:53, 4:43-52. Nowhere in the specification is an "indication of transmission signal strength" limited solely to transmitted signal strength itself. Had the patentee intended to claim no more than the transmitted signal strength, the patentee could have done so as evidenced by the specific use of "signal strength" in the context of "measuring at said receiver the received signal strength." *See Aventis Pharma*, 675 F.3d at 1330-31. Accordingly, Defendants' construction must be rejected.

VIII. DEFENDANTS' INDEFINITENESS ALLEGATIONS FOR THE OTHER DISPUTED TERMS ARE BASELESS AND WRONG

Patents are presumed valid. 35 U.S.C. § 282 ("Each claim of a patent … shall be presumed valid independently"). Accordingly, Defendants bear the burden of proving any allegation of invalidity by clear and convincing evidence. *Id.*; *Microsoft Corp. v. i4i Ltd.*, 564 U.S. 91 (2011)

("[B]y the time Congress enacted s. 282 . . . the presumption of patent validity had long been a fixture of the common law. According to its settled meaning, a defendant raising an invalidity defense bore 'a heavy burden of persuasion,' requiring proof of the defense by clear and convincing evidence."). Defendants have failed to carry that burden here, especially on the preliminary record and prior to expert reports.

A. Indefiniteness Should Not Be Decided at the Claim Construction Stage

The test for indefiniteness is whether "a patent's claims, viewed in the light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). It is improper to rely on "claim language, standing alone," to allege indefiniteness. *Nature Simulation Sys. Inc. v. Autodesk, Inc.*, 50 F.4th 1358, 1360-61 (Fed. Cir. 2022).

Under the Joint Discovery Plans entered by the Court, Defendants were to disclose "Invalidity Disclosures" that included "[a]ny grounds for invalidity for any of the asserted claims based on indefiniteness" on May 1, 2023, with "Final Invalidity Contentions" due before "the due date for Defendant's opening expert report on invalidity," *i.e.*, June 26, 2023. No. 22-cv-01331, Dkt. No. 50 at 4-5; No. 22-cv-01373, Dkt. No. 44 at 4-5. Those opening expert reports would also include Defendants' indefiniteness support, since it is an "issue on which they bear the initial burden of proof." *Id.* Geoscope will then proffer expert testimony on validity on July 21, 2023. Attempting to force the issue of invalidity now, at the claim construction stage, is contrary to the parties' agreed-upon discovery plan and would deprive the Court of the testimony of those skilled in the art, which is the lynchpin of the indefiniteness analysis.

In these circumstances, district courts routinely defer the issue of indefiniteness until the merits phase in light of the high burden of proof required to demonstrate indefiniteness and the importance of expert testimony to revealing the perspective of those of skill in the art. *See, e.g.*,

Merck Sharp & Dohme Corp. v. Teva Pharms. USA, Inc., No. 17-6921, 2019 WL 943532, at *6 (D.N.J. Feb. 26, 2019); *Junker v. Med. Components, Inc.*, No. 13-4606, 2017 WL 4922291, at *2 (E.D. Pa. Oct. 31, 2017). The Court should similarly defer the issue of indefiniteness until summary judgment or trial here where the inquiry can be performed with the benefit of a full evidentiary record, such as the expert depositions and expert reports forthcoming in these cases. *See Par Pharm. Inc. v. Sandoz, Inc.*, No. 3:18-cv-14895, 2020 WL 1130387, at *8 (D.N.J. Mar. 9, 2020). Moreover, Defendants' invalidity contentions on indefiniteness to date have only comprised conclusory statements that:

> "This limitation is indefinite under § 112 because this limitation is indefinite and lacks written description support in the specification, particularly based upon the disclosure for Figure 1. As used in the claims, that phrase would not have a single, reasonably discernible meaning to a POSA. The specification does not provide sufficient guidance either."

See, e.g., Ex. 8 at 112-113; Ex. 9 at 108. This falls far short of the clear and convincing evidence necessary to support an indefiniteness finding, and to permit Defendants to augment their theories and evidence on the fly with their opening brief—and months before Geoscope is due to offer expert testimony on the issue—would significantly prejudice Geoscope and contravene the spirit, if not also the letter, of the parties' Joint Discovery Plan.

B. Even if the Court Addresses Indefiniteness Now, Both Intrinsic and Extrinsic Evidence Support that a POSA Would Understand the Terms with Reasonable Certainty

In any event, the partial record adduced to date demonstrates that a POSA would understand the meaning and scope of the disputed terms with reasonable certainty. Notably, the Patent Office had no concerns about the clarity of the Asserted Patents' language, either in evaluating the patent claims for definiteness under § 112 directly, or in comparing the scope of the claims to the prior art during prosecution. *See Sonix Tech. Co., Ltd. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1379-80 (Fed. Cir. 2017) (finding compelling that "the USPTO did not express any

uncertainty as to the scope of [the disputed term], or encounter any apparent difficulty in applying the term to the references"). Each disputed term is addressed in turn below.

1. "evaluating said at least one network measurement report with each of said sets of grid points as a function of select ones of said characterizing parameters"/ "evaluate said at least one network measurement report with each of said sets of grid points as a function of select ones of said characterizing parameters" (753 Patent, cl. 1, 32)

A POSA would readily understand these "evaluating"/"evaluate" terms when read in light of the claims and specification, as the *Nautilus* standard dictates. As detailed in Section II.B, the '753 Patent is directed to a method and system for determining the location of a mobile device that involve, *inter alia*, generating "grid points" based on calibration data and using those grid points to geolocate a mobile device. As part of using those grid points, the specification provides that the evaluation step involves analyzing based on "characterizing parameters"—such as signal strength information—what data from the network measurement reports and what grid points should be used in determining the location of the mobile device. *See, e.g.*, Dkt. No. 1-4 ('753 Patent) at 2:26-39, 55:18-67, Figs. 67, 70, claims 1, 32.

The prosecution history of the '753 Patent provides further support that these terms would be readily understood by those skilled in the art. That the USPTO Examiner had no apparent difficulty understanding these "evaluating"/"evaluate" terms, including in initially rejecting the claims as anticipated and/or obvious over prior art, is compelling evidence that the terms would be readily understood by those skilled in the art and requires no construction by the Court. *See Sonix Tech.*, 844 F.3d at 1379-80. For example, the Examiner initially rejected claim 1 of the '753 Patent as anticipated over prior art reference "Zeng" that purportedly disclosed a method of determining the location of a mobile device comprising, *inter alia*, a "comparison of obtained information with parameters from calibration points." *See* Ex. 10 at GEOSCOPE-A-001662. The invention of the '753 Patent was eventually distinguished because the prior art did not teach, *inter*

alia, the claimed grid points, but at no point during prosecution did the Examiner express any uncertainty as to the meaning or scope of the claim in view of these "evaluating" terms in particular.

Accordingly, no construction is necessary for the terms, as they are easily understandable to those of skill in the art. But should the Court construe these terms, the "evaluating…" phrase should be construed as "analyzing the collection of data associated with a wireless communication network or mobile device based on information associated with a signal or network," consistent with the specification, the ordinary meaning of the terms, and Geoscope's proposed constructions for "network measurement report" and "characterizing parameters." Likewise, the "evaluate…" phrase should be construed to mean "analyze the collection of data associated with a wireless communication network or mobile device based on information associated with a signal or network." These are both consistent with the plain and ordinary meaning of the claim language, and reflect the role of evaluation in the '753 Patent's specification.

2. "characterizing parameters" ('753 Patent, cl. 1, 9, 32, 40)

"Characterizing parameters" is readily understood by a POSA and requires no construction by the Court. Should the Court construe this term, it should be construed to mean "information associated with a signal or network," consistent with the specification and claims of the '753 Patent. This term is used in the context of "providing calibration data . . . , said calibration data having one or more ***characterizing parameters***" and "evaluating said at least one network measurement report with each of said sets of grid points as a function of select ones of said ***characterizing parameters***." *See, e.g.*, Dkt. No. 1-4 ('753 Patent) at cl. 1, 32 (emphasis added). Dependent claims 9 and 40 further specify that the characterizing parameter be selected from a group, including "signal strength for a signal transmitted by a transmitter having a known location as received by a receiver at said grid point . . .; the identification of a serving cell or serving sector

of said mobile device located at said grid point; a state of a wireless network serving said mobile device, and combinations thereof." In this context, a POSA would certainly understand the meaning and scope of "characterizing parameters" as information associated with a signal or network that is used in determining the location of a mobile device.

Further, as noted above, the prosecution history of the '753 Patent provides additional support that "characterizing parameters" would readily be understood by those skilled in the art. In particular, the Examiner who examined the '753 Patent had no apparent difficulty understanding this term, including in initially rejecting the claims as anticipated and/or obvious over prior art. *See* Ex. 10 at 3.

To the extent Defendants contend that the term is indefinite if not limited to the examples in the specification, such restriction would violate the general rule that claims of a patent are not limited to the preferred embodiment or to the examples listed within the patent specification. *See Littelfuse, Inc. v. Mersen USA EP Corp.*, 29 F.4th 1376, 1381 (Fed. Cir. 2022). The scope of a patent is not limited to specific embodiments or examples within the specification, and limitations stated in a dependent claim should not be read into the independent claim from which they depend. *Id.* at 1380-81.

3. "determining said most likely street as a first one of said plural geographic locations" ('784 Patent, cl. 1, 12)

A POSA would understand the scope of this term with reasonable certainty both from its plain and ordinary meaning and also the intrinsic evidence, including the context of claim 1.[7] As detailed in Section II.C, the '784 Patent is directed to methods and systems for generating a

[7] To streamline the discussion, only claim 1 is discussed here. However, all of the arguments apply equally to claim 12, which recites a system form of claim 1.

calibration database using map data to verify and improve calibration data that can later be used in geolocating a mobile device. The relevant portion of claim 1 recites:

> determining a status of said wireless device;
>
> determining from said status a most likely one of said plural streets upon which said wireless device is located;
>
> ***determining said most likely street as a first one of said plural geographic locations***;

This term was introduced, in consultation with the Examiner, during prosecution of the '784 Patent, which amended claim 1 to read:

> determining from said status a most likely one of said plural streets upon which said wireless device is ~~sited for a first one of said plural geographic locations~~ located;
>
> determining said most likely street as a first one of said plural geographic locations

Ex. 11 at GEOSCOPE-A-001252-1253.

Read in this context, a POSA would understand that the claimed method involves, *inter alia*, determining a status of a wireless device, and from this status, determining a most likely one of the plural streets where the wireless device is located, and determining the most likely street as one of the geographic locations for which location data has been obtained. This is supported by the specification, which describes that "based upon the status [of the wireless device], a most likely street upon which the wireless device is sited may be determined as the geographic location (907)." Dkt. No. 1-5 ('784 Patent) at 8:55-9:2, Fig. 9; *see also id.* at 2:22-36. Accordingly, a POSA would understand the scope of this term with reasonable certainty.

4. "in proximity" ('784 Patent, cl. 1, 12)

Courts have held terms of degree, such as "in proximity" and similar terms, to be "ubiquitous in patent claims" and sufficiently definite without requiring strict numerical boundaries. *See, e.g.*, *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275, 1291 (Fed. Cir. 2017) (holding the term "near" sufficiently definite); *Advanced Steel Recovery, LLC v. X-Body*

Equip., Inc., No. 2:12–cv–01004, 2013 WL 4828152, at *17-18 (E.D. Cal. Sept. 9, 2013) (holding the term "in proximity to" sufficiently definite). Here, a POSA would likewise understand the meaning and scope of "in proximity" based on the context of the inventions claimed in the '784 Patent. To achieve the goal of the inventions, a POSA would understand that the method involves determining a point that must be sufficiently "in proximity" to "[the] first geographic location" such that verification and improvement of the calibration data can be obtained.

That the Examiner did not have any apparent difficulty understanding this term during prosecution of the '784 Patent, including in recognizing that the prior art failed to teach, *inter alia*, "determining a first point of said plural points that is ***in proximity*** to said first geographic location," further supports that the term would have been understood by a POSA. *See* Ex. 11 at GEOSCOPE-A-001254 (emphasis added). Accordingly, the term "in proximity" is not indefinite and does not require construction; its scope is clear on its face and in the context of the claims.

IX. CONCLUSION

The plain and ordinary meaning of claim language controls its construction. Defendants cannot meet their high burden of proving that Geoscope's inventors disclaimed this claim scope or otherwise redefined known terms in a narrowing fashion. Controlling precedent is clear that neither the specific examples of the specification nor later-derived inventor testimony can restrict a claim's scope or read limitations into a claim. Defendants' attempt to create a non-infringement defense by rewriting the scope of the patents accordingly fails, and the Court should enter constructions consistent with Geoscope's proposals to reflect the plain and ordinary meaning of the claim language.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on May 26, 2023, I will electronically file the foregoing with the Clerk of the Court using the CM/ECF system, which will send a notification of such filing (NEF) to the following:

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