

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

PERDIEMCO LLC,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 20-1397-GBW-SRF
)	
CALAMP CORP.,)	
)	
Defendant.)	

REPORT AND RECOMMENDATION

Pending before the court in this patent infringement case are the parties' claim construction disputes. Plaintiff PerDiemCo LLC ("Plaintiff") asserts eight patents against defendant CalAmp Corp. ("Defendant"): United States Patent Nos. 10,382,966 ("the '966 patent"), 10,021,198 ("the '198 patent"), 9,871,874 ("the '874 patent"), 9,680,941 ("the '941 patent"), 10,602,364 ("the '364 patent"), 10,284,662 ("the '662 patent"), 10,277,689 ("the '689 patent"), and 10,397,789 ("the '789 patent"). (D.I. 1 at ¶ 1) All of the asserted patents generally relate to improvements to location tracking systems. (*Id.* at ¶ 23) This decision sets forth the court's recommendations of constructions following a review of the parties' joint claim construction brief and consideration of the arguments presented at the *Markman* hearing held on January 10, 2023. (D.I. 84)

Eight terms remain in dispute. For the reasons set forth below, I recommend that the court adopt the following constructions for the parties' disputed terms:

Term	Recommended Construction
“authorized user[s]”	“A user who is given permission to access information.”
“administrator[s]”	Plain and ordinary meaning, which is “an entity that performs administrative functions.”
“second level of administrative privileges to perform group administrative functions . . . , which are not performed using the first level of administrative privileges”	Plain and ordinary meaning, no construction required.
“second level of administrative privileges, which is not used by the system administrator”	Plain and ordinary meaning, no construction required.
“the administrator having the first level of administrative privilege does not exercise the second level of administrative privilege”	Plain and ordinary meaning, no construction required.
“causes an alert to be sent when a mobile device crosses a boundary associated with the zone”	“causes an alert to be sent every time a mobile device crosses a boundary associated with the zone”
“driver location” / “locat[e] [a/the] driver”	Plain and ordinary meaning, which is “information that indicates location of a driver.”
“event condition”	“A condition related to a relationship between an object location and a zone.”

I. LEGAL STANDARD

The purpose of the claim construction process is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 388-90 (1996). Construing the claims of a patent presents a question of law, although subsidiary fact finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015) (citing *Markman*, 52 F.3d at 977-78). An actual dispute regarding the proper scope of a claim term must be resolved by a judge, as opposed to the jury. *Markman*, 52 F.3d at 979.

“[T]here is no magic formula or catechism for conducting claim construction.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005). Instead, the court may attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.* The words of the claims “are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312-13 (internal citations and quotation marks omitted). If the meaning of a claim term is not readily apparent, the court considers sources including “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips*, 415 F.3d at 1312 (internal quotation marks omitted). Accordingly, “the claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Id.* at 1314. Claim terms are typically used consistently throughout the patent, and “usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Also, “[d]ifferences among claims can also be a useful guide For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15 (internal citation omitted).

The claims must be read in view of the specification, which “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the

meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[T]he specification may reveal a special definition given to a claim term by the patentee,” in which case, “the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). The specification may also contain a disclaimer or disavowal of claim scope. *Id.* However, “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted). The specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

The court should also consider the patent’s prosecution history, which is intrinsic evidence and “consists of the complete record of the proceedings before the [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* Statements made during inter partes review (“IPR”) may also be considered. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017).

A court may sometimes rely on “extrinsic evidence,” which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. Expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with

that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* Overall, extrinsic evidence is less reliable than intrinsic evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Phillips*, 415 F.3d at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

II. CONSTRUCTION OF DISPUTED TERMS

A. “authorized user[s]”

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“authorized user[s]” '689 patent, claim 1; '874 patent, claims 11, 44, 45; '198 patent, claims 1, 2, 4, 7, 13; '789 patent, claims 1-4, 12, 14, 17; '364 patent, claim 3	Plain and ordinary meaning, no construction required. Alternatively, if construed, “a user authorized to use a system” or “a user who is given permission to access information.”	“A user who is given permission to access information and has exclusive control of the conveyance of event information.”	“A user who is given permission to access information.”

I recommend that the court construe the term “authorized user[s]” to mean “a user who is given permission to access information,” in accordance with Plaintiff’s proposed construction and the construction given to the term by the Patent Trial and Appeal Board (“PTAB”) during IPR proceedings. (D.I. 85, Ex. 12 at 18) The parties dispute whether all authorized users must have “exclusive control” over the conveyance of event information. A review of the intrinsic

record supports Plaintiff's broader construction, and further limitations on the meaning of this term are not necessary because they are found in the claim language of the asserted patents.

Across the patents-in-suit, the asserted claims include limitations that describe the capabilities of the "authorized user[s]." (*See, e.g.*, D.I. 85, Ex. 3 at 25:58-66; Ex. 8 at 23:47-58) In some cases, this renders the "exclusive control" limitation in Defendant's narrower proposal superfluous. For instance, claim 11 of the '874 patent expressly provides that an authorized user having a second level of administrative privilege controls the conveyance of notifications, and an administrator having a first level of administrative privilege does not exercise the authorized user's second level of administrative privilege. (*Id.*, Ex. 3 at 25:58-66) Because the claim language already describes the capabilities of the authorized users, the additional limitation in Defendant's proposed construction is unnecessary. *See Linear Tech. Corp. v. Int'l Trade Comm'n*, 566 F.3d 1049, 1056 (Fed. Cir. 2009) (finding proposed additional language was unnecessary where the claim language already specified components to aid in the claimed circuit's function).

In other instances, the "exclusive control" limitation in Defendant's proposed construction conflicts with the claim language. Claim 1 of the '789 patent specifies that an authorized user "is not authorized to use the second level of administrative privileges" because that right is instead reserved for a "group administrator." (*Id.*, Ex. 8 at 23:47-58) As a result, the group administrator sets the location zones and event conditions and specifies who can receive event notifications. (*Id.*, Ex. 8 at 24:7-28) Because the "exclusive control" limitation in Defendant's proposal is inconsistent with the way the term is used in claim 1 of the '789 patent, Plaintiff's broader proposal should be adopted. *See Finjan LLC v. ESET, LLC*, 51 F.4th 1377, 1382 (Fed. Cir. 2022) ("The disclosures of related patents may inform the construction of claim

terms common across patents, but it is erroneous to assume that the scope of the invention is the same such that disclaimers of scope necessarily apply across patents[.]” (quoting *X2Y Attenuators, LLC v. U.S. Int’l Trade Comm’n*, 757 F.3d 1358, 1366 (Fed. Cir. 2014) (J. Reyna, concurring)).

The asserted patents’ common specification also supports Plaintiff’s position that some authorized users may not control the conveyance of event information. (D.I. 84 at 9-10) For instance, the specification describes an example in which a mother and father are authorized users, and the mother conveys object location information to the father but “may or may not allow the conveyance of the zone or event information to the father.” (D.I. 85, Ex. 1 at 11:24-29) In this scenario, the father is an authorized user who cannot control the conveyance of event information. Defendant’s proposed construction would read this embodiment out of the scope of the asserted claims. *See Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1320 (Fed. Cir. 2005) (“A claim construction that does not encompass a disclosed embodiment is . . . rarely, if ever, correct.”).

Defendant counters that its proposed construction is consistent with the portions of the specification describing the features of the “present invention” to include an “authorized user” having exclusive control of the conveyance of event information. (D.I. 84 at 12-13) “When the specification describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.” *Lemoine v. Mossberg Corp.*, 2021 WL 4199934, at *3 (Fed. Cir. Sept. 15, 2021) (citing *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006)). However, a reference to “the present invention” does not amount to a disavowal of scope if the phrase is used to describe “one way to carry out the present invention,” or where the specification does not “uniformly require” the limiting feature. *Continental Circuits LLC v. Intel*

Corp., 915 F.3d 788, 798 (Fed. Cir. 2019); *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1136-37 (Fed. Cir. 2011); *see also Pacing Techs., LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1025 (Fed. Cir. 2015). In sum, language characterizing “the present invention” must be read in context of the entire specification and the prosecution history, and it should not be interpreted to impose a limitation not supported by the rest of the intrinsic record. *Rambus Inc. v. Infineon Techs. AG*, 318 F.3d 1081, 1094-95 (Fed. Cir. 2003).

Here, the common specification’s references to “the present invention” do not support a conclusion that the term “authorized user[s]” should be limited to a user having exclusive control of the conveyance of event information. The specification describes the conveyance of object location event information “by the user of the computing device and not by someone else,” as “a key distinction between the user-defined zones of the present invention and predefined zones of previous location-aware applications.” (D.I. 85, Ex. 1 at 18:21-26) But this language immediately precedes the examples of a traveling salesman, a parole officer, a pet owner, a parent, and a hiker who define zones and control the conveyance of event information. (*Id.*, Ex. 1 at 18:26-19:53) It does not encompass the mother-daughter example, discussed earlier in the specification, in which the father is identified as an authorized user but only the mother has control over the conveyance of zone or event information. (*Id.*, Ex. 1 at 11:24-29) Because the specification does not “uniformly require” the limiting feature advocated by Defendant, this discussion of “the present invention” does not amount to a disavowal of scope. *See Continental Circuits*, 915 F.3d at 798; *Absolute Software*, 659 F.3d at 1136-37.

The prosecution history also supports Plaintiff’s position that the “exclusive control” limitation proposed by Defendant is not inherent in the term “authorized user[s].” In 2016, the PTAB instituted IPR proceedings for a parent of the asserted patents sharing the same

specification. (D.I. 85, Ex. 11) In the institution decision, the PTAB construed the term “authorized user” broadly to mean “a user who is given permission to access information,” consistent with Plaintiff’s proposed construction in this case. (*Id.*, Ex. 11 at 13) The PTAB explained that “Patent Owner cites nothing in the specification or elsewhere that requires interpreting an ‘authorized user’ as limited to one who *authorizes other users* to receive information.” (*Id.*) (emphasis in original). Although the patentee subsequently argued that, “[b]y using the words ‘the present invention,’ the patentees meant for” statements limiting the conveyance of event information to authorized users “to apply to the invention as a whole[.]” there is no indication on the present record that the PTAB credited the patentee’s position. (*Id.*, Ex. 15 at 7)

Ultimately, the patentee accepted the PTAB’s construction of “authorized user” and amended the language of certain claims in the ’874 patent to add a limitation that would achieve the desired result of limiting the second level of administrative privilege exclusively to the authorized user. (*Id.*, Ex. 12 at 18) The prosecution history of the ’874 patent specifies that it is these claim amendments, and not the inherent meaning of the term “authorized user,” “which make the second level of administrative privilege exclusive to the authorized user.” (*Id.*) The patentee explained that these amendments are enabled by particular embodiments in the specification, such as the “hiking” example, the “three teenage girls” example, the “traveling salesman” example, and the “pet tracking” example. (*Id.*, Ex. 12 at 19) The patentee did not purport to argue that all embodiments in the specification required the authorized user to have exclusive control over the conveyance of event information, nor did the patentee discuss the mother-daughter example in the context of these claim amendments. (*Id.*) These statements made to support claim amendments sought during prosecution of the ’874 patent do not amount

to a clear and unmistakable prosecution history disclaimer of an authorized user who lacks exclusive control. *See Rambus*, 381 F.3d at 1094-95 (explaining that limiting language in the intrinsic record “must be read in context of the entire specification and the prosecution history” to determine whether patentee made a clear disavowal of claim scope). To conclude otherwise would be inconsistent with the use of the term “authorized user” in the later-issued ’789 patent, which claims an authorized user who “is not authorized to use the second level of administrative privileges” because that right is instead reserved for a “group administrator.” (D.I. 85, Ex. 8 at 23:47-58)

During the *Markman* hearing, Defendant argued that Plaintiff’s statements to the PTO during prosecution of the parent application are binding even though the PTO ultimately rejected Plaintiff’s proposed construction. (D.I. 134 at 46:5-47:13) In support of its position, Defendant cited the Federal Circuit’s decision in *Fenner Investments, Ltd. v. Cellco Partnership*, 778 F.3d 1320, 1325-26 (Fed. Cir. 2015), which was not included in the parties’ joint brief on claim construction. In *Fenner*, the PTO rejected the plaintiff’s patent application for obviousness and the plaintiff overcame the rejection by distinguishing the prior art reference cited by the PTO. *Id.* at 1325. The plaintiff subsequently tried to distance itself from this position in the litigation by arguing that the statements made to overcome the obviousness rejection were not the basis for the grant of the patent. *Id.* The Federal Circuit rejected the plaintiff’s efforts to disavow its arguments during prosecution, explaining that the public should not be required “to decipher whether the examiner relied on them, or how much weight they were given.” *Id.*

Unlike in *Fenner*, where the patentee’s position was accepted by the PTO and the patentee subsequently tried to disclaim that position, the PTAB in this case expressly rejected the patentee’s claim construction argument and concluded that the privileges of the administrator

and authorized user are “mutually non-exclusive.” (D.I. 85, Ex. 12 at 18) There is no ambiguity about whether the PTAB relied on the patentee’s construction or how much weight was given to the patentee’s construction because the PTAB rejected the patentee’s construction outright. (*Id.*) Defendant cites no authority to suggest that a court may find a patentee has disavowed claim scope in claim construction arguments that were expressly rejected by the PTAB.

B. “administrator[s]”

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“administrator[s]” '689 patent, claims 1, 5; '662 patent, claim 1; '941 patent, claim 1; '874 patent, claims 11, 44; '198 patent, claims 1, 13; '789 patent, claims 1-3, 12, 14, 17; '364 patent, claim 3	Plain and ordinary meaning, which is “an entity that performs administrative functions.”	“A person or entity that performs administrative functions but cannot control conveyance of event information.”	Plain and ordinary meaning, which is “an entity that performs administrative functions.”

I recommend that the court construe the term “administrator[s]” in accordance with Plaintiff’s proposed construction, which is consistent with the intrinsic record. The focus of the parties’ dispute is on whether the administrator “cannot control conveyance of event information.” The parties largely rely on the same intrinsic evidence that they cited in support of their proposed constructions for the term “authorized user[s]” and, accordingly, the court’s analysis of “administrator[s]” tracks the analysis for “authorized user[s]” at § II.A, *supra*.

As previously discussed, Defendant’s proposed construction is not consistent with the claim language across all the asserted patents. The negative limitation in Defendant’s proposal barring an administrator from controlling the conveyance of event information conflicts with the language of claim 1 in the '789 patent, which provides that a “group administrator” is authorized to use the second level of administrative privileges. (D.I. 85, Ex. 8 at 23:52-55) Moreover, the

common specification describes different types of administrators performing information-sharing functions, such as a company administrator or a parent administering an information-sharing environment for the family. (*Id.*, Ex. 1 at 13:34-53) Defendant’s focus on the specification’s description of a “key distinction” of the “present invention” over the prior art does not alter the result for the reasons described at § II.A, *supra*. (D.I. 84 at 30)

Likewise, the prosecution history supports Plaintiff’s construction for the reasons discussed at § II.A, *supra*. Plaintiff’s arguments in support of the proposed amendments to the claims of the ’874 patent confirm that Plaintiff accepted the PTAB’s broad construction of the term “administrator” and included additional limitations in the claim language itself to clarify when Plaintiff intended to preclude the administrator from exercising the second level of administrative privilege. (D.I. 85, Ex. 12 at 18) By representing that “the above claim amendments require that the administrator having the first level of administrative privilege does not exercise the second level of administrative privilege,” Plaintiff confirmed that the limitation on the administrator’s ability to exercise the second level of administrative privilege was tied to the claim amendments, and not to the inherent meaning of the term “administrator[s].” (*Id.*) Subsequent discussion of the specification in the prosecution history was limited to establishing that the amended claim limitation is enabled by the specification. (*Id.*, Ex. 12 at 18-20) Because Plaintiff did not disavow the full scope of the term “administrator[s]” by amending the claims of the ’874 patent to include additional limitations, Defendant’s cited case authorities regarding prosecution history disclaimer are inapposite. *See, e.g., Infinity Computer Prods. v. Oki Data Ams. Inc.*, 987 F.3d 1053, 1060 (Fed. Cir. 2021).

C. “Administrative Privilege” Terms

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“second level of administrative privileges to perform group administrative functions . . . , which are not performed using the first level of administrative privileges” ’789 patent, claims 1, 12	Plain and ordinary meaning, no construction required.	“a second level of administrative privileges to perform group administrative functions, which cannot be performed using the first level of administrative privileges”	Plain and ordinary meaning, no construction required.
“second level of administrative privileges, which is not used by the system administrator” ’789 patent, claim 17	Plain and ordinary meaning, no construction required.	“a second level of administrative privileges, which cannot be used by the system administrator”	Plain and ordinary meaning, no construction required.
“the administrator having the first level of administrative privilege does not exercise the second level of administrative privilege” ’874 patent, claims 11, 44	Plain and ordinary meaning, no construction required.	“the administrator having the first level of administrative privilege cannot exercise the second level of administrative privilege”	Plain and ordinary meaning, no construction required.

I recommend that the court construe the disputed “administrative privilege” terms in accordance with Plaintiff’s proposals, which are consistent with the claim language and the prosecution history. The focus of the parties’ dispute is on whether the phrases “are not,” “is not,” and “does not” should be replaced with “cannot.” During the *Markman* hearing, Defendant’s counsel argued that the basis for replacing the existing claim language with “cannot” is grounded in its non-infringement position, without citing any support for the modification in the four corners of the ’874 patent. (D.I. 134 at 63:7-65:12) The court declines

to adopt a proposed construction that “masquerades as a genuine attempt to promote clarity . . . but is ultimately fueled by [a defendant’s] non-infringement positions and unsupported by the intrinsic record.” *EIS, Inc. v. IntiHealth Ger GmbH*, C.A. No. 19-1227-GBW, 2023 WL 346631, at *15 (D. Del. Jan. 9, 2023).

Defendant relies on the same portion of the prosecution history it cited in support of its proposed constructions for the terms “authorized user[s]” and “administrator[s],” which was previously discussed at § II.A-B, *supra*. (D.I. 84 at 68) The prosecution history of the ’874 patent is consistent with the claim language, explaining that the amendments specify “the administrator having the first level of administrative privilege does not exercise the second level of administrative privilege.” (D.I. 85, Ex. 12 at 18) Defendant focuses on the patentee’s assertion that this language “makes the second level of administrative privilege exclusive to the authorized user” and the limitation achieves this exclusivity “by preventing the administrator from exercising the second level of administrative privilege.” (*Id.*, Ex. 12 at 18, 20) But the patentee deemed the “are not” / “is not” / “does not” language sufficient to convey this exclusivity in both the amended claim language and the prosecution history relied on by Defendant. (*Id.*) At bottom, Defendant’s claim construction proposal is an effort to bolster its non-infringement position rather than to resolve a genuine ambiguity in the claim language, and the intrinsic record does not justify a departure from the claim language chosen by the patentee in this instance.

D. “causes an alert to be sent when a mobile device crosses a boundary zone associated with the zone”

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“causes an alert to be sent when a mobile device crosses a boundary associated with the zone” ’941 patent, claim 1	Plain and ordinary meaning, no construction required. If construed, “causes an alert to be sent at any or every time that a mobile device crosses a boundary associated with the zone.”	“causes an alert to be sent every time a mobile device crosses a boundary associated with the zone”	“causes an alert to be sent every time a mobile device crosses a boundary associated with the zone”

I recommend that the court construe the term “causes an alert to be sent when a mobile device crosses a boundary associated with the zone” in accordance with Defendant’s proposed construction. The parties dispute the scope encompassed by the claim language. *See O2 Micro Int’l, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) (concluding that the trial court is required to resolve disputes regarding the scope of the asserted claims). Here, the parties’ dispute centers on the meaning of the word “when,” and whether the word requires the alert to be sent every time a device crosses a boundary or only sometimes. (D.I. 84 at 38-39) The intrinsic record supports Defendant’s position that an alert is sent “every time” a zone boundary is crossed. Plaintiff does not explain how an alert that is sent “at any time” a boundary is crossed supports its position that the alert may be sent only “sometimes.”

Claim 1 of the ’941 patent, which discloses that “the occurrence of the event causes an alert to be sent when a mobile device crosses a boundary associated with the zone,” supports Defendant’s proposed construction requiring an alert to be sent every time the mobile device crosses a zone boundary. (D.I. 85, Ex. 4 at 23:53-55) The claim recites a location tracking system having a server configured to “cause the group’s alert to be sent[.]” (*Id.*, Ex. 4 at 23:17-

22, 24:19) The object of the claimed tracking system is to convey location event information, and to construe the term in accordance with Plaintiff's proposal would defeat the stated purpose of the invention. (*Id.*, Ex. 4 at 24:19-23); *see Fujitsu Ltd. v. Netgear, Inc.*, 620 F.3d 1321, 1335 (Fed. Cir. 2010) (rejecting a broad construction that "ignores the power saving purpose of the invention and is not supported by the specification.").

The specification further supports Defendant's proposed construction of the claim term, explaining that "[i]f the GPS receiver indicates a user's location passes over a zone boundary, an exit or entry alert is issued." (D.I. 85, Ex. 4 at 20:13-15) The specification includes a number of examples consistent with Defendant's position that a key feature of the invention is sending an alert every time a zone boundary is crossed: (1) a parole officer receives notifications when a parolee enters a prohibited location; (2) a pet owner receives an alert when a pet leaves the yard; (3) a parent receives a notice when a child enters or leaves permissible or prohibited play areas in the neighborhood; and (4) a hiker receives an alert whenever another hiker in the group enters or exits a defined zone along the hiking route. (*Id.*, Ex. 4 at 19:22-53) Another example describes a group of teenage girls who go shopping in a mall and define a zone for a meet-up location that sends an alert "when any of the girls enters the [defined] sitting area." (*Id.*, Ex. 4 at 18:1-16) An example of a traveling salesman likewise receives alerts that include updated customer information when he enters each zone. (*Id.*, Ex. 4 at 18:32-36) These examples do not contemplate a scenario in which an alert is not sent when a zone boundary is crossed. Instead, each of the examples confirms that the alerts sent when a zone boundary is crossed are a critical aspect of the invention. *See Fujitsu*, 620 F.3d at 1335.

Plaintiff maintains its proposed construction is supported by the specification's "mother-daughter" example, which states that the mother has control over whether an alert is sent: "The

mother may or may not allow conveyance of the zone or event information to the father.” (D.I. 85, Ex. 4 at 11:27-29) But the mother’s discretion over whether the father receives the alert does not mean that the alert is not sent. The embodiment confirms that the mother continues to receive the alerts when a zone boundary is crossed, even if the father does not. (*Id.*, Ex. 4 at 11:51-57) Plaintiff argues the specification is silent on whether the mother receives the alert every time, but that silence cuts in only one direction. (D.I. 134 at 80:23-81:8) The example describes the alert being sent to the mother and never suggests a scenario in which the alert is not sent to the mother.

The prosecution history of the ’941 patent further supports Defendant’s position that an alert is sent “every time” a boundary is crossed. The disputed term was added to the claim by way of amendment in the patentee’s response to a non-final office action on December 22, 2016. (D.I. 85, Ex. 16 at 3) To support the addition of the new claim limitation, the patentee cited portions of the specification describing the hiker example and an exit or entry alert issued “[i]f the GPS receiver indicates a user’s location passes over a zone boundary.” (*Id.*, Ex. 16 at 12) There is simply no support in the intrinsic record for Plaintiff’s position that an alert is not sent every time a zone boundary is crossed, and to rule otherwise would nullify a key purpose of the invention.

E. “driver location” / “locat[e] [a / the] driver”

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“driver location” / “locat[e] [a / the] driver” ’966 patent, claims 1, 8, 13; ’789 patent, claim 17	No construction necessary. If construed: plain and ordinary meaning, which is “information that indicates location of a driver.”	“[Location of / locate] a driver, independent of a vehicle driven by the driver.”	Plain and ordinary meaning, which is “information that indicates location of a driver.”

I recommend that the court construe the terms “driver location” / “locat[e] [a / the] driver” in accordance with Plaintiff’s proposal, which is consistent with the intrinsic record. The focus of the parties’ dispute is on whether one electronic device may determine the location of both the driver and the vehicle, or whether the location of the driver and the location of the vehicle are determined by separate devices.

The claim language confirms that the location of the driver need not be independent of the vehicle driven by the driver. Asserted claim 17 of the ’789 patent recites a “method for tracking driving events” in which a vehicle carries a mobile computer device (“MCD”), and both driver location information and driving event information are received via the MCD located in the vehicle. (D.I. 85, Ex. 8 at 27:1-12) Dependent claim 18 confirms that the resulting event log file contains both “recorded driver location information and driving event information.” (*Id.*, Ex. 8 at 27:15-17) The asserted claims of the ’966 patent also support Plaintiff’s proposed construction. For example, claim 13 of the ’966 patent claims an MCD “carried in a vehicle driven by a driver for tracking driving events[.]” (*Id.*, Ex. 1 at 24:38-39) The MCD in the vehicle is used “to locate the driver and record driver locations . . . into an event log file” and to “record driver locations within the area[.]” (*Id.*, Ex. 1 at 24:52-54, 24:63-65) Because the only mechanism for locating the driver is the MCD positioned inside the vehicle, Defendant’s proposed construction for determining the location of the driver apart from the location of the vehicle is not supported by the claim language.

Defendant maintains that claim 4 of the ’789 patent supports its position that the location of a driver is independent of the location of a vehicle driven by the driver. (D.I. 84 at 49-50) Claim 4 recites a person as the first carrier of a mobile tracking device who is the driver of a vehicle, and the vehicle has a separate tracking device. (D.I. 85, Ex. 8 at 24:44-50) The driver

and the vehicle become associated with each other when they are both within a zone of proximity. (*Id.*) While this dependent claim provides for separate tracking of the driver location and the vehicle location, there is no similar limitation in asserted claim 17 and no comparable requirement limiting the scope of the invention in the specification.

The mother-daughter example in the specification provides further support for Plaintiff's position. In this embodiment, "[t]he vehicle is equipped with a location information source (e.g., a GPS receiver) and is configured to transmit the location of the car . . . when the car is powered on." (D.I. 85, Ex. 1 at 9:31-35) In this manner, the mother "has authorized access to the object location information of the vehicle." (*Id.*, Ex. 1 at 9:39-40) The mother then receives notices "when her daughter's car enters or leaves any of the three user-defined zones." (*Id.*, Ex. 1 at 9:58-59) The specification explains that these user-defined zones and object location events "allow the mother to know when the daughter has safely arrived at the three places" and track the location of the car when it is in transit between user-defined zones. (*Id.*, Ex. 1 at 9:62-10:6) In this example, the mother's awareness of the daughter's location is derived from information provided by the GPS receiver inside the vehicle, as opposed to a source independent of the vehicle. The specification's representation that both people and vehicles are examples of objects which may be tracked does not advance Defendant's argument that people must be tracked separately from vehicles in all circumstances. (D.I. 84 at 49-50; D.I. 85, Ex. 1 at 6:29-33)

F. “event conditions”

Claim term	Plaintiff’s proposal	Defendant’s Proposal	Court’s construction
“event condition” ’689 patent, claims 1, 4-6; ’662 patent, claims 1, 3; ’874 patent, claims 11, 44; ’198 patent, claims 1, 12; ’789 patent, claims 1, 4, 9, 10; ’364 patent, claim 3	Plain and ordinary meaning, no construction required. If construed, “a condition used to determine if an event occurs.”	“A condition related to a relationship between an object location and a zone.”	“A condition related to a relationship between an object location and a zone.”

I recommend that the court construe the term “event conditions” in accordance with Defendant’s proposal, which is consistent with the intrinsic record. The focus of the parties’ dispute is on whether the geo-fencing limitation proposed by Defendant should be included in the construction. The patentee’s lexicography and the examples in the specification support Defendant’s position that event conditions require a relationship between an object location and a zone.

The patentee defined the term “event conditions” in the specification to require a relationship between an object location and a zone in accordance with Defendant’s proposal: “An event is also defined in terms of a condition related to a relationship between an object location and the zone. The condition can relate to entry by the object into the zone, exit by the object from the zone, or proximity of the object to the zone[.]” (D.I. 84 at 56; D.I. 85, Ex. 1 at 1:65-2:2) By using the phrase “defined in terms of,” the patentee expressed an intent to limit the term in this manner. *See Pacing Techs.*, 778 F.3d at 1024; *see also Arendi S.A.R.L. v. LG Elecs., Inc.*, C.A. No. 12-1595-LPS et al., 2019 WL 3891150, at *4 (D. Del. Aug. 19, 2019) (limiting term to word processing documents where specification said “the present invention is defined in

terms of” such word processing documents). This definition is consistent with the specification’s characterization of “the present invention” as “relat[ing] to a system and method for defining events that are correlated with the location of one or more objects to one or more zones.”¹ (D.I. 85, Ex. 1 at 2:9-11)

A review of the specification in its entirety further supports Defendant’s narrower reading of the term. The numerous examples of event conditions described in the specification require a relationship between an object location and a zone. For example, the specification explains how an object location event can be “defined to occur periodically as long as an object is outside a user-defined zone or inside a user-defined zone.” (D.I. 85, Ex. 1 at 9:15-18) Plaintiff contends that the event condition in this instance is the passage of time, but the specification also expressly requires object location and zone information in this example. (*Id.*; D.I. 84 at 55) Nothing in Defendant’s proposed construction precludes the added consideration of the passage of time.

Another portion of the specification describes predefined zones and predetermined object location events, setting forth examples in which an alarm condition is set when a person carries an object into a predefined zone, or a motion detector turns on a light when a person walks through a predefined area. (D.I. 85, Ex. 1 at 17:41-52) Plaintiff argues that the event conditions in these examples are based on device activation or detected motion. (D.I. 84 at 55) But the device activation and detected motion in these examples is dependent on, and cannot be divorced

¹ The analysis of this term is not inconsistent with the court’s prior analysis of the terms “authorized user[s]” and “administrator[s]” at § II.A-B, *supra*. Although the specification also described those terms in the context of “the present invention,” the terms were not used consistently across the claims of the asserted patents, and the specification included examples to support a broader construction of the terms. The same is not true for the term “event conditions.”

from, the location of objects relative to a predefined zone. (D.I. 85, Ex. 1 at 17:41-52) For instance, the alarm goes off when a non-deactivated RFID tag (the object) comes into proximity with the predefined zone near a store exit (the zone). (*Id.*)

Plaintiff also refers to a passage in the specification describing information packages that include sensor information such as temperature, humidity, heart rate, or breathing rate. (D.I. 84 at 55; D.I. 85, Ex. 1 at 18:46-63) According to Plaintiff, a temperature notification can be sent in an information package without the need for a relationship between an object and a zone. (D.I. 84 at 55) But nothing in the specification supports a conclusion that an information package is an event condition. Instead, the specification explains that these information packages containing sensor information can be associated with the object location information or zone information of an event condition. (D.I. 85, Ex. 1 at 18:46-63) Figure 16 further illustrates this distinction, explaining that the information packages may provide pictures or other sensory information that can be associated with the user's location (i.e., zone or event information):

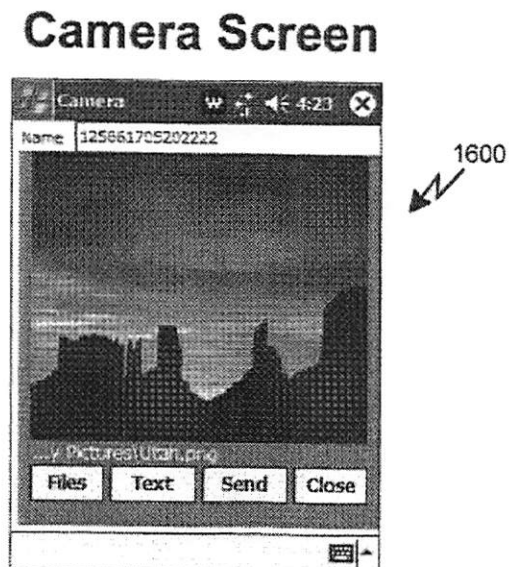


FIG. 16

(D.I. 85, Ex. 1 at Fig. 16) By explaining that the information packages may be associated with zone and event information, the specification confirms that the information packages are not inconsistent with the express definition of event conditions. (*Id.*, Ex. 1 at 22:12-25)

Similarly, a review of the specification fails to support Plaintiff's position that a "power on" condition falls within the scope of the term "event conditions" without any corresponding zone information. (D.I. 84 at 55) In one embodiment, the specification describes a vehicle equipped with a GPS receiver that is configured to transmit the location of the car periodically "when the car is powered on." (D.I. 85, Ex. 1 at 9:32-35) The event condition in this example occurs when the powered-on vehicle (i.e., the object) transmits location information based on predetermined, user-defined zones. (*Id.*, Ex. 1 at 9:27-40) This example does not advance Plaintiff's position that an event condition can occur without a relationship between an object location and a zone.

The same analysis applies to "characteristics of movement" such as driving speed. The specification describes an example in which the location of a car can be monitored as it travels between user-defined zones, with notifications received "based on the defined events" pertaining to the object and zones. (D.I. 85, Ex. 1 at 9:62-10:6) While these notifications can also be "used to indicate characteristics of movement including the speed of a vehicle," the speed of the vehicle cannot be determined in the absence of object location and zone information. (*Id.*, Ex. 1 at 10:2-6)

III. CONCLUSION

For the reasons set forth above, I recommend that the court construe disputed terms as follows:

Term	Recommended Construction
“authorized user[s]”	“A user who is given permission to access information.”
“administrator[s]”	Plain and ordinary meaning, which is “an entity that performs administrative functions.”
“second level of administrative privileges to perform group administrative functions . . . , which are not performed using the first level of administrative privileges”	Plain and ordinary meaning, no construction required.
“second level of administrative privileges, which is not used by the system administrator”	Plain and ordinary meaning, no construction required.
“the administrator having the first level of administrative privilege does not exercise the second level of administrative privilege”	Plain and ordinary meaning, no construction required.
“causes an alert to be sent when a mobile device crosses a boundary associated with the zone”	“causes an alert to be sent every time a mobile device crosses a boundary associated with the zone”
“driver location” / “locat[e] [a/the] driver”	Plain and ordinary meaning, which is “information that indicates location of a driver.”
“event condition”	“A condition related to a relationship between an object location and a zone.”

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The objections and responses to the objections are limited to ten (10) pages each. The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the District Court. *See Sincavage v. Barnhart*, 171 F. App’x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the court's Standing Order For Objections Filed Under Fed. R. Civ. P. 72, dated March 7, 2022, a copy of which is available on the court's website, <http://www.ded.uscourts.gov>.

Dated: February 10, 2023



Sherry R. Fallon
UNITED STATES MAGISTRATE JUDGE