

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

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INCOM CORPORATION §
PLAINTIFF, §
V. §
RADIANT RFID, LLC, §
DEFENDANT. §

CAUSE NO. 1-17-CV-009-LY

CLERK OF DISTRICT COURT
WESTERN DISTRICT OF TEXAS

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INCOM CORPORATION §
PLAINTIFF, §
V. §
AUSTIN AT GROUP, INC. F/K/A §
ALLIANCE TECH, INC. AND §
CVENT, INC. §
DEFENDANT. §

CAUSE NO. 1-17-CV-224-LY

**MEMORANDUM OPINION AND ORDER REGARDING
CLAIMS CONSTRUCTION**

Before the court in the above-styled and numbered causes are Plaintiff InCom Corp.'s Opening Claim Construction Brief filed February 6, 2018 (Doc. #36); Defendants' Opening Claim Construction Brief filed February 6, 2018 (Doc. #35); Plaintiff InCom Corp.'s Responsive Claim Construction Brief filed February 22, 2018 (Doc. #40); Defendants' Responsive Claim Construction Brief filed February 22, 2018 (Doc. #39); Defendant Radiant RFID LLC's Supplemental Brief in Response to the Dobson Declaration filed March 6, 2018 (Doc. #47); Plaintiff's Brief in Response to Defendant Radiant RFID LLC's Supplemental Brief in Response to the Dobson Declaration filed March 16, 2018 (Doc. #51); the parties' Revised Joint Claim Construction Statement filed March 5, 2018 (Doc. #45); and the parties' claim-construction presentations.

Defendants, as referred in this Opinion and Order, are the defendants in both causes before the court for claim construction: Radiant RFID LLC and Austin AT Group, Inc.

The court held a claim-construction hearing on March 6, 2018. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). After considering the patents and their prosecution history, the parties' claim-construction briefs, the applicable law regarding claim construction, and argument of counsel, the court now renders its order with regard to claim construction.

I. Introduction

The court renders this memorandum opinion and order to construe the claims of United States Patent Nos. 7,336,185 (“the ’185 Patent”), entitled “Combination ID/Tag Holder,” and 8,353,705 (“the ’705 Patent”), entitled “Attendance Tracking System” (collectively “the Asserted Patents”). Plaintiff InCom Corporation is the owner of the Asserted Patents, which relate to automated attendance monitoring systems. Specifically, the asserted claims of the ’185 patent are directed to holders for remotely readable tags, and the asserted claims of the ’705 patent are directed to a method for automatically gathering and validating attendance data. Plaintiffs allege that Defendants infringe claims of the Asserted Patents through making, using, offering for sale, selling or importing infringing products.

II. Legal Principles of Claim Construction

Determining infringement is a two-step process. *See Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996) (“[There are] two elements of a simple patent case, construing the patent and determining whether infringement occurred . . .”). First, the meaning and scope of the relevant claims must be ascertained. *Id.* Second, the properly construed claims must be

compared to the accused device. *Id.* Step one, claim construction, is the current issue before the court.

The court construes patent claims without the aid of a jury. *See Markman*, 52 F.3d at 979. The “words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Vitronics Corp v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention” *Id.* at 1313. The person of ordinary skill in the art is deemed to have read the claim term in the context of the entire patent. *Id.* Therefore, to ascertain the meaning of a claim, a court must look to the claim, the specification, and the patent’s prosecution history. *Id.* at 1314–17; *Markman*, 52 F.3d at 979.

Claim language guides the court’s construction of a claim term. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and unasserted, can provide additional instruction because “terms are normally used consistently throughout the patent” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.* at 1314–15.

Claims must also be read “in view of the specification, of which they are a part.” *Markman*, 52 F.3d at 979. “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582). In the specification, a patentee may define a term to have a meaning that differs from the meaning that the term would otherwise possess. *Id.* at 1316. In such a case, the patentee’s lexicography governs. *Id.* The specification may also reveal a patentee’s intent to disavow claim scope. *Id.*

Such intention is dispositive of claim construction. *Id.* Although the specification may indicate that a certain embodiment is preferred, a particular embodiment appearing in the specification will not be read into the claim when the claim language is broader than the embodiment. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

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

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (internal quotations omitted). Technical dictionaries and treatises may help the court understand the underlying technology and the manner in which one skilled in the art might use a claim term, but such sources may also provide overly broad definitions or may not be indicative of how a term is used in the patent. *See id.* at 1318. Similarly, expert testimony may aid the court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a

claim term are not useful to a court.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms” *Id.* Extrinsic evidence may be useful when considered in the context of the intrinsic evidence, *id.* at 1319, but it cannot “alter a claim construction dictated by a proper analysis of the intrinsic evidence,” *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1139 (Fed. Cir. 2004).

III. Discussion

A. Agreed Constructions

The parties agree to the construction of three claim terms. The court adopts the agreed construction of those claim terms as listed in the table below.¹

Claim Term/Phrase	Adopted Agreed Construction
“tag” [’185 Patent, Claim 1]	an RFID tag or other electronic device that is subject to interference caused by the human body and is used to indicate physical location
“at a rate of more than one tag per second” [’705 Patent, Claim 3]	faster than one tag per second
“scanning . . . at multiple different distances” [’705 Patent, Claim 4]	reading tags at different distances from the scanner

¹ Throughout, the **bolded** claim terms indicate the court’s adopted construction.

B. *Disputed Terms*

The parties dispute the construction of eleven terms. Each disputed term is discussed separately.

1. “tag container”

The parties’ proposed constructions of this term, as used in Claims 24 and 25 of the ’185 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because term is used consistent with plain and ordinary meaning (holder (e.g., receptacle or storage place) for tag).	A container for the tag that is separate from the holder

Plaintiff argues that the term would be understood by a person of ordinary skill in the art and should be given its plain and ordinary meaning. Defendants assert that use of the disputed term in other claims and in the specification requires that the “tag container” be a structure distinct from the holder. Plaintiff responds that Defendants’ construction improperly imposes claim limitations that are otherwise absent. The court agrees with Defendants.

Claim language guides the court’s construction of a claim term. *Phillips*, 415 F.3d at 1314. Read in the context of Claims 16 and 23, from which Claims 24 and 25 depend, “tag container” is a distinct component of the claimed “holder.” Claim 16 is directed to “[a] holder for a remotely readable tag . . . the holder comprising . . . a tag spacing maintainer” ’185 Patent, 5:30–41. Claim 23 is directed to “[t]he holder of claim 16, wherein said tag spacing maintainer includes a wall” *Id.* at 6:32–33. Claim 24 recites “[t]he holder of claim 23, wherein said wall defines a portion of a tag container” *Id.* at 6:37–38. Claim 25 adds a further limitation to the tag container of claim 24. *See id.* at 6:40–42. Read together with Claims

16 and 23, Claims 24 and 25 are directed to a remotely readable tag holder that includes a tag spacing maintainer with a wall that defines a portion of a tag container. Thus the “tag container” component is part of, but distinct from, the holder itself.

Other claims using the term “tag container” support this construction. Because “terms are normally used consistently throughout the patent,” other claims, asserted and unasserted, provide additional instruction. *Phillips*, 415 F.3d at 1314; *see also Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001) (“[A] claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent.”). Claims 1, 8, and 14 consistently refer to a “tag container” distinct from the “holder.” Claim 1 is directed to “[a] holder comprising . . . a body . . . a second pouch for holding a tag container . . . [and] a tag container, for placement in said second pouch” ’185 Patent, 4:8–14. By its plain language, Claim 1 refers to a “tag container” as a component of the claimed “holder.” Claims 8 and 14 similarly describe the “tag container” as distinct from the “holder.” *See id.* at 4:47–59, 5:18–27. Plaintiff has provided no evidence that the use of “tag container” in Claims 24 and 25 should be attributed a meaning different from that of Claims 1, 8 and 14.

Defendants’ construction is further reinforced by the specification. The specification describes the invention as requiring a distinct tag container component:

[t]he present invention is a combination ID/tag holder, comprising (i) a holder body, (ii) a first pouch 18 for holding a traditional ID card, (iii) a second pouch 20, (iv) a tag container 30, for placement in the second pouch, and (v) a tag 34 for placement in the tag container 30.

’185 Patent, 2:15–19. “When a patent thus describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007). Here, the specification limits the scope of the invention to “a combination ID/tag holder” that includes a “tag container” component.

The “present invention” description is not so limiting when other intrinsic evidence suggests that invention reaches beyond that description. *See Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1136–37 (Fed Cir. 2011). But that is not the case here. On the contrary, the specification consistently describes the tag container as a distinct component of the claimed invention. *See, e.g.*, ’185 Patent, 2:27–44 (describing the holder as including a body which supports a “second pouch 20 . . . for holding the tag container 30”); *id.* at 2:42–44 (“The second pouch 20 may be sealed at the ends after the tag container 30 has been inserted”); *id.* at 3:42–43 (“In use, a tag container 30 with a user’s tag 34 would be placed into the second pouch 20.”); *id.* at figs. 5–6 (depicting the tag container as a distinct component of the holder).

Plaintiff argues that Defendants’ construction improperly imposes limitations not present in the claims. However, Defendants’ construction simply makes explicit that the “tag container” is a distinct component of the claimed holder. The Federal Circuit has approved similar claim constructions. *See, e.g., Regents of Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 934–39 (Fed. Cir. 2013) (affirming construction that claimed “first and second occluding disks” be two physically separate structures). Because the “separate from the holder” portion of Defendants’ construction is permissible under Federal Circuit precedent and supported by the intrinsic evidence, the court concludes that Defendants’ construction is proper.

Therefore, the court concludes the construction of “tag container” to be: **a container for the tag that is separate from the holder.**

2. “tag orientation controller”

The parties’ proposed constructions of this term, as used in Claim 16 of the ’185 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because term is used consistent with plain and ordinary meaning (arrangement that keeps the tag in a desired orientation)	This claim language is subject to construction under 35 U.S.C. § 112, ¶6. The claimed function is “to keep the tag with its length extending substantially horizontally and extending lateral to the human user when the tag suspension is in use coupling the tag to the human user” The disclosed structure for performing the claimed function is a tag container 30 snugly held within a second pouch 20 in the holder.

The parties dispute whether this term is subject to and governed by 35 U.S.C. § 112(f).² Plaintiffs assert that the term requires no construction because the term is used consistent with plain and ordinary meaning and is easily understood by both the jury and a person of ordinary skill in the art. Defendants contend that the term fails to connote specific structure to a person of ordinary skill in the art and, therefore, must be construed under Section 112(f). The court agrees with Defendants.

In determining whether a claim limitation is subject to Section 112(f), the “essential inquiry is not merely the presence or absence of the word ‘means’ but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite

² The America Invents Act replaced Section 112, paragraph 6 with Section 112(f) for all patent applications filed after September 15, 2012. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified in scattered sections of 35 U.S.C.). To avoid confusion, the court will refer to subsections consistent with the current version of the statute. Throughout this opinion and order, the court will refer to this provision simply as “Section 112(f).”

meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). Even in the absence of the word “means,” a limitation is still subject to construction under Section 112(f) if the terms fails to recite sufficiently definite structure. *Id.* Such is the case here.

Terms such as “controller” often connote insufficient structure to take the limitation outside the bounds of Section 112(f). *See id.* at 1350 (“Generic terms such as ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means’ because they typically do not connote sufficiently definite structure and therefore may invoke [Section 112(f)].” (internal quotations omitted)). That the term “tag orientation controller” fails to recite sufficiently definite structure is clear from Plaintiff’s proposed plain and ordinary meaning, which uses solely functional language: “arrangement that keeps the tag in a desired orientation.”

In response to Defendants’ proposed construction, Plaintiff submits the Declaration of Michael Dobson, the Chairman and founder of InCom. Mr. Dobson contends that “tag orientation controller” would connote definite structure to a person of ordinary skill in the art. However, the court finds the Dobson Declaration unpersuasive in light of the intrinsic evidence. *See Phillips*, 415 F.3d at 1318 (concluding that court should discount expert testimony at odds with intrinsic evidence). Mr. Dobson attempts to assign definite structure to the “tag orientation controller” of Claim 16 by referencing the term’s use in dependent claims. But dependent claims, by nature, add limitations not present in the corresponding independent claim. *See Dana Corp. v. Am. Axle & Mfg., Inc.*, 279 F.3d 1372, 1376 (Fed. Cir. 2002) (“[D]ependent claims necessarily add limitations to the claims from which they depend”). Thus use of the term “tag orientation controller” in dependent Claims 19–21 provides no description of term’s

structure in independent Claim 16. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004) (concluding that presence of claim limitation in dependent claims provides “strong support” for the argument that corresponding independent claim did not include that limitation).

Plaintiff asserts that “tag orientation controller” connotes sufficiently definite structure when read in light of the specification. In support of this argument, Plaintiff cites the Federal Circuit’s statement in *Media Rights Technologies, Inc. v. Capital One Financial Corp.* that in determining whether Section 112(f) applies, “we ask if the claim language, read in light of the specification, recites sufficiently definite structure to avoid [Section 112(f)].” 800 F.3d 1366, 1372 (Fed Cir. 2015) (quoting *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014)) (internal quotations omitted). The precedent this statement quotes clarifies that “[t]he question is whether the claim language names particular structures or, instead, refers only to a general category of whatever may perform specified functions.” *Robert Bosch*, 769 F.3d at 1099. In the latter case, Section 112(f) applies. *Id.*

The court concludes that “tag orientation controller” does not name particular structures described in the specification, but rather “refers only to a general category of whatever may perform specified functions.” *Id.* In cases reaching the opposite conclusion, the patent provided a detailed description of the structure of the disputed term by name. *See, e.g., Inventio AG v. ThyssenKrupp Elevator Americas Corp.*, 649 F.3d 1350, 1357–59 (Fed. Cir. 2011) (holding that patent’s detailed description of operation of claimed “modernizing device” conveyed definite structure) *overruled in part by Williamson*, 792 F.3d at 1349; *Quanergy Sys., Inc. v. Velodyne Lidar, Inc.*, No. 16-cv-05251-EJD, 2017 WL 4410174, at *13 (N.D. Cal. Oct. 4, 2017) (holding text and figures of specification described “rotary power coupling” in sufficient detail to

conclude claim term referred to particular structures). In contrast, the term “tag orientation controller” does not appear in the ’185 Patent specification at all.

Plaintiff responds that a person of ordinary skill in the art would be capable of more than term matching; therefore, “tag orientation controller” could connote definite structure without specific use in the specification. In reaching this conclusion, Mr. Dobson starts by describing the claimed function of the tag orientation controller then identifying a structure disclosed in the specification capable of performing that function. This approach, however, fails to show how the term “tag orientation controller” itself would be understood as the name for sufficiently definite structure. *See Williamson*, 792 F.3d at 1349 (“The standard is whether *the words of the claim* are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as *the name for structure*.” (emphasis added)).

The court concludes that the term “tag orientation controller” fails to recite sufficiently definite structure and is therefore subject to construction under Section 112(f). Having found that Section 112(f) applies, the court concludes that the claimed function is **to keep the tag with its length extending substantially horizontally and extending lateral to the human user when the tag suspension is in use coupling the tag to the human user**, and the disclosed structure is **a tag container snugly held within a second pouch in the holder**.

3. “tag spacing maintainer”

The parties’ proposed constructions of this term, as used in Claim 16 and 23 of the ’185 patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
<p>No construction is necessary because term is used consistent with plain and ordinary meaning (tag standoff or separator)</p>	<p>This claim element is subject to construction under 35 U.S.C. §112, ¶6</p> <p>The claimed function is to keep the tag spaced in depth away from the human user by a minimum distance to minimize interference with tag reading caused by the human user’s attenuation of signals interacting with the tag.</p> <p>The disclosed structure for performing the claimed function is a rectangular tag container 30 that creates an open space or air cushion between the tag and an opposite wall closer to the human user.</p> <p>Alternatively this claim element means an open space or air gap between the tag and an opposite point on the tag container nearest the human user.</p>

The parties dispute whether this term is subject to and governed by Section 112(f). Plaintiff asserts that the term requires no construction because the term is used consistent with its plain and ordinary meaning and is easily understood by both the jury and a person of ordinary skill in the art. Defendants contend that the term fails to connote specific structure to a person of ordinary skill in the art at the time of the application, and therefore must be construed under Section 112(f). Alternatively, Defendants contend that representations made by the patentee during prosecution of the ’185 Patent warrant construing “tag spacing maintainer” to mean an open space or air gap between the tag and an opposite point on the tag container nearest the human user.

For reasons substantially similar to those applicable to “tag orientation controller,” the court agrees with Defendants. The term “tag spacing maintainer” fails to recite sufficiently definite structure and is therefore subject to construction under Section 112(f). Having found that Section 112(f) applies, the court concludes that the claimed function is **to keep the tag spaced in depth away from the human user by a minimum distance to minimize interference with tag reading caused by the human user’s attenuation of signals interacting with the tag.** Although Defendants’ proposed construction for the disclosed structure is largely accurate, the specification is clear that the tag container need not be rectangular. *See* ’185 Patent, 2:56 (“The tag container 30 can also be many other shapes . . .”). Therefore, the court concludes that the disclosed structure is **a tag container that creates an open space or air cushion between the tag and an opposite wall closer to the human user.**

4. “a minimum distance”

The parties’ proposed constructions of this term, as used in Claim 16 of the ’185 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
distance required between user’s body and tag to minimize absorption of RFID waves and other signals by the user’s body	an open space or air gap of at least 0.5 mm

Plaintiff argues that its construction is supported by the specification and by differentiating the language of Claim 16 from Claims 1, 8 and 11. Plaintiff further argues that the 0.5 mm requirement in Defendants’ construction improperly limits the claim to features disclosed in an embodiment of the invention. Defendants argue that the prosecution history of the ’185 Patent requires that the minimum distance be both open space and at least 0.5 mm in size. The court agrees with Defendants that the minimum distance must be an open space or air

gap. However, the court agrees with Plaintiff that the 0.5 mm requirement improperly limits the claim.

Representations made by the patentee during prosecution of the '185 Patent require that "minimum distance" refer to an open space or air gap. "[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" *Phillips*, 415 F.3d at 1317. During prosecution of the '185 Patent, the patentee distinguished its claims over two prior art references based on the claims' requirement of an open space. For example, the patentee argued that "Anderson does not teach an air cushion . . . that provides an *open* minimum distance between the tag and a user wearing the holder." The patentee later distinguished the invention from other prior art on the same grounds: "the tag required by claim 15 as having an air cushion/open space adjacent thereto is not anticipated by Savage because the corresponding portions of Savage . . . are embedded in solid material without any open space adjacent thereto." Furthermore, the applicant made clear that "[t]he maintenance of an open space adjacent the tag . . . is not a trivial limitation lacking in significance," and went on to criticize tags embedded in solid material: "[w]hen this distance is filled with other structures, rather than provided as an open minimum distance, the effectiveness with which the tag can be read is diminished."

Plaintiff argues that many of these remarks were made in reference to a specific claim other than Claim 16. However, other remarks suggest that the open space requirement applies to the invention as a whole, including Claim 16. In distinguishing the invention from Savage, the applicant stated that "an important aspect of *this invention* is the provision of a protective air cushion defined as an open space within the tag container between the tag and an opposite point

on the tag container” (emphasis added); see *Dig. Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1347 (Fed. Cir. 1998) (holding that global comments made to distinguish the claimed invention from prior art properly inform interpretation of all relevant claims). Later, when describing new Claim 30 (issued Claim 16), the applicant characterized the claim as including “the essential details which allow the tag of this invention to be held . . . with the proper spacing away from a user,” adding that “[t]hese limitations are crafted in a way which is distinct from the prior art of record in this case” The applicant repeatedly distinguished the invention from prior art based on the presence of an open space between the tag and human user. Thus, the applicant’s description of Claim 30 as being crafted to be distinct from the prior art implies that it too includes an open space or air gap.

Plaintiff responds that its construction is directly supported by the specification: “[t]he holder and its protective air cushion also maintain a minimum distance between the user’s body and the tag 34, so as to minimize absorption of RFID waves or other signals by the user’s body.” ’185 Patent, 3:53–56. However, the very language cited by Plaintiff suggests that the “minimum distance” is an open space or air gap since this minimum distance is maintained by “the holder and its protective *air cushion*.”

Plaintiff further argues that its interpretation gives meaning to all the words of the claims, while Defendants’ construction renders the word “open” in Claims 1 and 11 superfluous. Specifically, Plaintiff argues that “should the inventors have wanted or intended to restrict the minimum distance in Claim 16 to ‘an open space or air gap,’” the use of the word “open” in Claims 1 and 11 suggests that they knew how to do so. However, this claim differentiation argument is overcome by the wealth of evidence in the prosecution history supporting the requirement for an open space or air gap. See *Marine Polymer Techs., Inc. v. HemCon, Inc.*, 672

F.3d 1350, 1359 (Fed. Cir. 2012) (“[C]laim differentiation is ‘not a hard and fast rule and will be overcome by a contrary construction dictated by the written description or prosecution history.’” (quoting *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005))).

However, the court rejects the portion of Defendants’ construction that requires the open space or air gap to be “at least 0.5 mm.” In support of this limitation, Defendants cite the applicant’s remark during prosecution that “a lesser open space than .5 mm has an effect in the readability of the tag, such that the criticality of this dimension has been demonstrated.” However, unlike the statements made regarding the open space requirement, this isolated remark was made in reference only to dependent Claims 5–8 (issued Claims 2–5). Additionally, the only reference to this requirement in the patent’s written description is clear that it applies only to one embodiment. ’185 Patent, 3:24–25 (“In one embodiment, this distance is at least 0.5 mm”). Furthermore, Claims 1 and 8, each of which include a “minimum distance” limitation, have dependent claims that expressly recite the 0.5 mm limitation. *Id.* at 4:8–25, 4:47–61. Because a limitation present in a dependent claim is presumed to be absent in the claim from which it depends, *Liebel-Flarsheim*, 358 F.3d at 910, the 0.5 mm requirement cannot be implied by use of the term “minimum distance” alone. Despite the “criticality of this dimension,” it cannot properly be read to limit the “minimum distance” in Claim 16.

Accordingly, the court concludes the construction of “minimum distance” to be: **an open space or air gap.**

5. “attendance area”

The parties’ proposed constructions of this term, as used in Claims 1, 6, and 9 of the ’705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
monitored area	a classroom or other defined location where the attendance of students on a class list is to be taken

Plaintiff asserts that its construction is in accordance with the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art. Defendants argue that the intrinsic evidence suggests that “attendance” is restricted to attendance of students in a class and that “area” be a defined location where certain individuals are expected to attend a class. The court agrees with Plaintiff.

A court may depart from the plain and ordinary meaning of a claim term in only two instances: lexicography and disavowal. *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). There is no evidence that the patentee acted as his own lexicographer to define “attendance area” in a specific way. Therefore, to conclude that the term requires construction beyond its plain and ordinary meaning, the court would need to find that “the specification [or prosecution history] makes clear that the invention does not include a particular feature or is clearly limited to a particular form of the invention.” *Id.* at 1372 (internal citations and quotations omitted).

In support of their construction, Defendants point to the use of the term “class list” in the creating step of Claim 1. Defendants argue that because “attendance” in “attendance area” refers to the attendance of students on a class list, the term should be limited to a classroom or other defined location where attendance of students on a class list is to be taken. However, although

the term “class list” informs the meaning of “a class list of who is expected to be in attendance,” its presence does not inform a proper construction of “attendance area.”

Defendants further allege that limiting the invention to the classroom setting is required by the specification. In support, Defendants’ cite the specification’s description of the “present invention” as including “student-specific identification tags,” ’705 Patent, 2:47–48, and several other classroom references in the specification. However, the specification is equally clear that the invention is not intended to be limited to the classroom setting. *E.g., id.* at 8:5–8 (“[T]he present invention can be used in office buildings, factories, prisons, hospitals, or any other facility where it is important to know the location of individuals, or the time when they entered or exited a particular area.”). Thus, the specification does not clearly support limiting “attendance area” as proposed by Defendants.

The court finds that the evidence does not support a construction of this term in a way other than the plain and ordinary meaning of the words as they would be understood by a lay person, much less one of ordinary skill in the art. The court concludes that **no construction of the claim term is necessary.**

6. “a class list of who is expected to be in attendance”

The parties’ proposed constructions of this term, as used in Claim 1 of the ’705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
list of expected attendees	a list of students that are enrolled to attend a class

Plaintiff asserts that the specification and prosecution history show that the invention is not limited to a classroom setting, and therefore a person of ordinary skill in the art would

understand “class list” to refer to expected attendees. Defendant argues that the plain meaning of the term necessarily refers to students who are enrolled in a class and appear on a class list. Defendants further argue that this construction is consistent with the way “class” and “class list” are used in the specification. Defendants also allege that the prosecution history supports their construction and that Plaintiff’s construction reads the word “class” out of the claim. The court agrees with Defendants.

The plain and ordinary meaning of the disputed claim term, as understood by a person of ordinary skill in the art, is a list of students that are expected to attend a class. Although the word “class” has meanings outside the educational context (*e.g.*, a socioeconomic class), here the term refers to a group of students, as shown by the way the word is used in the specification. *See, e.g.*, ’705 Patent, 4:57–58 (“The chart will show each student in that class”); *id.* at 5:26–27 (“The scanners 20 continue to monitor attendance during the entire class period”); *id.* at fig. 6a (showing that after a “tag number is aligned with student” the software will “compare present list to class list to determine who is absent”); *id.* at 6:27–29 (“This software 50 compares and matches the attendance data acquired from the scanners 20 to classroom records and files.”). Thus, there is no evidence that the word “class” means anything other than a group of students in the context of the ’705 Patent.

Plaintiff responds that because the specification is clear that the invention is not limited to a classroom setting, Defendants’ construction improperly restricts the invention to an embodiment disclosed in the specification. However, statements in the specification cannot overcome an express limitation in the claim itself. *See TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir. 2008) (“[T]he mere fact that there is an alternative embodiment disclosed in the . . . patent that is not encompassed by district court’s

claim construction does not outweigh the language of the claim, especially when the court's construction is supported by the intrinsic evidence.”). Indeed, Plaintiff's proposed construction reads the word “class” out of the claim entirely. “It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.” *Wasica Fin. GmbH v. Continental Auto. Sys., Inc.*, 853 F.3d 1272, 1288 n.10 (Fed. Cir. 2017); *see also Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (“[C]laims are interpreted with an eye toward giving effect to all terms in the claim.”).

Contrary to both parties' assertions, the prosecution history of this claim language does not provide persuasive support for either proposed construction. The relevant portion of Claim 1 was added during prosecution to overcome Section 112 rejections for indefiniteness and lack of adequate disclosure. Upon making this amendment, the applicant explained that the new limitations were supported by figure 6a's depiction of a step in which the software “compare[s] present list to class list to determine who is absent” and the written description's disclosures regarding the provisional attendance report. The prosecution history of this amendment neither “demonstrat[es] how the inventor understood the invention [nor] whether the inventor limited the invention in the course of prosecution” *Phillips*, 415 F.3d at 1317.

The remainder of the prosecution record similarly provides little support for either construction. In appealing an obviousness rejection, the patentee made some statements suggesting that the invention went beyond the classroom environment. For example, in appealing the final rejection of certain claims, the patentee broadly stated that “[t]his invention is directed to the concept of easily providing a system for generating a highly accurate attendance report for a particular attendance area.” However, the patentee also made statements suggesting that the invention was limited to the classroom environment: “The teacher, with this invention, is

only verifying an automatically generated document . . . rather than generating an entire attendance document by formal ‘roll call’” Thus the prosecution history provides no compelling evidence whether the invention in general or this claim term in particular is limited to a classroom setting.

Finally, the court notes that Defendants’ proposed construction improperly replaces the word “expected” with “enrolled.” This alteration inappropriately suggests that an enrollment process is required by the claim. The claim language, specification, and prosecution history provide no support for such a requirement. Accordingly, the court concludes the construction of “class list of who is expected to be in attendance” to be: **a list of students that are expected to attend a class.**

7. “an attendance tracker individual in the attendance area”

The parties’ proposed constructions of this term, as used in Claim 1 of the ’705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because the term is used consistent with the plain and ordinary meaning	a person located in the attendance area who takes attendance of the students enrolled in the class

Plaintiff asserts that the term is used in accordance with the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art. Defendants argue that the specification and prosecution history require that the “attendance tracker individual” be physically located within the attendance area, and that the “class list” limitation discussed above limits the term to students enrolled in the class. The court agrees with Plaintiff.

For the same reasons discussed under construction of “attendance area,” the court finds little reason to construe the term beyond its plain and ordinary meaning. Although the term

“class list” informs construction of “class list of who is expected to be in attendance,” it does not provide instruction for construing this term. The only other element of Defendants’ proposed construction—that the individual be physically in the attendance area—is apparent from the claim language itself. However, both parties agree that the “attendance tracker individual” is a person. Accordingly, the court concludes the construction of “an attendance tracker individual in the attendance area” to be: **person in the attendance area.**

8. “personally visually inspecting the attendance within the attendance area”

The parties’ proposed constructions of this term, as used in Claim 1 of the ’705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because the term is used consistent with the plain and ordinary meaning	the attendance tracker personally visually verifies whether each person on the class list is present or absent from the class without a roll call

Plaintiff asserts that the term is used in accordance with the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art. Defendants argue that the prosecution history requires that the visual inspection verify the presence or absence of each person, that the “class list” limitation restricts the term to students enrolled in the class, and that the prosecution history forecloses a “roll call.” The court agrees with Plaintiff.

Defendants’ proposed construction requires that the visual inspection verifies the presence or absence of each person. However, this limitation finds no support in the specification or prosecution history. Defendants cite portions of the prosecution history describing the importance of the visual inspection in creating the more accurate attendance report produced by the claimed method. Yet these statements hardly require that the attendance tracker

verify the presence or absence of each person. On the contrary, as Plaintiff notes, the specification disparages such an approach. *E.g.*, '705 Patent, 1:10–24 (describing “scanning the classroom to determine which students are present” as a “time-consuming and tedious chore”).

The term “class list” informs construction of “class list of who is expected to be in attendance,” but does not provide instruction for construing this term. The final limitation included in Defendants’ construction—that the visual verification occur “without a roll call”—is consistent with the plain and ordinary meaning of the term. A visual inspection, by nature, does not encompass an oral roll call.

Accordingly, the court concludes that **no construction of the claim term is necessary.**

9. “regardless of whether any expected attendees are absent in the provisional attendance report”

The parties’ proposed constructions of this term, as used in Claim 1 of the '705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because the term is used consistent with the plain and ordinary meaning	the visual inspection is performed at least once when the provisional report does not show anyone absent

Plaintiff asserts that the term is used in accordance with the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art. Defendants argue that its construction follows from the claim language and statements made by the patentee during prosecution. Specifically, Defendants cite the patentee’s statement that the visual inspection is “routine and always performed,” and its distinction over prior art because visual inspection occurs “regardless of any previously identified discrepancies.” Defendants argue that these

statements require that the visual inspection occur at least once when there are no absentees on the provisional report.

However, Defendants concede that “[b]y its terms, this claim language means that the visual inspection occurs when the provisional attendance report indicates that expected attendees are absent, *and also when the report indicates that expected attendees are not absent.*” (emphasis added). Therefore, the plain and ordinary meaning of the term itself requires that “the visual inspection is performed at least once when the provisional report does not show anyone absent.” Accordingly, the court concludes that **no construction of the claim term is necessary.**

10. “differences between the provisional attendance report and results of said inspecting step”

The parties’ proposed constructions of this term, as used in Claim 1 of the ’705 Patent, are listed in the following table:

Plaintiffs’ Proposed Construction	Defendants’ Proposed Construction
No construction is necessary because the term is used consistent with the plain and ordinary meaning	differences between the attendance of students in the class reported on the provisional attendance report and the results of the attendance taken by visual inspection

Plaintiff asserts that the term is used in accordance with the plain and ordinary meaning of the term as understood by a person of ordinary skill in the art. Defendants argue that their construction makes explicit that the “differences” referred to involve a comparison of the provisional attendance report, which is restricted to students in the class due to the “class list” limitation, and the attendance taken by visual inspection.

Other than the “students in the class” requirement, Defendants’ proposed construction is consistent with the plain and ordinary meaning of the term. A person of ordinary skill in the art would understand the “results of said inspecting step” to refer to the results of the preceding

visual inspection without the additional language proposed by Defendants. Furthermore, Defendants' attempt to limit this term to students in a class based on the "class list" language elsewhere in the claim is improper. Accordingly, the court concludes that **no construction of the claim term is necessary.**

11. "more accurate"

The parties' proposed constructions of this term, as used in Claim 1 of the '705 Patent, are listed in the following table:

Plaintiffs' Proposed Construction	Defendants' Proposed Construction
No construction is necessary because the term is used consistent with the plain and ordinary meaning	Indefinite

Plaintiff asserts that the term is used in accordance with its plain and ordinary meaning. Defendants argue that "more accurate" is a term of degree which is not defined in the specification, and thus provides no basis by which a person of ordinary skill in the art would be able to say when one attendance report is "more accurate" than another. Plaintiff responds that, when read in context of the full claim, a person of ordinary skill in the art would understand that "modifying the provisional attendance report to correct for differences" would naturally yield a "more accurate" second attendance report. The court agrees with Plaintiff.

A claim is indefinite if it does not reasonably inform a person of ordinary skill in the art of the claim scope. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1383–84 (Fed. Cir. 2005). "Claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). However, "[t]he

claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art.” *Id.* at 1371.

The court agrees with Plaintiff that a person of ordinary skill in the art would understand that the verification and modifications required by the claimed method produces a result that is “more accurate” than the provisional report. A second attendance report that reflects changes made to correct for differences between the provisional report and the visual inspection more accurately reflects actual attendance than the provisional attendance report. If the second report does not include such corrections, the modifying step simply has not been performed.

The court concludes that the claim term is definite and that **no construction of the claim term is necessary.**

C. Summary Table of Agreed and Disputed Terms

Term	Court’s Construction
“tag” [’185 Patent, Claim 1]	an RFID tag or other electronic device that is subject to interference caused by the human body and is used to indicate physical location
“at a rate of more than one tag per second” [’705 Patent, Claim 3]	faster than one tag per second
“scanning...at multiple different distances” [’705 Patent, Claim 4]	reading tags at different distances from the scanner
“tag container” [’185 Patent, Claims 24, 25]	a container for the tag that is separate from the holder

<p>“tag orientation controller”</p> <p>[’185 Patent, Claim 16]</p>	<p>Subject to § 112(f).</p> <p>Function: to keep the tag with its length extending substantially horizontally and extending lateral to the human user when the tag suspension is in use coupling the tag to the human user</p> <p>Structure: a tag container snugly held within a second pouch in the holder</p>
<p>“tag spacing maintainer”</p> <p>[’185 Patent, Claims 16, 23]</p>	<p>Subject to § 112(f).</p> <p>Function: to keep the tag spaced in depth away from the human user by a minimum distance to minimize interference with tag reading caused by the human user’s attenuation of signals interacting with the tag</p> <p>Structure: a tag container that creates an open space or air cushion between the tag and an opposite wall closer to the human user</p>
<p>“a minimum distance”</p> <p>[’185 Patent, Claim 16]</p>	<p>an open space or air gap</p>
<p>“attendance area”</p> <p>[’705 Patent, Claims 1, 6, 9]</p>	<p>No construction necessary</p>
<p>“a class list of who is expected to be in attendance”</p> <p>[’705 Patent, Claim 1]</p>	<p>a list of students that are expected to attend a class</p>
<p>“an attendance tracker individual in the attendance area”</p> <p>[’705 Patent, Claim 1]</p>	<p>person in the attendance area</p>

<p>“personally visually inspecting the attendance within the attendance area”</p> <p>[’705 Patent, Claim 1]</p>	<p>No construction necessary</p>
<p>“regardless of whether any expected attendees are absent in the provisional attendance report”</p> <p>[’705 Patent, Claim 1]</p>	<p>No construction necessary</p>
<p>“differences between the provisional attendance report and results of said inspecting step”</p> <p>[’705 Patent, Claim 1]</p>	<p>No construction necessary</p>
<p>“more accurate”</p> <p>[’705 Patent, Claim 1]</p>	<p>No construction necessary</p>

IV. Conclusion

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

IT IS FURTHER ORDERED that this case is set for a **Scheduling Conference** on **November 15, 2018, at 2:00 p.m.**, in Courtroom 7, Seventh Floor, United States Courthouse, 501 W. 5th Street, Austin, Texas 78701. If the case is not settled, the parties shall confer in an attempt to reach agreement on a schedule to follow for the remainder of the case. The court will render a scheduling order as a result of the conference.

SIGNED this 28th day of September, 2018.


 LEE YEAKEL
 UNITED STATES DISTRICT JUDGE