

In the United States Court of Federal Claims

No. 15-501C

(Filed: September 25, 2018)

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3RD EYE SURVEILLANCE, LLC and)
DISCOVERY PATENTS, LLC,)
)
Plaintiffs,)
)
v.)
)
UNITED STATES,)
)
Defendant,)
)
and)
)
ELBIT SYSTEMS OF AMERICA, LLC,)
GENERAL DYNAMICS ONE SOURCE)
LLC, NORTHROP GRUMMAN)
SYSTEMS CORPORATION, and)
VIDSYS, INC.,)
)
Defendant-Intervenors.)
*****)

Claims of patent infringement; 28 U.S.C. § 1498(a); patentability; 35 U.S.C. § 101; second step of the *Alice* test; application of *Aatrix*; leave to amend complaint; RCFC 15(a)(2); claim construction

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OPINION AND ORDER

LETTOW, Senior Judge.

Pending before the court in this patent infringement action are three matters linked by the procedural setting of this case. Plaintiffs are the patent holder and the assignee of three patents, Nos. 6,778,085 (the “’085 patent”), 6,798,344 (the “’344 patent”), and 7,323,980 (the “’980 patent”), each relating to security systems with attendant imagery capabilities. Plaintiffs assert that their intellectual property is being infringed by security systems in use in secured locations owned, operated, or managed by or for the United States. *See* Pls.’ First Am. Compl. (“Am. Compl.”) ¶ 9, ECF No. 22.¹ Defendant-intervenors are suppliers of various hardware, software, or information technology (“IT”) services to the federal government who have been given notice to intervene in this matter as a result of indemnity clauses in their respective contracts with the United States. *See, e.g.*, Def.’s Unopposed Mot. For Leave of Ct. to Notice Additional Third Parties at 4 (discussing the justification for issuing notice to defendant-intervenor General Dynamics One Source pursuant to Rule 14(b) of the Rules of the United States Court of Federal Claims (“RCFC”)), ECF No. 79.

The United States sought to have notice issued to a number of government contractors who could potentially be required to indemnify the United States, *see* ECF Nos. 23, 25, 30, 79, 163, & 183, and, upon approval by the court, notice was eventually issued to 14 such entities, *see* ECF Nos. 42-49, 82-85, 165, & 191. Of the various contractors to whom notice issued, ten eventually joined in this action. *See* ECF Nos. 54, 57, 64, 67, 70, 78, 94, 97, 100, & 102. Of this group, a number were thereafter dismissed without prejudice as it became apparent to plaintiffs that various defendant-intervenors were not infringing based on available information. *See* ECF Nos. 132 (motion to dismiss Diebold, Inc., FLIR Detection, Inc., CACI NSS, Inc., and Leidos, Inc.), 147 (motion to dismiss Datawatch Systems, Inc.), & 171 (motion to dismiss Tyco Integrated Security LLC). At present, the remaining defendant-intervenors are, as listed in the caption of the case, Elbit Systems of America, LLC, General Dynamics One Source, LLC, Northrop Grumman Systems Corporation, and Vidsys, Inc.

The matters currently pending for resolution by the court are (1) Defendant-Intervenor Northrop Grumman Systems Corporation’s (“Grumman”) Motion for Judgment on the

¹The three patents constitute a closely related patent family. A provisional application was filed on July 8, 2002 as No. 60/393,942. *See* ’344 Patent at 1, item (60). The application was formally filed October 17, 2002 and issued on September 28, 2004. *See id.* items (22), (45). The ’085 patent is a continuation in part of the ’344 patent, even though the ’085 patent was issued first, on August 17, 2004. *See* ’085 Patent, at 1, items (45), (60), (63). The ’980 patent is a continuation in part of the ’085 patent and was issued on January 29, 2008. *See* ’980 Patent at 1, items (45), (63). Each has a similar title. The ’344 patent is styled “Security Alarm System and Method with Realtime Streaming Video,” ’344 Patent at 1, and the ’085 patent and ’980 patent are both titled “Security System and Method with Realtime Imagery,” ’085 Patent at 1, ’980 Patent at 1.

Pleadings, (“Def.-Intervenors’ Mot.”), ECF No. 194, in which the United States and all defendant-intervenors join, (2) Plaintiffs’ Rule 15(a)(2) Motion for Leave to Amend Complaint, ECF No. 205 (“Pls.’ Mot. to Amend”); *see also* [Plaintiffs’ Proposed] Second Amended Compl. (“[Proposed] Second Am. Compl.”), ECF No. 221, and (3) claim construction for the patents plaintiffs assert are infringed.

These three matters are linked procedurally, and thus properly before the court concurrently, by virtue of recent precedent of the United States Court of Appeals for the Federal Circuit that specifies that the court “cannot adopt a result-oriented approach to end patent litigation at the Rule 12(b)(6) stage that would fail to accept as true the complaint’s factual allegations and construe them in the light most favorable to the plaintiff, as settled law requires,” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1358 (Fed. Cir. 2018) (“*Aatrix II*”) (Moore, J., concurring in denial of rehearing *en banc*), particularly where the operant inquiry is whether patent claims survive the second step of the *Alice* test, *see Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. ___, ___, 134 S.Ct. 2347, 2355 (2014) (In the second step, “we then ask, ‘[w]hat else is there in the claims before us,’” and then “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.”) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 77-79 (2012)). Because courts “should freely give leave [to amend pleadings] when justice so requires,” RCFC 15(a)(2), it is an abuse of discretion to deny leave to amend where the proposed amendments allege facts sufficient to raise an issue of an inventive concept sufficient to survive a Rule 12 motion at a preliminary stage of the proceedings, *see Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126-28 (Fed. Cir. 2018) (“*Aatrix I*”). Thus, the court looks at these issues at the same time.

A technical tutorial on the technology underlying the patents at issue was held on July 2, 2018. A hearing on claim construction was held on July 31, 2018, at which the motion to amend and motion for judgment on the pleadings were also addressed. Expert testimony was received at both the technical tutorial and the hearing. Accordingly, the parties’ motions are ripe for resolution, as are the parties’ contentions regarding the proper construction of the patent claims at issue.

BACKGROUND

Plaintiffs initially filed suit in this court on May 15, 2015, thereafter submitting an amended complaint on January 26, 2016. Plaintiffs allege that “[t]he [g]overnment operates a series of security systems in airports, office buildings, and other locations that the [g]overnment considers . . . require monitoring,” that “[t]he [g]overnment operates security systems at numerous secured locations, including . . . airports, [f]ederal [c]ourts, and other government office buildings,” and that these systems infringe plaintiffs’ patents—the ’085, ’344, and ’980 patents. *See* Am. Compl. ¶¶ 9, 12. These contentions have been the subject of extensive proceedings in the intervening years, culminating in three published opinions by this court addressing various motions made by the parties as the case progressed through preliminary discovery and towards claim construction, also taking into account six separate applications post-

complaint for *inter partes* review filed by the United States with the Patent Trial and Appeal Board (“PTAB”). *See* Joint Prelim. Status Report at 4 & n.2, ECF No. 51.

The first contested matter that required the court’s resolution was the government’s motion for more definite statement, ECF No. 9, filed concurrently with a motion to dismiss for lack of subject matter jurisdiction, ECF No. 8. *See* Def.’s Mot. for a More Definite Statement at 1 n.1 (“The government has concurrently, but separately, filed a motion to dismiss for lack of subject matter jurisdiction.”). In these motions, the United States contended that “[b]ecause the Complaint fails to identify an accused[ly infringing] surveillance system, a more definite statement is necessary to provide minimal fair notice in this case.” *Id.* at 1. In the course of briefing these related motions, “the government . . . concede[d] that plaintiffs have standing to bring the present suit,” and the court accordingly denied the government’s motion to dismiss for lack of subject matter jurisdiction that had been filed on that ground. *See 3rd Eye Surveillance, LLC v. United States*, 124 Fed. Cl. 438, 440-41 (2015). The government’s motion for a more definite statement, however, was granted “because the complaint does not specifically identify the accused system ‘[leaving] the government [] to guess what systems allegedly infringe on the asserted patents.’” *Id.* at 442. The court directed “plaintiffs to amend their complaint to explain why they believe that certain government agencies and third-party contractors to the government have infringed the patents at issue . . . [; specifically,] plaintiffs should submit an amended complaint that provides the government with the publicly available information upon which they relied to bring their claims before the court.” *Id.* at 440. The resulting amended complaint, plaintiffs’ Amended Complaint of January 26, 2016, is currently the operative version while plaintiffs’ motion to amend is pending.

After plaintiffs filed their Amended Complaint, the United States filed a suite of motions to notify various government contractors, who, the government asserted, “pursuant to the patent indemnity clause in each underlying contract . . . may have an interest in the subject matter of this suit.” *E.g.*, Def.’s Opposed Mot. to Notice Third Parties at 3, ECF No. 23 (seeking to notice former defendant-intervenors IndigoVision, Ltd. and Datawatch Systems, Inc.). The court held a hearing on the government’s initial motions on March 24, 2016, and granted them on April 5, 2016. *See 3rd Eye Surveillance, LLC v. United States*, 126 Fed. Cl. 266 (2016). As the court noted, the parties primarily disputed whether “the government ha[d] sufficiently alleged that the third-party entities have an interest in the present action such that notice . . . is necessary or appropriate.” *Id.* at 273. In that respect, the court disagreed with plaintiffs’ assertion that, to sufficiently allege an interest in the present action, the government must satisfy the standard set forth in *Twombly* and *Iqbal*. *Id.* at 273-75 (addressing *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007), and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009)). The court granted the government’s motions to notice eight entities that may have an interest in this case, *id.* at 277, and notice to the first eight entities was issued on April 13, 2016, ECF No. 42-49. Thereafter, the government filed two further motions to notice interested parties, one on July 8, 2016, *see* ECF No. 79, to notice four additional interested parties, which the court granted the same day, *see* Order of July 8, 2016, ECF No. 80, and a second filed August 23, 2017, ECF No. 163, to notify one more additional interested party, which the court also granted on the same day, *see* Order of Aug. 23, 2017, ECF No. 164.

Four entities that received notice, Tactical Micro, Inc., Indigo Vision, Ltd., Security Operations Group International, LLC, and Technical Communities, Inc., did not enter an appearance and did not assert an interest in this case. Of the remaining ten, six were subsequently dismissed without prejudice. *See generally* [First] Order of June 15, 2017, ECF No. 146 (dismissing Diebold, Inc., FLIR Detection, Inc., CACI NSS, Inc., and Leidos, Inc.); [Second] Order of June 15, 2017, ECF No. 148 (dismissing Datawatch Systems, Inc.); Order of Nov. 16, 2017, ECF No. 175 (dismissing Tyco Integrated Security, LLC).

With the parties identified, the case proceeded apace with preliminary discovery and the exchange of tentative infringement and invalidity contentions, until plaintiffs filed a motion to compel the government's responses to certain requests for production of documents. *See* Pls.' Mot. to Compel Gov't to Produc. Docs. & Overrule Obs., ECF No. 126 ("Pls.' Mot. to Compel"). The government resisted producing the documents that plaintiffs sought, arguing that the requests for production were "vague with respect to time," disproportionate to the needs of the case, *id.* at 2-3, and, specifically as to production of allegedly infringing source code, "that source code should only be produced where the requesting party is able to show that it is actually relevant to the infringement theories advanced against a particular instrumentality," *id.* attach 3, at 3. Further, plaintiffs sought source code employed in United States embassies, but asserted no claims in the complaint as to those installations. *Id.* attach 3, at 4. In addition, Grumman specifically declined to produce certain documents "that it [wa]s prohibited from producing due to federal government restrictions." *Id.* at 7. All of these contentions save the first—the time period for which plaintiffs could assert claims to damages for infringement—were addressed in an order issued June 16, 2017. *See* Order of June 16, 2017, 2017 WL 2609233, ECF No. 149.

After the parties' briefing and the resolution of most of the issues raised in plaintiffs' motion, the court, in the third major milestone in this strongly-contested litigation, issued a reported opinion and order resolving the parties' contentions as to the time period for which the United States was required to produce documents potentially relevant to plaintiffs' claims. *See 3rd Eye Surveillance, LLC v. United States*, 133 Fed. Cl. 273 (2017). The court, at a hearing held on June 14, 2017, requested supplemental briefing "regarding whether systems installed prior to February 12, 2013[,] are within the scope of potentially infringing systems, to assess whether the government should be compelled to produce documents regarding such systems." *Id.* at 275 & n.1. Following the completion of briefing, the court concluded that "the assignment of the '085, '344, and '980 patents to Discovery Patents d[id] not fall within a recognized exception to the Assignment of Claims Act, but rather fit[] squarely within the ambit of claim assignments that Congress sought to bar." *Id.* at 277. Accordingly, the court concluded that "any systems first procured or used by the government prior to February 12, 2013[,] are not within the scope of potentially infringing systems in this case . . . unless such systems were modified or upgraded to become infringing after that date." *Id.* at 278.

While the notice and discovery disputes were underway in this court, the United States was advancing petitions for *inter partes* review before the PTAB. *See* Joint Prelim. Status Report at 3-4 & n.2. The United States filed six petitions for *inter partes* review, in which it

sought “a ruling of invalidity for every claim in each of the three patents-in-suit.” *Id.* at 4.² The PTAB declined to institute *inter partes* review proceedings on five of the applications, *see Department of Justice v. Discovery Patents, LLC*, IPR2016-01035, Paper No. 11 (P.T.A.B. Nov. 15, 2016); *Department of Justice v. Discovery Patents, LLC*, IPR2016-01037, Paper No. 11 (P.T.A.B. Nov. 15, 2016); *Department of Justice v. Discovery Patents, LLC*, IPR2016-01038, Paper No. 10 (P.T.A.B. Nov. 15, 2016); *Department of Justice v. Discovery Patents, LLC*, IPR2016-01039, Paper No. 10 (P.T.A.B. Nov. 15, 2016); *Department of Justice v. Discovery Patents, LLC*, IPR2016-01040, Paper No. 10 (P.T.A.B. Nov. 15, 2016), but instituted proceedings on the sixth application, eventually finding claims 11-12, 14, 16-18, and 20-31 of the ’980 patent were “unpatentable over the cited prior art,” *see Department of Justice v. Discovery Patents, LLC*, No. IPR2016-01041, Paper No. 29, 2017 WL 5446312, at *8, 15 (P.T.A.B. Nov. 9, 2017). Plaintiffs did not appeal. *See* Notice of IPR Decision at 2, ECF No. 103.

Also relevant is a claim construction opinion issued by the United States District Court for the Eastern District of Texas construing certain terms in the ’980 patent. *See 3rd Eye Surveillance, LLC v. City of Fort Worth*, No. 6:14-CV-00725, 2016 WL 3951335 (E.D. Tex. June 8, 2016) (claim construction opinion). In that opinion, the district court explicated several terms contained in claims of the ’980 patent, which terms will be addressed in the portion of this opinion that addresses claim construction.³

After the resolution of the notices to interested third parties, the parties’ discovery disputes, and the United States’ petitions for *inter partes* review, the parties submitted a joint claim construction statement, ECF No. 193, and opening briefs and responses regarding claim construction.⁴ In their briefing, the parties advance their preferred definitions of certain relevant,

²The *inter partes* review petitions were: IPR2016-01035 (seeking to invalidate claims 1-16 of the ’344 patent); IPR2016-01037 (seeking to invalidate claims 1-6 and 56 of the ’085 patent), IPR2016-01038 (seeking to invalidate claims 7-37 of the ’085 patent); IPR2016-01039 (seeking to invalidate claims 38-55 of the ’085 patent); IPR 2016-01040 (seeking to invalidate claims 1-10 of the ’980 patent); and IPR2016-01041 (seeking to invalidate claims 11-31 of the ’980 patent). *See* Joint Prelim. Status Report at 4 & n.2. All of the petitions by the United States were filed on May 13, 2016.

³*But see* Defs.’ Resp. Claim Constr. Br. at 1, ECF No. 225 (asserting that the persuasive force of the Eastern District of Texas’s claim construction opinion is diminished because “[t]he Texas court did not consider the ’344 or ’085 patents, did not address 26 of the 35 claim terms disputed in this case, and did not have [d]efendants’ proposed constructions or arguments before it”).

⁴*See* Defs.’ Claim Constr. Br. (“Defs.’ Claim Constr. Br.”) at 5-29 (initially identifying and proffering constructions for 23 terms in 13 general groups delineated A through M), ECF No. 209; Pls.’ Opening Br. Supporting Claim Constr. Br. (“Pls.’ Claim Constr. Br.”) at 7-8 (proposing specific constructions of only four terms, grouped into three categories, and

disputed claim terms found in one or more of the three patents at issue. Concurrently, Defendant-intervenor Grumman, joined by the United States and all other defendant-intervenors, moved for judgment on the pleadings on the grounds that “[t]he asserted claims are directed to [] unpatentable abstract idea[s] and do not contain an[y] inventive concept[s].” Def.-Intervenors’ Mot. at 1. Plaintiffs then moved for leave to file a Second Amended Complaint. *See generally* Pls.’ Mot. to Amend. Each of these motions, in addition to the matter of claim construction, has been fully briefed. Due to the related issues raised by the motions and their proximate relationship to the question of claim construction, the court will address each of these issues in turn, beginning with Grumman’s Motion for Judgment on the Pleadings.

STANDARDS FOR DECISION

A. Patent Infringement under 28 U.S.C. § 1498

The United States, pursuant to 28 U.S.C. § 1498(a), has waived sovereign immunity and vested in this court exclusive jurisdiction to adjudicate patent infringement claims against the federal government “[w]henever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same.” 28 U.S.C. § 1498(a). Section 1498 provides in relevant part that “the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the [g]overnment and with the authorization or consent of the [g]overnment, shall be construed as use or manufacture for the United States.” 28 U.S.C. § 1498(a); *see also Zoltek Corp. v. United States*, 672 F.3d 1309, 1326-27 (Fed. Cir. 2012) (*en banc*) (“28 U.S.C. § 1498(a) creates an independent cause of action for direct infringement by the [g]overnment or its contractors.”).

The government’s unauthorized “use or manufacture” under Subsection 1498(a) is analogous to a taking of property under the Fifth Amendment to the Constitution. *See* U.S. Const. amend. V; *Motorola, Inc. v. United States*, 729 F.2d 765, 768 (Fed. Cir. 1984) (comparing patent infringement to eminent domain). The government “takes” a non-exclusive and compulsory license to a United States patent “as of the instant the invention is first used or manufactured by the [g]overnment.” *Decca Ltd. v. United States*, 640 F.2d 1156, 1166 (Ct. Cl. 1980). And, because the government has only waived sovereign immunity for a compulsory taking of a non-exclusive patent license, the basis for recovery under 28 U.S.C. § 1498 differs from that in patent litigation between private parties under 35 U.S.C. § 271 in the following respects:

[S]ection 1498 is a waiver of sovereign immunity only with respect to a *direct governmental infringement* of a patent. Activities of the [g]overnment which fall short of direct infringement do not give rise to governmental liability

submitting that all remaining claims “should be given their plain and ordinary meaning”), ECF No. 208.

because the [g]overnment has not waived its sovereign immunity with respect to such activities. Hence, the [g]overnment is not liable for its inducing infringement by others, for its conduct contributory to infringement of others, or for what, but for section 1498, would be contributory (rather than direct) infringement of its suppliers. Although these activities have a tortious ring, the [g]overnment has not agreed to assume liability for them.

Decca, 640 F.2d at 1167 (footnotes omitted) (emphasis added).

“The government directly infringes a patent when it uses or manufactures the patented invention without a license.” *FastShip, LLC v. United States*, 131 Fed. Cl. 592 (2017), *aff’d as modified*, 892 F.3d 1298, 1303 (Fed. Cir. 2018) (modifying damages) (citing *Decca*, 640 F.2d at 1167 n.15). In evaluating a patent infringement dispute under Section 1498, the court applies a two-step analysis that parallels the infringement analysis applied to disputes between private parties. See *Lemelson v. United States*, 752 F.2d 1538, 1548-49 (Fed. Cir. 1985); *Casler v. United States*, 15 Cl. Ct. 717, 731 (1988), *aff’d*, 883 F.2d 1026 (Fed. Cir. 1989). The court first construes the claims of the patent, and then compares the construed claims to the characteristics of the accused infringing product or process. See *FastShip*, 892 F.3d at 1308-10; *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1329 (Fed. Cir. 2005).

Claim construction is a question of law to be determined by the court, whereas the comparison between the claims and the accused product or process involves questions of fact. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-90 (1996). In making such a comparison, the plaintiff has the burden of proving that every limitation in a patent claim is also present in the accused infringing product or process, either literally or through the doctrine of equivalents. See *Lemelson*, 752 F.2d at 1551 (“[E]ach element of a claim is material and essential, and . . . in order for a court to find infringement, the plaintiff must show the presence of every element or its substantial equivalent in the accused device.”) (citations omitted); *Prochroma Techs., Inc. v. United States*, 60 Fed. Cl. 614, 617 (2004) (noting that plaintiffs must adduce evidence demonstrating that the government “literally or equivalently” infringed the claim by meeting all of the claim’s limitations) (citations omitted).

This standard is commonly described as the “all elements” rule. See, e.g., *TDM Am., LLC v. United States*, 92 Fed. Cl. 761, 768 (2010), *aff’d*, 471 Fed. Appx. 903 (Fed. Cir. 2012); see also *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997). Ultimately, the plaintiff has the burden of proving direct infringement, literally or under the doctrine of equivalents, by a preponderance of the evidence. *Lemelson*, 752 F.2d at 1547; *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1361 (Fed. Cir. 1983).

B. Available Defenses

Under Section 1498(a), “[i]n the absence of a statutory restriction, any defense available to a private party is equally available to the United States.” *Motorola*, 729 F.2d at 769 (quoting 28 U.S.C. § 1498, Revisor’s Notes) (emphasis added). Thus, the invalidity defenses available to private parties involved in patent disputes under 35 U.S.C. § 282(b) are also available to the government. See, e.g., *Messerschmidt v. United States*, 29 Fed. Cl. 1, 17-40 (1993), (granting the

government’s cross-motion for summary judgment on plaintiff’s patent infringement suit, having found plaintiff’s patent invalid on the basis of anticipation, indefiniteness, and obviousness), *aff’d*, 14 F.3d 613 (Fed. Cir. 1993). Nonetheless, an issued patent is presumed valid, 35 U.S.C. § 282(a), and the government must prove invalidity by clear and convincing evidence, *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 95 (2011). This burden of persuasion remains on the government throughout a pending action. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1534 (Fed. Cir. 1983).

Pursuant to Supreme Court precedent construing 35 U.S.C. § 101, “[l]aws of nature, natural phenomena, and abstract ideas” are subject matters that are ineligible for patent protection. *Alice*, 573 U.S. at ___, 134 S. Ct. at 2354 (quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589-90 (2013)).⁵ The Supreme Court was careful in construing “this exclusionary principle lest it swallow all of patent law . . . [;] an invention is not rendered ineligible for patent simply because it involves an abstract concept.” *Id.* (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70-74 (2012); *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)).

The Supreme Court in *Alice* articulated a two-part test to determine ineligible patent subject matter. *See Alice*, 573 U.S. at ___, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 75-81). Under this two-part *Alice* test, a court must (1) “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” and (2) if so, “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (citing *Mayo*, 566 U.S. at 75-81). The second step has been characterized as “a search for an ‘inventive concept.’” *Id.* (citing *Mayo*, 566 U.S. at 71-74); *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016).

The category of “abstract ideas” as one of the “patent-ineligible concepts” under step one of the *Alice* test “embodies ‘the longstanding rule that [a]n idea of itself is not patentable.’” *See Alice*, 573 U.S. at ___, 134 S. Ct. at 2355 (citing *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (internal quotation omitted) (alteration in original)). The Supreme Court and other courts have held various abstract or conceptual subject matters to be patent ineligible abstract ideas under 35 U.S.C. § 101. *See, e.g., Alice*, 573 U.S. at ___, 134 S. Ct. at 2355-57 (finding as patent ineligible “a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk,” which embodied the abstract idea of intermediated

⁵These three categories of ineligible subject matter are judicially created. *See Hitkansut LLC v. United States*, 115 Fed. Cl. at 719, 723 (2014), *aff’d*, 721 Fed. Appx. 992 (Fed. Cir. 2018). Section 101 states:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101.

settlement); *Benson*, 409 U.S. at 71-72 (finding as patent ineligible an algorithm for converting binary-coded decimal numerals into pure binary form, as it was “in practical effect . . . a patent on the algorithm itself.”); *Parker v. Flook*, 437 U.S. 584, 594-95 (1978) (finding as patent ineligible a mathematical formula for computing “alarm limits” in a catalytic conversion process). Nonetheless, specific improvements in technology, method, or material that make more useful concepts, ideas, or materials are patent eligible. See *Rapid Litigation Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1048-49 (Fed. Cir. 2016) (finding that a “new and useful laboratory technique for preserving [a type of liver cell]” was patent eligible subject matter); *Hitkansut LLC v. United States*, 130 Fed. Cl. 353, 380 (2017) (finding as patent eligible a “new and more efficient method for treating metal parts to change their physical properties”), *aff’d*, 721 Fed. Appx. 992 (Fed. Cir. 2018). At bottom, the point is to “distinguish between patents that claim the ‘buildin[g] block[s]’ of human ingenuity and those that integrate the building blocks into something more.” *Alice*, 573 U.S. at ___, 134 S. Ct. at 2354 (citing *Mayo*, 566 U.S. at 88-89) (internal quotation omitted) (alteration in original).

C. Motion for Judgment on the Pleadings

Rule 12(c) provides that “[a]fter the pleadings are closed – but early enough not to delay trial – a party may move for a judgment on the pleadings.” RCFC 12(c). The burden on the moving party for a motion under Rule 12(c) is high; the motion should only be granted where “it appears to a certainty that the nonmoving party is entitled to no relief under any state of facts which could be proved in support of [its] claim.” *City of Wilmington v. United States*, 136 Fed. Cl. 628, 631 (2018) (citing *Owen v. United States*, 851 F.2d 1404, 1407 (Fed. Cir. 1988)). In making this determination, the court must “assume each well-pled factual allegation to be true and indulge in all reasonable inferences in favor of the nonmovant.” *Id.*; see also *Xianli Zhang v. United States*, 640 F.3d 1358, 1364 (Fed. Cir. 2011) (citing *Cary v. United States*, 552 F.3d 1373, 1376 (Fed. Cir. 2009)) (holding that when reviewing a grant of a motion under RCFC 12(c), the Federal Circuit “presume[s] that the facts alleged by the plaintiffs are true, and [] draw[s] all reasonable inferences in the plaintiffs’ favor.”).

D. Motion for Leave to Amend Plaintiff’s Second Complaint

Under RCFC 15(a)(2), a party may amend its complaint “with [either] the opposing party’s written consent or the court’s leave,” which should be “freely give[n] when justice so requires.”⁶ The court has “liberally construed” this language and should “generally grant leave to amend barring any ‘apparent or declared’ reason not to permit amendment.” *Marchena v. United States*, 128 Fed. Cl. 326, 330 (2016) (citing *A&D Auto Sales, Inc. v. United States*, 748 F.3d 1142, 1158 (Fed. Cir. 2014) (“The Claims Court rules liberally provide for amendments of the complaint after the filing of the defendant’s answer.”)); see also *Stueve Bros. Farms, LLC v. United States*, 107 Fed. Cl. 469, 475 (2012) (rejecting “the approach that pleading is a game of skill in which one

⁶A party may amend their pleadings once as a matter of right within 21 days of service of the pleading or 21 days after service of a responsive pleading or motion under RCFC 12. RCFC 15(a)(1).

misstep by counsel may be decisive to the outcome and accept the principle that the purpose of pleading is to facilitate a proper decision on the merits.”).

The trial court should deny leave to amend only where there is evidence of “delay, bad faith, repeated failure to correct a complaint’s deficiencies, undue prejudice to the opposing party, or if the amendment would be futile.” *Marchena*, 128 Fed. Cl. at 330 (citing *A&D Auto Sales*, 748 F.3d at 1158); *see also Advanced Aerospace Techs., Inc. v. United States*, 130 Fed. Cl. 564, 568 (2017) (“Of course, when a proposed amendment is futile, leave to amend should not be granted.”). An amendment would be futile if “it would not survive a motion to dismiss.” *Marchena*, 128 Fed. Cl. at 330 (citing *Meyer Grp., Ltd. v. United States*, 115 Fed. Cl. 645, 650 (2014)); *see also Kemin Foods, L.C. v. Pigmentos Vegetales Del Centro S.A. de C.V.*, 464 F.3d 1339, 1354-55 (Fed. Cir. 2006). Thus, the “party seeking leave must proffer sufficient facts supporting the amended pleading that the claim could survive a dispositive pretrial motion.” *Marchena*, 128 Fed. Cl. at 330 (internal citation omitted).

The decision to grant or deny leave to amend is “within the discretion of the trial court.” *Mitsui Foods, Inc. v. United States*, 867 F.2d 1401, 1403 (Fed. Cir. 1989). But, in a patent case, it is an abuse of discretion to deny leave to amend at a preliminary stage of the proceedings where the proposed amendments allege facts sufficient to raise an allegation of an inventive concept sufficient to survive a motion under Rule 12. *See Aatrix I*, 882 F.3d at 1126-28.

E. Standards for Claim Construction

“The purpose of claim construction is to ‘determin[e] the meaning and scope of the patent claims asserted to be infringed.’” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996)).

The construction and meaning of claims in a patent are questions of law for the court to address. *Markman*, 517 U.S. at 388-90. The trial court is not required to construe every term in a patent, but it must construe any term for which claim scope is disputed. *See O2 Micro*, 521 F.3d at 1360-61; *see also Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010). The court should first look to the intrinsic evidence of record, as “intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Intrinsic evidence consists of the “patent itself, including the claims, the specification[,] and . . . the prosecution history.” *Id.* (citing *Markman*, 52 F.3d at 979).

“The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Intellectual Ventures I, LLC v. T-Mobile USA, Inc.*, ___ F.3d ___, ___, 2018 WL 4201163 (Fed. Cir. Sept. 4, 2018) (quoting *Thorner v. Sony Comput. Entm’t Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). The temporal focus for the person of ordinary skill in the art is on the date of the invention, which is the “effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). “That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of

the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Id.* Courts have recognized, however, that “a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary and customary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.” *Vitronics*, 90 F.3d at 1582 (citing *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1578 (Fed. Cir. 1996)); *Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1563 (Fed. Cir. 1990), *cert. dismissed pursuant to Sup. Ct. R. 46*, 499 U.S. 955 (1991). Therefore, a court must review the patent’s specification “to determine whether [an] inventor has used any terms in a manner inconsistent with their ordinary meaning.” *Vitronics*, 90 F.3d at 1582. Where relevant, prosecution history should also be examined, with its principal purpose being to exclude interpretations disclaimed during prosecution. *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005); *Vitronics*, 90 F.3d at 1582–83.

Extrinsic evidence, which includes “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises,” *Markman*, 52 F.3d at 980, is “less significant than the intrinsic record” in the construction process, *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). It should be considered by the court only when intrinsic evidence cannot be used to resolve ambiguities in the claim language. *Id.* at 1317-1318.

ANALYSIS

The three patent claims at issue in this case each deal with a system of relaying “realtime video” or “other realtime imagery” of a secured location “over a high-speed communications link.” ’980 Patent Abstract.⁷ A core problem in the past was the inability to provide first responders with realtime information, significantly limiting their pre-operational awareness of the unfolding situation. ’980 Patent Col. 1, lines 31-43. Plaintiffs claim the system embodied in the ’085, ’344, and ’980 patents intelligently and efficiently packages realtime information and provides it to responders, giving them valuable and contemporaneous information about an ongoing incident or event.

Relatedly, plaintiffs, in their First Amended Complaint, allege that defendant United States employed and employs security systems at various secure locations (*e.g.*, airports, office buildings, courthouses, military and law enforcement installations) around the country that infringe on the stated patents. *See* Am. Compl. ¶ 5-12. Defendant-intervenor Grumman, joined by defendant United States and the other defendant-intervenors, counter that the claimed patents fail under both parts of the *Alice* test because they reflect abstract ideas that do not contain any inventive concepts and are therefore patent ineligible. *See* Def.-Intervenors’ Mot. at 1-2. In response, plaintiffs argue their patents describe a patentable system and that the court should deny judgment on the pleadings while concurrently issuing a decision on claim construction and

⁷*See also* ’344 Patent Abstract (providing “realtime video of a secured location to . . . emergency response agencies over a high-speed communications link”); ’085 Patent Abstract (transmitting “realtime video” or “other realtime imaging of a secured location . . . over a high-speed communications link”).

allowing plaintiffs to amend their complaint. *See* Pls.’ Resp. to Def.-Intervenor’s Mot. for J. on the Pleadings (“Pls.’ Resp.”) at 4-6, ECF 207. As would be expected in this strongly contested case, the parties disagree about the construction of the patent claims as well.

The court first addresses defendant-intervenor Grumman’s Motion for Judgment on the Pleadings before turning to plaintiffs’ Motion for Leave to Amend Complaint and then to claim construction for the three patents at issue.

I. Defendant’s Motion for Judgment on the Pleadings Pursuant to Rule 12(c)

Defendant-intervenor Grumman’s Motion for Judgment on the Pleadings is joined by the United States and the other defendant-intervenors. *See generally* Def.-Intervenors’ Mot. In the motion, Grumman argues that the asserted claims of the ’344, ’085, and ’980 patents are “directed to an unpatentable abstract idea and do not contain an inventive concept . . . [and are] therefore invalid under § 101.” *Id.* at 1. In essence, Grumman asserts that the asserted patents fail under the two-part *Alice* test. *Id.* at 1-2; *see also Alice*, 573 U.S. at ____, 134 S. Ct. at 2355 (discussing the two-part test). *Id.*

Respecting part one of the *Alice* test, Grumman argues the asserted claims are “directed to the abstract idea of relaying an eyewitness account and other information in realtime to first responders . . . just as the 911 system has done for decades.” Def.-Intervenors’ Mot. at 16. Grumman contends plaintiffs’ patent claims, when “stripped of the standard hardware components,” do nothing more than “(1) collect[] imagery at a secure location; (2) transmit that imagery to a central station; and (3) re-transmit that imagery and associated information to an identified emergency response agency.” *Id.* In short, Grumman argues that plaintiffs’ claimed patents simply use the Internet to expedite and improve a “process long-employed in the 911 emergency response system.” *Id.*

In stating its position as to part one of *Alice*, Grumman looks to decisions by the Federal Circuit, including *Secured Mail Solutions v. Universal Wilde*, 873 F.3d 905, 907 (Fed. Cir. 2017) (finding the use of “computers” and “networks” to communicate information about a mail object’s contents was directed to the abstract idea of using markings on a mail object to communicate information about that object); *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327 (Fed. Cir. 2017) (finding that a computerized method of “organizing and accessing records through the creation of an index-searchable database includes longstanding conduct that existed well before the advent of computers and the Internet” and was therefore an unpatentable abstract idea); and *Affinity Labs of Texas, LLC v. DIRECTV, LLC* (838 F.3d 1253, 1255-56 (Fed. Cir. 2016) (finding the use of a “network based resource” to stream a regional broadcast to a cellphone outside the regional broadcast’s region was directed to the abstract idea of “providing out-of-region access to regional broadcast content”). Def.-Intervenor’s Mot. at 18-19.

For part two of the *Alice* test, Grumman asserts “[n]one of the remaining elements of the claims, alone or in combination, adds an inventive idea that would render them patent eligible.” Def.-Intervenors’ Mot. at 20. Grumman reiterates that “the Asserted Claims recite only generic computer and other hardware, connected over a standard network such as the Internet.” *Id.* at

20-21. Grumman proffers two figures from the '344 patent that it claims “show[] [that] the purported innovation of the Asserted Patents over the prior art is nothing more than taking the real-time video available to the central station and re-transmitting it to one or more emergency response agencies.” *Id.* at 22. Those figures are simplistic and do not reflect all of the embodiments of the patented systems, but they are nonetheless “illustrative:”

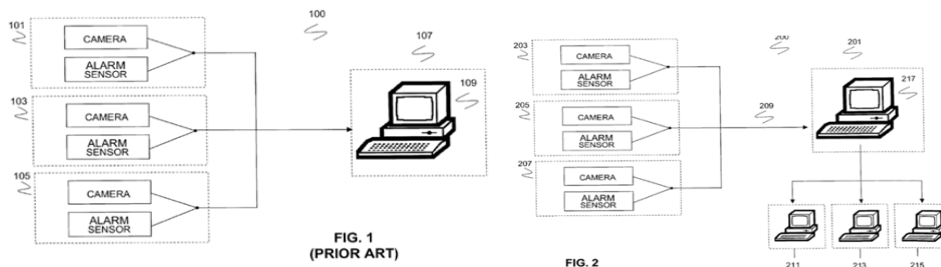


Figure 1

Figure 2

Figure 1 is described in the '344 patent as “a diagram illustrating a conventional security alarm system with video capability,” '344 Patent, Col. 2, lines 54-55, and Figure 2 is said to represent “a diagram . . . in accordance with exemplary embodiments of the present invention,” *id.*, lines 56-58.

In response, plaintiffs rely heavily on *Aatrix*, recently decided by the Federal Circuit. *See generally* Pls.’ Resp. (relying on *Aatrix I*, 882 F.3d at 1126-28). Plaintiffs contend that *Aatrix* “is the most recent case from the Federal Circuit interpreting *Alice* and elucidates a trial court’s obligations when considering a Rule 12 motion challenging patent validity.” Pls.’ Resp. at 5. They argue that under *Aatrix*, “a trial court should allow a patent owner the opportunity to amend its pleadings to allege facts concerning the inventive features of a patent before considering a dispositive motion under *Alice*.” *Id.* They also contend that “the Federal Circuit doubts the propriety of a court considering an *Alice* motion prior to claim[] construction.” *Id.* Thus, the plaintiffs request the court “deny [Grumman’s] motion without prejudice . . . and require that Plaintiffs amend their complaint after the court construes the claims.” *Id.*

The salient question is whether the claims at issue contain inventive concepts, sufficient to indicate that the patent is directed at patentable subject matter, rather than an abstract idea or law of nature. Under the two-part *Alice* test, the court must determine if the plaintiffs’ patent claims go to the “buildin[g] block[s]’ of human ingenuity” or if they “integrate the building blocks into something more.” *Alice*, 573 U.S. at ___, 134 S. Ct. at 2354 (citing *Mayo* 566 U.S. at 88-89) (internal quotation omitted) (alteration in original).

Under part one of the two-part *Alice* test, the court concludes that the patents at issue are directed towards the idea of relaying information, in realtime, from the site of an active emergency or other situation to first responders to provide them with contemporaneous information to assess the unfolding circumstances. Nonetheless, contrary to Grumman’s contentions, the patents are not “analogous to the process long-employed in the 911 emergency response system,” Def.-Intervenors’ Mot. at 17, because the patented system eliminates any need for human intervention in both monitoring information about events at the secured location and

deciding whether, after human evaluation, to route the information to an appropriate responder or responders. In contrast, under the patented system, the receipt, evaluation, and transmission of information is fully integrated and proceeds without delay. In effect, the claims here use computers “as a tool” to improve the efficiency and effectiveness of first responders. *See Core Wireless Licensing S.A.R.L. v. LG Elects., Inc.*, 880 F.3d 1356, 1361-62 (Fed. Cir. 2018). Thus, the court concludes that at step one of the two-part *Alice* test, the patents at issue are directed towards the abstract idea of relaying information from a secured site to first responders, but in an enhanced manner.

If a patent claim is determined to be directed at a patent ineligible subject matter such as an abstract idea under step one, the claim may nonetheless be valid if an “inventive concept” “transform[s] the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at ___, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 75-81). The Federal Circuit’s guidance in *Aatrix I* draws upon this possibility. *See* 882 F.3d at 1126 (“*Alice/Mayo* step two requires that we consider whether the claims contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.”) (citing *Alice*, 573 U.S. at ___, 134 S. Ct. at 2357; *Mayo*, 566 U.S. at 72, 79) (internal quotations omitted); *see also id.* at 1128 (“[T]he second step of the *Alice/Mayo* test is satisfied when the claim limitations ‘involve more than performance of a well-understood, routine, [and] conventional activities previously known in the industry.’”) (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347-48 (Fed. Cir. 2014)) (alteration in original). In *Aatrix I*, the Federal Circuit further concluded that under step two, “patentees who adequately allege their claims contain inventive concepts survive a § 101 eligibility analysis under Rule 12(b)(6).” *Id.* at 1126-27 (citing *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016)). “Whether the claim elements or the claimed combination are well-understood, routine, [or] conventional is a question of fact [T]hat question cannot be answered adversely to the patentee based on the sources properly considered on a motion to dismiss, such as the complaint, the patent, and materials subject to judicial notice.” *Id.* at 1128.

Therefore, under the guidance from the Supreme Court in *Alice* and the Federal Circuit in *Aatrix*, the court believes granting judgment on the pleadings under RCFC 12(c) at the current time would be premature. At this point in the litigation, the court cannot conclude that the claimed patents are not among the category of specific improvements in technology, method, or conventional activities that improves, or makes more useful, concepts, ideas, or activities that are patent eligible. *See CellzDirect, Inc.*, 827 F.3d at 1048-49; *Hitkansut*, 130 Fed. Cl. at 380.

The patents at issue here, with the facts construed most favorably to the non-moving plaintiffs, demonstrate a system designed to improve the efficiency and effectiveness of security systems and first responders over the prior art. *See generally* [Proposed] Second Am. Compl. Each patent is designed to “enhance” security systems through the provision of realtime video and realtime image information. *Id.* ¶¶ 13, 108, 142. Plaintiffs’ [Proposed] Second Amended Complaint, much like the one in *Aatrix*, contains “numerous allegations related to the inventive concepts [of the claimed patent].” 882 F.3d at 1127. The proposed amended complaint describes the issues with the prior art, *e.g.*, delay, human error in relaying information, that decreased the efficiency of first responders and how the claimed patent systems improve this process by integrating data collection and significantly eliminating the risk of human error by

providing first responders with realtime evidence of the unfolding situation. [Proposed] Second Am. Compl. ¶¶ 13-18, 32, 108-114, 142-155. It also presents specific allegations related to the “inventive features” of the patents at issue. *E.g., id.* ¶¶ 32 (“One of the improvements over the prior art claimed in the ’085 Patent is that the system selects and identifies specific agencies from among a list of all possible agencies without the need for human interaction.”), 35 (“Another inventive feature includes the transmission of additional information with the imagery.”), 111 (“This inventive feature and enhancement places realtime video information directly into the hands of those who are called upon . . . to respond to potential emergencies.”), 114 (“The system also claims as an inventive feature a mobile emergency response unit with mobile means for processing and displaying the realtime video over an [i]nternet connection.”), 159 (“[A]s a further example of the implementation of the inventive features unique to the ’980 patent, Claim 2 . . . includes biometric information from an individual located at a secured location, and the computer system . . . is configured to analyze the biometric information.”).

These allegations in the proposed amended complaint are directed towards the improvement of emergency response systems through computer technology and internet communications. *See generally* Proposed Second Am. Compl. When taken as a whole (or as an “ordered combination”), the claims at issue here are akin to the ones in *Aatrix I*, where the “claimed software uses less memory, results in faster processing speed, and reduces the risk of [a condition that slowed down prior art systems] which makes the computer process [] more efficient[.]” 882 F.3d at 1127. Here, the patent claims allegedly improve the efficiency and effectiveness of emergency response systems, *see* Pls.’ Second Reply to Defs.’ Mot. for Judgment on the Pleadings (“Pls.’ Rebuttal”) at 44-48, ECF No. 223, and eliminate or reduce the risk of human error in relaying the pertinent information. *Id.* at 44.

In *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1371 (Fed. Cir. 2018) (“*Berkheimer II*”), the Federal Circuit addressed improvements over the prior art. The Federal Circuit noted that *Mayo* had “considered disclosures in the specification of the patent about the claimed techniques being ‘routinely’ used and ‘well known in the art.’” *Id.* (citing *Mayo*, 566 U.S. at 73-74, 79). In that setting, the Court of Appeals said *Mayo* had held that “any additional steps beyond the law of nature [which] consist of well-understood, routine, conventional activity ready engaged in by the scientific community . . . add nothing significant beyond the sum of their parts taken separately.” *Id.* (quoting *Mayo*, 566 U.S. at 73-74, 79-80) (internal modifications omitted) (further modification added).

The patent claims at issue here are not similarly flawed. Grumman, in the defendant-intervenors’ reply brief, asserts that the court does not need to accept as true the previously recited allegations in the [Proposed] Second Amended Complaint because the “conclusory” allegations in that complaint are contradicted by “matters properly subject to judicial notice or exhibit, such as the claims and the patent specifications.” Def.-Intervenors’ Reply in Support of its Mot. for Judgment on the Pleadings at 2, ECF No. 227 (citing *Berkheimer II*, 890 F.3d at 1372). But Grumman does not point out *which* specific allegations are contradicted by *what* judicial notice or *which* exhibits before the court are controverted.

As the determination of whether the claim elements or claim combinations are “well-understood, routine, [or] conventional is a question of fact,” *Aatrix*, 882 F.3d at 1128, the court,

considering all proper sources available at this stage in the litigation, cannot determine at this time that the claims of the plaintiffs fail this test.⁸ Therefore, the amendment of plaintiffs' complaint would not be futile. The court prudently denies Grumman's motion without prejudice in light of plaintiffs' proffered second amended complaint.

II. Plaintiffs' Motion for Leave to Amend their Complaint

Because of the timing of their motion, plaintiffs need the permission of the court to file a second amended complaint under RCFC 15(a)(2). While this permission should be "freely give[n] when justice so requires," RCFC 15(a)(2), it should be denied when amendment would cause "delay, bad faith, repeated failure to correct a complaint's deficiencies, undue prejudice to the opposing party, or if the amendment would be futile," *Marchena*, 128 Fed. Cl. at 330 (citing *A&D Auto Sales*, 748 F.3d at 1158). This decision is within the discretion of the trial court. *Tamerlane, Ltd. v. United States*, 550 F.3d 1135, 1147 (Fed. Cir. 2008) (internal quotation and citation omitted).

The government and defendant-intervenors do not make any allegations of bad faith against the plaintiffs. Rather, the government and defendant-intervenors argue that the motion should be denied as futile and untimely. They resist application of the Federal Circuit's decision in *Aatrix*, which held that denying leave to amend is in error when "factual allegations[] spelled out in the proposed second amended complaint[,] . . . if accepted as true, establish that the claimed combination contains inventive components." *Aatrix I*, 882 F.3d at 1125. Defendants argue that plaintiffs' [Proposed] Second Amended Complaint lacks sufficient factual allegations to fall under the *Aatrix* umbrella, emphasizing the well-known components of the patented systems. *See* Defs.' Reply to Pls.' Rule 15(a)(2) Mot. for Leave to Amend Compl. ("Defs.' Rebuttal"), at 8, ECF No. 222.

Taken at this stage of the pleadings, where the court is required to accept plaintiffs' factual allegations as true, it cannot be said that the amendment would be futile, as the [Proposed] Second Amended Complaint contains sufficient facts establishing inventive concepts. Here, as discussed in connection with analysis of Grumman's motion for judgment on the pleadings, plaintiffs allege enough facts in their [Proposed] Second Amended Complaint to demonstrate sufficient inventive concepts to survive under step two of the *Alice* test. *See supra*, at 8-9.

Moreover, amendment of the complaint would not prejudice the defendants. Prejudice is typically found where an amendment would result in "unfair surprise, a broadening or fundamental change in the issues litigated, or prompting further discovery or a need for significant new preparation." *RMA Eng'g S.A.R.L. v. United States*, ___ Fed. Cl. ___, ___, No. 14-

⁸The court has in hand the complaint, the patents, the motion to dismiss, and materials subject to judicial notice. *See Aatrix I*, 882 F.3d at 1128 ("Whether the claim elements or claimed combinations are well-understood, routine, conventional is a question of fact [] that cannot be answered . . . based on . . . the complaint, the patent, and materials subject to judicial notice.").

1202, 2018 WL 4140429, at *39 (Aug. 28, 2018) (citing *Cencast Servs., L.P. v. United States*, 729 F.3d 1352, 1363-64 (Fed. Cir. 2013)). None of those concerns are present in this case. Plaintiffs are not bringing in new claims that would unfairly surprise the government and defendant-intervenors. Nor are they broadening their claims to expand the issues litigated. If anything, plaintiffs are narrowing their claims to provide greater specificity. *See generally* [Proposed] Second Am. Compl. Additionally, as this litigation is still in its early stages despite its pendency for three years during which ancillary matters were addressed, there are no fears of hindrance to, or adverse effect on, discovery (as only preliminary work aimed at delineating parties and supporting claim construction has taken place). In sum, the court does not find that the amended complaint will cause the defendants any significant prejudice beyond continuing the litigation they seek to avoid.

Therefore, the court determines the proposed amendments would not be futile and are timely. For good cause shown, plaintiffs' motion for leave to amend the complaint is granted.

III. Claim Construction

The parties have focused on claim construction of the patents at issue. Apart from the parties' divergent contentions on the construction of the terms of the claims, the court has before it an opinion of the District Court for the Eastern District of Texas construing several terms of the '980 patent. *See 3rd Eye Surveillance*, 2016 WL 3951335 (claim construction opinion).

As a preliminary matter, the court construes only terms of claims that the plaintiffs assert are valid and actually infringed. For the '980 patent, plaintiffs are pursuing Claims 1-10, 13, and 15. *See* Pls.' Notice Concerning Withdrawal of Certain Asserted Claims ("Pls.' Notice") at 2, ECF No. 197; Pls.' Resp. at 36. For the '085 patent, plaintiffs are pursuing Claims 3-6, 8-10, 12-14, 17-19, 30, 34, and 36-55. *See* Pls.' Notice at 2. Finally, for the '344 patent, plaintiffs are pursuing Claims 6-10. *Id.*; Pls.' Resp. at 35.⁹

The plaintiffs propose that most of the terms at issue in this case be given their plain and ordinary meaning, excepting the terms that were previously construed by the United States District Court for the Eastern District of Texas in the context of the '980 patent. *See generally* Pls.' Resp. The plaintiffs propose adopting the district court's construction for all similar terms in each of the three patents at issue. *See* Pls.' Claim Constr. Br." at 7-8.

Defendant and defendant-intervenors disagree with many of the plaintiffs' proffered definitions. *See generally* Defs.' Claim Constr. Br. at 5-30. Rather, they advance their own definitions drawn from the specification and prosecution histories of the relevant patents. *Id.*

⁹After a decision by the Patent and Trademark Appeals Board on *inter partes* review, Claims 11-12, 14, 16-18, and 20-31 of the '980 patent were invalidated. *See Department of Justice*, 2017 WL 5446312, at *5, 13, 15. Correlatively, plaintiffs filed a notice with the court withdrawing certain other claims. *See* Pls.' Notice.

A. *Defining the Relevant “Person of Ordinary Skill in the Art”*

When construing patents, federal trial courts are required to “examine patent claim terms and phrases from the perspective of a person of ordinary skill in the art.” *Beacon Adhesives, Inc. v. United States*, 134 Fed. Cl. 26, 33 (2017) (citing *Markman*, 52 F.3d at 986). The Federal Circuit has said “[f]actors that may be considered in determining the ordinary level of skill in the art include: 1) the types of problems encountered in the art; 2) the prior art solutions to those problems; 3) the rapidity with which innovations are made; 4) the sophistication of the technology; and 5) the educational level of active workers in the field.” *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 666-67 (Fed. Cir. 2000). Determining a person of ordinary skill in the art is “a basic factual inquiry.” *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

For this case, the court begins with defendants’ definition, *i.e.*, that a person of ordinary skill in the art would be a person possessing either “an undergraduate degree in electrical engineering or its equivalent with at least three years of professional experience in realtime image/video/audio system design,” or a “master’s degree in electrical engineering or its equivalent and at least two years of professional experience in realtime image/video/audio systems design.” Defs.’ Claim Constr. Br. at 5. The court believes this level of education and knowledge of audio/visual systems design would be helpful due to the sophistication of the technology (*e.g.*, realtime video systems, computer systems involving multiple sensors and automated processes) and the types of problems encountered in the art (*e.g.*, systems analysis and design). *See Ruiz*, 234 F.3d at 666-67; *see also generally* the ’085 Patent; the ’344 Patent; the ’980 Patent. That definition should be expanded, however, to also include a person with “three-to-four years” of professional experience in the field of electronics *and* security systems, as a substitute for a college degree. Pls.’ Claim Constr. Resp. at 14-15. The court includes this additional qualification as it goes to factor 5 of *Ruiz*, the educational level of active workers in the field.¹⁰

B. *The Specific Terms the Parties Request to be Constructed*

Term 1: “**Security system central station**” and “**security system central monitoring station**”:

Plaintiffs’ Proposed Claim Construction	Defendants’ Proposed Claim Construction
The E.D. Tex. construction, <i>viz.</i> : “a central facility that monitors a client’s secured location.” Pls.’ Claim Constr. Br. at 7.	“The facility of security companies that monitors remotely-located secured locations for their clients.” Defs.’ Claim Constr. Br. at 5.

¹⁰As plaintiffs noted, defendants’ preferred definition would “exclude the inventors, who lack that level of education . . . [and] would exclude David Monroe, the inventor of the [most pertinent] prior art.” Pls.’ Claim Constr. Resp. at 14.

Term 1 appears in independent Claims 1 and 3, and dependent Claims 5, 7, and 15 of the '980 patent; dependent Claims 5, 6, 12, 13, 14, 36, and 37, independent Claim 38, and dependent Claims 38, 42, 54, and 55 of the '085 patent; and independent Claim 6 and dependent Claim 10 for the '344 patent. The plaintiffs' proposed construction of Term 1 adopts that of the Eastern District of Texas. Defendants' proposed definition is based on statements in the specification and the plaintiffs' statements during patent prosecution. Defs.' Claim Constr. Br. at 5-8. They argue the plaintiffs' proposed definition omits "securities companies," and also refers to "secured location" in the singular tense. *Id.* at 7.

Defendants point to statements made by the patentees during presentation of the '344 Patent, the '085 Patent, and the '980 Patent. *See* Defs.' Claim Constr. Br. at 5-6. The patentees had stated that "security system central monitoring station" and "security system central station" had definitions that were "well recognized."

It should be noted that the term "central station" is well-recognized in the security field as a facility associated with most security companies that monitor secured locations for a company's clients. The facility is typically staffed by trained security professionals who operate/monitor the computer and communications equipment at the facilities.

'085 File History, Nov. 5, 2003 Resp. to the Office Action mailed on Sept. 26, 2003 at A100; *see also* '980 File History, Apr. 11, 2007 Resp. to Office Action dated Jan. 11, 2007 at A148; '344 File History Nov. 5, 2003 Resp. to Office Action dated Sept. 29, 2003 at A129. These statements, however, do not themselves purport to define the terms; rather, they indicate that persons of ordinary skill in the art would know what was meant by them, without any elaboration. There is no basis in the statements to restrict the terms to facilities of "security companies," as defendants would wish. *See* Defs.' Claim Const. Br. at 7. Defendants concede that the specifications relate that "a central monitoring station" may be "associated with a 'private security service' or a 'government agency.'" *Id.* (quoting '980 Patent, col. 4, lines 3-5). They argue, however, that the reference in the specifications to "government agency" should be ignored in light of the prosecution history. *Id.* Such a contravention of the specifications has no basis in the quoted statements from the prosecution history. Defendants' purpose seems to be to draw close parallels to conventional security systems, to the point where the patented systems have nothing inventive to offer. That effort fails. The statements in the specifications regarding "security companies" were presented in context of improvements over what had been the prior art. Any reference to security companies is irrelevant for the patented systems or regarding any governmental facilities using the patented systems.

The court therefore largely adopts the definition supplied by the Eastern District of Texas for term 1: "security system central station" and "security system central monitoring station" mean a **central facility that monitors a secured location**.

Term 2: "**Realtime imagery**" and its associated variants, "**real-time imagery**," "**realtime video**," and "**real-time imagery data**":

Plaintiff's Proposed Claim Construction	Defendants' Proposed Claim Construction
The E.D. Tex. definition, <i>viz.</i> , “Realtime imagery, defined as “Imagery—as seen (1) by a sensor (<i>e.g.</i> , IR or PMMW), (2) as video, and/or (3) as still images—made available for viewing without intentional delay.” Pls.’ Claim Constr. Br. at 7-8.	“Imagery [or video, where appropriate] relating to the actual time that an event occurs such that the imagery [or video] can be used by trained personnel, including security personnel, to control, monitor, or respond in a timely manner to the event’s occurrence.” Defs.’ Claim Constr. Br. at 17 (brackets modified).

Term 2 appears in independent Claim 1 and dependent Claim 2 of the ‘980 patent; dependent Claims 12, 13, and 14, independent Claim 38, and dependent Claims 39 and 40 of the ‘085 patent; it does not appear in the ‘344 patent.

The parties have primarily contested the meaning of “realtime,” with plaintiffs referring to the approach taken by the Eastern District of Texas, *i.e.*, “made available for viewing without intentional delay,” Pls.’ Claim Constr. Br. at 7-8, while defendants have urged reference to “the actual time that an event occurs,” Defs.’ Claim Constr. Br. at 17. No disagreement arises respecting “imagery” or “video,” with the parties simply accepting that the word means a pictorial or representational reproduction.¹¹ At the *Markman* hearing, the parties seemingly concurred that the only delays involved in the transmission of images or videos patented systems were those necessarily incurred because of the laws of physics, *i.e.*, the time required for light or electrons to travel over the transmission means, and the capability of the technology employed respecting transmission. Hr’g Tr. 66:9 to 68:18, 91:3 to 99:20 (July 31, 2018).¹² That time might be measured in tenths of a second if satellite communication was involved or nanoseconds if other transmission means were used. Hr’g Tr. 68:3-18.¹³

¹¹The representation could be generated by infrared (“IR”) sensors or passive millimeter-wave (“PMMW”) sensors. *See* ‘980 Patent, col. 9, lines 8-10 (“Alternative imagery devices may include, for example, infrared (IR) sensors or passive millimeter-wave (PMMW) sensors to name just a few.”).

¹²The date will be omitted from further citations of the transcript of the *Markman* hearing held on July 31, 2018.

¹³As Dr. Clifford Reader, who testified as an expert on behalf of the government, testified:

[I]magine that you’re going to be doing a video phone call with somebody. Well, then it turns out that the response time of . . . humans in a conversational environment means that if there’s a delay of more than 200 milliseconds in each direction of the call, then we don’t have a natural-flowing conversation . . . because that delay is enough to make us wonder if the other person has stopped talking or not. So then, we interrupt each other and it doesn’t work.

Defendants’ inclusion in the definition of limitations regarding the purpose for use of the “realtime imagery” is extraneous to the meaning of the term itself.

Consequently, the court modifies the construction adopted by the Eastern District of Texas to provide that “realtime imagery,” “real-time imagery,” “realtime video,” and “realtime imagery data” mean **video or other pictorial or representational images derived from cameras or sensors made available for viewing as the actual events occur, subject to the laws of physics and the capability of the technology employed respecting transmission.**

Term 3: “**Emergency response agency,**” **emergency response agencies,**” “**response agency,**” and “**response agencies**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
The E.D. Tex. definition, <i>viz.</i> , “A federal, state, or local organization capable of responding to an emergency and/or a perceived emergency.” Pls.’ Claim Constr. Br. at 8.	“A federal state, or local organization, distinct from the security system central [monitoring] station, capable of responding to an emergency and/or a perceived emergency.” Defs.’ Claim Constr. Br. at 8.

Term 3 appears in independent Claim 1 and dependent Claim 13 of the ’980 patent; independent Claim 1, dependent Claim 13, independent Claim 38, and dependent Claims 42, 44-46, 49, 51, 53, and 55 of the ’085 patent; and independent Claim 6, and dependent Claims 9 and 10 of the ’344 patent.

As with terms one and two, the plaintiffs proffer a definition supplied by the Eastern District of Texas. Defendants counter with a definition that “seeks clarification that the claimed ‘emergency response agency’ and claimed ‘security system central [monitoring] station’ are distinct entities.” Defs.’ Claim Constr. Br. at 9. Defendants cite the plaintiffs’ statements during patent prosecution, the plain language of the claims, and the patent specification. *Id.* at 9-11.

The defendants’ definition is cumbersome and introduces unnecessary surplus language. If a central monitoring station could also respond to an emergency or a perceived emergency, there would be no need for the patents claimed by the plaintiffs. Moreover, by adding “distinct entities” defendants would eliminate the possibility that the organization operating the central monitoring station might also be one that has an emergency response unit. Nothing in the patented claims requires that separation. When construing claims, although the Federal Circuit has held “no canon of construction is absolute in its application,” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998), it has also repeatedly struck down

So we actually have versions of the standards called a low-delay mode in which we don’t use the same technology we use for broadcast TV.

Hr’g Tr. 68:5-16.

claim constructions that render words as surplusage, *see, e.g., Nautilus Grp., Inc. v. Icon Health & Fitness, Inc.*, 82 Fed. Appx. 691, 694 (Fed. Cir. 2003) (finding error in the district court’s claim construction that rendered certain terms as “surplusage.”); *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1578 (Fed. Cir. 1996) (avoiding a claim construction that would render language as surplusage); *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (same).

For the reasons above, the court adopts the definition supplied by the Eastern District of Texas and advocated by the plaintiffs for term 3: “Emergency response agency,” emergency response agencies,” “response agency,” and “response agencies” mean **a federal, state, or local organization capable of responding to an emergency or perceived emergency.**

Term 4: “**Mobile emergency response unit,**” “**mobile response unit,**” and “**emergency response unit**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“A unit of an emergency response agency that communicates with its corresponding emergency response agency, at least in part, via a wireless connection.” Defs.’ Claim Constr. Br. at 14.

Term 4 does not appear in the ’980 patent or the ’344 patent. It does appear in dependent Claim 44 of the ’085 patent.¹⁴

The plaintiffs argue that term 4 should be constructed according to its plain and ordinary meaning. The defendants proffer a more lengthy construction, drawn from the patent specifications. Defendants cite particularly the ’085 Patent, col. 5, lines 8-12, which states: “As these emergency response units are mobile, the high-speed communication link between a corresponding emergency response agency, for example, . . . and emergency response unit . . . is achieved, at least in part by a wireless connection.” Defs.’ Claim Constr. Br. at 14-15. Defendants also note that the specifications refer to mobile response units by characteristic, *e.g.*, “one or more police officers in a police vehicle,” “fire fighting personnel in a fire truck,” and “emergency medical technicians in an ambulance.” *Id.* at 14 (quoting ’085 Patent, col. 5, lines 1-8).

Defendants are correct that wireless communications would have to be employed, as cited in the specifications. The trouble with defendants’ preferred definition, however, is that it

¹⁴Claim 44 of the ’085 patent refers to “mobile response unit.” The other associated terms appear in claims of the ’085 patent and ’344 patent that are not at issue in this case, *viz.*, Claim 24 of the ’085 patent and Claim 3 of the ’344 patent refer to “mobile emergency response unit,” and Claim 11 of the ’344 patent refers to “emergency response unit.”

ignores the “mobile” aspect of the emergency response unit and emphasizes the means of communications. “Mobile” in this context appears to refer simply to the ability to move, which has a plain meaning. *See Mobile, Oxford English Dictionary*, online (“mobile, adj. . . . capable or characterized by movement . . .”).

This plain meaning seems preferred to defendants’ focus solely on the means of communication, which is important to the patent system but detracts from the salient fact that the informed responders can move to the secured location while receiving the realtime video and information. When construing claim terms of patents, “a court should generally look to the ordinary and customary meanings attributed to them by those of ordinary skill in the art at the date of the invention, which is the effective filing date of the patent application.” *FastShip, LLC*, 114 Fed. Cl. at 504 (citing *Phillips*, 415 F.3d at 1313); *see also Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014); *Thorner*, 669 F.3d at 1365. “There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim either in the specification or during prosecution.” *Thorner*, 669 F.3d at 1365 (citing *Vitronics*, 90 F.3d at 1580). Neither exception applies here. Therefore, the court applies plain meaning.

Term 5: “**Secured location**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Any location, outside or inside, which is protected by a security alarm system.” Defs.’ Claim Constr. Br. at 16.

Term 5 appears in independent Claim 1 and dependent Claims 2, 3, 8-10, and 13 of the ’980 patent; dependent Claims 12, 17, 18-19, 30, and 34, independent Claim 38, and dependent Claims 41, 46, 47-48, and 50-53 of the ’085 patent; and independent Claim 6 and independent Claim 7 of the ’344 patent.

Although the term appears in a number of the claims, the context for each is essentially the same: the location monitored by the system. *See e.g.*, ’980 Patent, col. 12, lines 37-38 (“a security system comprising: an imagery device positioned at a secure location”); ’085 Patent, col. 12, lines 46-47, (“[t]he security system of claim 7 further comprising: an alarm sensor position at the secured location”); ’344 Patent, col. 8, line 64, (“generating a realtime video signal at a secured location”).

The plaintiffs argue this term should be construed according to its plain and ordinary meaning, as “a [person of ordinary skill in the art] would understand the meaning of this term as basic terminology used in this field.” Pls.’ Resp. at 18. The defendants counter that the term should be construed according to the definition provided in the patent itself, *i.e.*, “secured location may refer to residences, commercial properties, . . . and any other location, outside or inside, which is *protected by* a security alarm system.” Defs.’ Claim Constr. Br. at 16; (citing ’980 Patent, col. 3, lines 20-26) (emphasis added). Defendants invoke *Innova/Pure Water, Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1116-17 (Fed. Cir. 2004), to buttress their

argument that “when a patentee acts as his or her own lexicographer, the meaning assigned by the patentee controls.” Defs.’ Claim Constr. Br. at 16.

Defendants’ construction would add unnecessary words to the claims. There is nothing in the patent that mandates or requires an “alarm” as part of the “security system at a secured location.” Also, defendants’ quotation from the ’980 patent is curtailed; the unabridged text of the ’980 Patent refers to “a security alarm system, *or, more generally*, a security system” ’980 Patent, col. 3, lines 24-25 (emphasis added). That there *may* be an alarm is irrelevant. For some “secured locations” an alarm might be deemed counterproductive or harmful to maintaining security.¹⁵ As a general matter, the Federal Circuit “indulge[s] a ‘heavy presumption’ that a claim term carries its ordinary and customary meaning.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002); *see also Phillips*, 415 F.3d at 1313. Indeed, the Federal Circuit has held courts should construe claims terms according to their “ordinary and accustomed meanings unless the patentee demonstrated an intent to deviate from the ordinary and accustomed meaning of a claim term by redefining the term . . . in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a *clear disavowal* of claim scope.” *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002) (“[A]n accused infringer cannot overcome the ‘heavy presumption’ that a claim term takes on its ordinary meaning simply by pointing to the preferred embodiment or other structures or steps disclosed in the specification or prosecution history.”) (citing *CSS Fitness*, 288 F.3d 1366) (emphasis added).

Moreover, the quoted portion of the specification in the ’980 patent is preceded by the phrase, “[t]o facilitate an understanding,” and includes the caveat that “the term ‘secured location’ *may* refer.” ’980 Patent, col. 3, lines 18-20 (emphasis added). These permissive indicia of preferred embodiments are not sufficient to carry the day over the “heavy presumption” of plain and ordinary meaning. Finally, the term “protected” in the defendants’ preferred definition encompasses too much. The “secured locations” could be *monitored* by the pertinent system, but they are *protected* by the persons or agency responding to the emergency or unfolding situation.

Therefore the court, for the forgoing reasons, concludes no construction of term 5 is necessary and the plain meaning of the term is preferred.

Term 6: “**Realtime audio signal**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Audio relating to the actual time that an event occur such that the audio can be used to

¹⁵For example, an audible or visual alarm might warn a trespasser, causing the person to leave precipitously, when that action would be detrimental to the purpose of the surveillance.

	engage in two-way communication.” Defs.’ Claim Constr. Br. at 19.
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Term 6 does not appear in the ’980 patent nor in the ’344 patent. It appears in dependent Claims 51-53 of the ’085 patent.¹⁶

The plaintiffs argue the court does not need to construe term 6, as “[a] [person of ordinary skill in the art] would understand the meaning of this term as basic terminology used in this field” and urges the court to adopt “its plain and ordinary meaning.” Pls.’ Resp. at 24. Defendants, on the other hand, contend that there is a “fundamental dispute over the scope of the term ‘realtime audio’ that needs to be resolved.” Defs.’ Claim Constr. Br. at 19. Under their definition, “realtime audio signal” includes both a contemporaneity requirement (“audio relating to the actual time that an event occurs”) and a duality requirement (“two-way communication”). *Id.* at 19-20.

The defendants’ construction of “realtime audio” is unnecessary. First, there is no generic requirement in the ’085 patent for the “realtime audio signal” to mean “two-way communication.” The “realtime audio signal” claims would contemplate a one-way system that relays sound to the emergency response agency.¹⁷ Second, the addition of “the actual time that an even occur[s]” to the definition is unnecessary. A person of ordinary skill in the art, indeed even a lay person, could deduce from the term “realtime” that the audio would be “relating to the actual time that an event occur[s].” And, the claims and specification do not indicate that the patentee desired a specialized meaning for this term. *FastShip*, 114 Fed. Cl. at 507. The court here does not need to resort to anything “more complicated than the common meaning of the

¹⁶The term appears in other claims of the ’085 patent that are not at issue in this case.

¹⁷Claim 51 of the ’085 patent is a dependent claim to independent Claim 38 of the ’085 patent that addresses providing “realtime imaging” to an emergency response agency. Claim 51 adds receipt of a “realtime audio signal:”

51. The method of claim 38 further comprising the step if: at the emergency response agency, receiving a first realtime audio signal generated by a sound detection device located at the secured location and responding sound as a function of the first realtime audio signal.

’085 Patent, Claim 51. Claims 52 and 53 are in turn dependent upon Claim 51 and address the possibility of reproducing a “second realtime audio signal” that could be received at the secured location, Claim 52, and then reproducing the voice signals “at the secured location and the emergency response agency . . . based on the first and second realtime audio signals,” Claim 53. Defendants’ definition of Term 6 makes sense only for dependent Claim 53 and would constrain Claims 51 and 52.

words when their meaning is evident and not contradicted by the claims or specification.” *Id.* (citing *Phillips*, 415 F.3d at 1314).

Thus, for the foregoing reasons, the court finds no need to construe the term “realtime audio signal,” and holds the term should be construed in accordance with its plain and ordinary meaning: **an audio signal transmitted contemporaneously within the limits of the laws of physics and the capability of the transmission technology employed.**

Term 7: “**A private security service**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning. Pls.’ Resp. at 25.	“A non-government entity responsible for providing security services.” Defs.’ Claim Constr. Br. at 20.

Term 7 does not appear in the ’980 patent nor in the ’344 patent. It does appear in dependent Claims 5, 36, and 54 at the ’085 patent. In context, the claim reads, “the security system of claim 1, wherein the security system central station is associated with a private security service.” ’085 Patent, col. 12, lines 15-17 & col. 14, lines 39-41.

The plaintiffs seek adoption of the plain and ordinary meaning of term 7. Pls.’ Resp. at 25. Defendants seek to construe the claim to mean “a non-government entity responsible for providing security services,” Defs.’ Claim Constr. Br. at 20, based on the juxtaposition with claim 6 of the ’085 patent, which also depends on Claim 1 and “specifies that ‘the security system central station is associated with a *government agency*,” *id.* (citing ’085 Patent at Claim 6) (emphasis in original).

There appears to be little disagreement among the parties regarding construction of term 7. In defendants’ brief, they state the “specification indicates that a ‘private security service’ is not ‘a government agency,’ and *vice versa*.” *Id.* at 21. And that, “[b]ased on the claims and the specifications, it is clear that one of ordinary skill in the art would understand ‘a private security service’ to mean a ‘non-government entity responsible for providing security services.’” *Id.* Plaintiffs argue a similar point, *i.e.*, “a [person of ordinary skill in the art] would understand the meaning of this term as basic terminology used in this field.” Pls.’ Resp. at 25.

The court agrees with the defendants regarding the construction of term 7. The court struggles to think of a different definition of “private security service” than the one provided by defendants, or any context where “private” could mean “government.” The term “private” in this context by itself connotes “non-government.” Black’s Law Dictionary defines “*private*” as “[r]elating or belonging to an individual, as opposed to the public or the government.” *Private*, Black’s Law Dictionary 1389 (10th ed. 2014).

Therefore, for the forgoing reasons, the court construes the term “private security service” as: **A non-government entity responsible for providing security services.**

Term 8: “**That which is maintained at the secured location**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Items or things present at the secured location.” Defs.’ Claim Constr. Br. at 21.

Term 8 does not appear in the ’980 patent nor in the ’344 patent. It does appear in dependent Claim 19 of the ’085 patent. In context, the claim states “wherein the data related to the secured location identifies that which is maintained at the secured location.” ’085 Patent, col. 13, lines 11-13.

The plaintiffs urge the court to adopt the plain and ordinary meaning of term 8. Pls.’ Resp. at 25. Defendants counter with a narrower definition that constructs term 8 as “items or things present at the secured location.” Defs.’ Claim Constr. Br. at 21. The defendants base their construction on a portion of the patent specification, which states that “the additional information may specify items or things maintained at the secured location Having this information might provide an indication as to what an intruder is seeking at the secured location.” *Id.* (citing ’085 Patent, col. 10, lines 30-34) (emphasis removed).

The defendants’ interpretation limits what is maintained at the secure location to items or things. The portion of the specification they emphasize is explicitly identified in the patent as an “[a]lternative[.]” ’085 Patent, col. 10, line 30. The specification provides as an example “hazardous materials” that might be maintained at the secured location. *Id.*, line 32. But, it also refers to “escape routes,” *id.* lines 28-29, “the best way into and out of a building,” *id.* line 30, and “data about a particular person or persons,” *id.* at line 41. Based on an alternative exemplar, a limitation to “items or things” does not represent a limitation applicable to the full scope of Claim 19. The defendants’ preferred definition arguably could exclude persons, animals, sound, light, heat, electronic (including infrared) waves, unoccupied or open spaces, or any other intangible that might not fall within the definition of “items or things.” The court cannot impute this limitation to the claim. *See Kara Tech, Inc. v. Stamps.com, Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2008) (“the patentee is entitled to the full scope of his claims, and we will not . . . import a limitation from the specification into the claims.”). The addition of the word “may” in the patent specification also indicates the plaintiffs did not intend to limit their patent claim to “items or things.” Rather, the permissive may indicates that the “additional information [provided by the sensors]” *could* include information about things if it was relevant (*e.g.*, about hazardous materials or emissions). Additionally, although “specification is important in discerning the meaning of the claims, federal trial judges must not ‘import’ or graft limitations from the specification into the claim.” *Advanced Aerospace Techs., Inc. v. United States*, 122 Fed. Cl. 445, 457 (2015) (citing *American Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324, 1331 (Fed. Cir. 2011)).

Therefore, for the foregoing reasons, the court agrees with the plaintiffs that term 8 “that which is maintained at a secure location” should be construed by its plain and ordinary meaning and no construction is necessary.

Term 9: “**Biometric information**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Imagery data of a biological feature of a person having a high enough resolution that the imagery data can be analyzed to provide identifying information.” Defs.’ Claim Constr. Br. at 22.

Term 9 appears in dependent Claims 2, 3, 13 of the ‘980 patent; dependent Claims 47 and 49 of the ‘085 patent; and does not appear in the ‘344 patent. The term, in context, reads “[t]he method of Claim 38 further comprising steps of: capturing biometric information from an individual located at the secured location; and analyzing the biometric information,” ‘085 Patent, col. 15, lines 24-28, and “[t]he method of claim 48 further comprising the steps of: generating an alarm signal based on the analysis of the biometric information,” *id.*, col. 15, lines 37-40.

Plaintiffs contend the court is “not required to define this term,” as a “[person of ordinary skill in the art] would understand the meaning of this basic terminology used in this field.” Pls.’ Resp. at 25. Defendants, on the other hand, request the court to provide a specialized definition that makes it known that “biometric information” is “not merely ‘imagery data,’ but a specialized kind of imagery data that can be analyzed to provide identifying information.” Defs.’ Claim Constr. Br. at 22. They note how the claims within the ‘085 patent and ‘980 patent “make clear that capturing biometric information requires something more than just capturing ordinary imagery data.” *Id.* at 22-23. They finally point to the specification for the ‘980 patent, which states, “[c]ertain imagery sensors that have the capability to provide very high resolution images may be employed to provide facial, thumb, eye or other biometric scans.” *Id.* at 23.

The court cannot accept the defendants’ proffered definition, as it adds unnecessary and complicating language to the term. Webster’s New College Dictionary defines information as: “[t]he act of informing or state of being informed. 2. *Knowledge* derived from study, experience, or instruction. 3. Knowledge of a particular event or situation.” *Information*, Webster’s II New College Dictionary (3rd ed. 2001) (emphasis added).¹⁸ If the imagery information did not provide data of “a high enough resolution that . . . can be analyzed to provide identifying information” it would not serve as biometric information. And this is true for *any* type of information. Defendants’ proffered definition is redundant and would be the equivalent of saying written information needs to be legible.

¹⁸Other dictionaries provide similar definitions. *See, e.g., Information*, Merriam-Webster’s Collegiate Dictionary (10th ed. 1998) (“1: the communication or reception or knowledge or intelligence.”); *Information*, Dictionary.com, <https://www.dictionary.com/browse/information> (last accessed Sept. 12, 2018).

Defendants’ proffered definition also seems unnecessary, as their principal concern with the term “biometric information,” appears to be that it is not *regular* imagery data. But this is apparently why the patentee used the different term “biometric information” instead of repeating “imagery data” or some variant. Consequently, it is not evident how defendants’ proffered construction is necessary.

In addition, the use of “biological feature” is similarly redundant and unnecessary. “Biological” is unnecessary, as “biometric” contains the prefix “bio,” a common indicator of “life, living organisms or tissues.” *Bi- or bio-*, Merriam-Webster’s Collegiate Dictionary (10th ed. 1998). “Feature” is similarly implied biological or biometric; *non*-feature is not intelligible in context.

Finally, nothing about the claims or specifications indicates the patentee intended any other meaning beyond the plain and ordinary meaning. And *Thorner* emphasizes that the court start with an interpretation of a term by its plain and ordinary meaning. 669 F.3d at 1368; *see also CCS Fitness, Inc.*, 288 F.3d at 1366. Thus, the court concludes that a person of ordinary skill in the art would ascertain the meaning of “biometric information,” and no persuasive reason has been advanced to deviate from this guiding principle. For the foregoing reasons, there is no need for the court to construe this claim beyond its ordinary and plain meaning. *See U.S. Surgical Corp.*, 103 F.3d at 1568; *Fastship*, 114 Fed. Cl. at 507.

Term 10: “**Alarm sensor**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“A non-camera sensor that generates an alarm signal in response to a forced/unauthorized entry, smoke/fire, a medical emergency, or manual alarm activation.” Defs.’ Claim Constr. Br. at 24.

Term 10 does not appear in the ’980 patent; appears in dependent Claim 12 of the ’085 patent; and does not appear in the ’344 patent. In context, the claim states, “[t]he security system of Claim 7 further comprising: an alarm sensor positioned at the secured location,” ’085 Patent, col. 12, lines 46-47.

Plaintiffs argue the court should not be required to define this claim and contend that “[a] [person of ordinary skill in the art] would understand the meaning of this term as basic terminology used in the field.” Pls.’ Resp. at 26. Defendants counter that the term “alarm sensor” must “reflect two important features: (1) it is not a camera, and (2) it generates an alarm signal in response to certain conditions explicitly identified in the specification.” Defs.’ Claim

Constr. Br. at 24. The defendants further assert the claims themselves distinguish between “video cameras” and “alarm sensors.” *Id.* (citing the ’344 Patent at Claim 3).¹⁹

The court generally agrees with defendants that an alarm sensor might well be distinguished from a video camera. It need not be, however. Dependent Claims 2 and 3 of the ’980 patent, which are issue in this case, refer to “real-time imagery data” that “includes biometric information from an individual located at the secured location.” ’980 Patent, Claim 2. That biometric information derived from a video camera could be used to trigger an alarm. In short, a sensor that could trigger an alarm might be any of the monitoring devices serving as sensors, whether chemical, light, heat, or other characteristics, so long as they could be used to trigger an alarm at the secured location. Defendants’ insertion of “non-camera” and specific events that would trigger an alarm unduly limits the meaning of the term. The court thus adopts the plain and ordinary meaning of “alarm sensor.”

Term 11: “**Based on at least one of the additional information and the imagery data**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
To be construed “in the disjunctive, <i>i.e.</i> , one or more additional information, one or more imagery data, or one or more of both.” Defs.’ Claim Constr. Br. at 27; <i>see also</i> Hr’g Tr. 22:7-13 (testimony of plaintiffs’ expert advancing the disjunctive construction).	“Based on at least one of the additional information and at least one of the imagery data.” Defs.’ Claim Constr. Br. at 27.

Term 11 appears in independent Claim 1 of the ’980 patent; and does not appear in either the ’085 or ’344 patents. In context, the claim reads, “a computer system associated with a security system central monitoring station, said computer system configured to: . . . identify an appropriate response agency from amongst a plurality of response agencies based on at least one of the additional information and imagery data; . . .” ’980 Patent, col. 12, lines 39-41, 46-49.

Plaintiffs request that this term be construed in “the disjunctive, *i.e.*, one or more additional information, one or more imagery data, or one or more of both.” Defs.’ Claim Constr. Br. at 27; *see also* Hr’g Tr. 22:7-13 (testimony of plaintiffs’ expert, Mr. Alexander, advancing the disjunctive construction). Defendants, on the other hand, seek to construe the claim in the conjunctive, *i.e.*, requiring “at least one of the additional information *and* at least one of the imagery data.” Defs.’ Claim Constr. Br. at 27. In other words, under the defendants’ construction, the system would identify the appropriate response agency based on one or more “additional information” provided by a number of different sensors *and* one or more imagery data provided by an image or video camera – both, not one or the other.

¹⁹’344 Claim 3 has been withdrawn by the plaintiffs.

Defendants cite *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 885-88 (Fed. Cir. 2004), as persuasive and primary authority regarding the construction of the phrase “at least one of” in the context of a list. Defs.’ Claim Constr. Br. at 27. In *SuperGuide*, the Federal Circuit first held that “at least one of” means “one or more.” 358 F.3d at 886 (citing *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999)). Then, the Federal Circuit determined when “at least one of” is followed by a list separated by the word “and,” it “connotes a conjunctive list,” *i.e.*, “at least one of” modifies *each* item or category in the list. *Id.*²⁰ In the present case, *SuperGuide* would imply interpreting term 11 to mean at least one of the additional information *and* at least one of the imagery data, requiring one of each before the system can decide on an appropriate emergency response agency.

This case, however, is distinguishable from *SuperGuide*. Unlike *SuperGuide*, the context here is not a list, but rather an option of two.²¹ The duality of the term makes it a binary choice between two options – not a list giving rise to the confusion present in *SuperGuide*. See 358 F.3d at 885-88. The use of “and” is shorthand for preserving the option that *both* the additional information and imagery data could be used in the security system process. Using “or” would have required additional words, *e.g.*, “or both,” at the end of the term in order for it to be read properly. Otherwise, saying “based on at least one of the additional information [or] the imagery data” implies a mutual exclusivity the plaintiffs avoided. See Pls.’ Resp. at 27-31.

The defendants’ interpretation also creates a surplusage problem and courts should avoid claim constructions that render terms as surplusage. See, *e.g.*, *Nautilus Grp.*, 82 Fed. Appx. at 694; *U.S. Surgical Corp.*, 93 F.3d at 1578. If the plaintiffs meant the phrase to read in the conjunctive, *i.e.*, requiring both variables, the term could have omitted “at least one of” and read “based on the additional information *and* the imagery data.” Making this part of the term entirely unnecessary goes against longstanding rules of claim construction.

Further, in the context of the patent, the defendant’s construction of term 11 is unnecessarily restricting. Defendants’ interpretation requires the plaintiffs’ patent to use “additional information” *and* “imagery data” to choose an appropriate emergency response agency. As patentees are “entitled to the full scope of [their] claims,” the court here is wary of imputing the requirements into claims. For example, “additional information” could be provided by a heat sensor and a smoke detector – indicating the need for a response from the fire department. Although imagery data might be helpful in this circumstance (*e.g.* to see the flames burn in the building), it would not be *required* for the system to call emergency responders under the plaintiffs’ disjunctive construction. Defendants’ interpretation, on the other hand, would require the system to get the image of flames or smoke before it could alert the appropriate

²⁰In *SuperGuide*, the Federal Circuit provided the following example: “Thus, ‘[i]n spring, summer, or winter’ means ‘in spring, in summer, or in winter.’ 358 F.3d at 886 (citing William Strunk, Jr. & E.B. White, *The Elements of Style* 27 (4th ed. 2000)).

²¹If given a choice between two options, it is equally as natural to say “choose between this *and* that” as it would be to say “choose between this *or* that.”

responders. This limitation is not present from the context of the patent. *See generally* '980 Patent; *see also* Pls.' Resp. at 29-30.

Finally, as plaintiffs note, numerous other courts, including the Patent Trial and Appeal Board, have “not interpreted *SuperGuide* as setting forth a *per se* rule that the use of ‘at least one of’ followed by ‘and’ connotes a conjunctive list.” *Apple, Inc. v. Evolved Wireless LLC*, No. IPR2016-01177, 2017 WL 6543970, at *4 (P.T.A.B. Dec. 20, 2017); *see, e.g., Fujifilm Corp. v. Motorola Mobility LLC*, No. 12-CV-03587-WHO, 2015 WL 1265009, at *8 (N.D. Cal. Mar. 19, 2015) (“*SuperGuide* did not erect a universal rule of construction for all uses of ‘at least one of’ in all patents.”); *Radware, Ltd v. AIO Networks, Inc.*, No. C-B-2021 RMW, 2014 WL 1572644, at *6-7 (N.D. Cal. Apr. 18, 2014) (finding “*SuperGuide* distinguishable because it involved selecting from a set or more than two items.”). In short, defendants’ interpretation of the term is not consistent with the natural reading of the term, is distinguishable from Federal Circuit precedent, and unnecessarily limits the scope of the term.

Therefore, for the stated reasons, the court accepts with the plaintiffs’ construction of the term, construing it **in the disjunctive, i.e., one or more additional information, one or more imagery data, or one or more of both.**

Term 12: “**Wherein the additional information is automatically generated by the computer system**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Additional information associated with the received imagery data is generated by the computer system associated with the security system central monitoring station without intervention of any personnel.” Defs.’ Claim Constr. Br. at 28.

Term 12 appears in dependent Claim 4 of the '980 patent; and does not appear in either of the '085 and '344 patents. In context, the claim reads, “the security system of Claim 1, wherein the additional information is automatically generated by the computer system.” '980 Patent, col. 13, lines 1-3.

The plaintiffs argue that the term should be construed according to its ordinary and plain meaning, as “a [person of ordinary skill in the art] would understand the meaning of this term as basic terminology in this field.” Pls.’ Resp. at 32. Defendants take issue with the plaintiffs’ proffered plain meaning definition in two respects: “(1) the meaning of ‘automatically generated’ and (2) the identity of the ‘computer system’ being referenced.” Defs.’ Claim Constr. Br. at 28. First, the defendants contend the phrase “automatically generated” within the term should be defined as “without intervention of any personnel.” *Id.* To support this, defendants point to the juxtaposition of “automatically generated” and “generated by personnel” in parallel dependent claims and in the specification of the '980 patent. *Id.* (citing the '980 Patent, col. 13, lines 1-6 & col. 10, lines 20-28). Second, the defendants seek clarification regarding *which* computer system

is automatically generating the additional information – either the “computer system associated with a security system central monitoring station,” or the “computer system associated with a response agency.” *Id.* at 29 (citing the ‘980 Patent, col. 12, lines 39-40, 51-52). Without this clarification, the defendants contend term 12 is indefinite. *Id.*

As stated respecting numerous previous claims, the court “seeks to ascribe the “ordinary and customary meaning” to claim terms as a person of ordinary skill in the art would have understood them at the time of the invention.” *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1310 (Fed. Cir. 2017) (citing *Phillips*, 415 F.3d at 1312-14).

First, the court sees little value in defendants’ proffered definition for “automatically generated” as “generated without intervention of any personnel.” Defendants themselves contend this is the plain meaning. *See* Defs.’ Claim Constr. Br. at 28. “[A]utomatically generated” implies a process that is completed in response to an external event, without human interaction. Merriam-Webster’s defines *automatic* as, “2: having a self-acting or self-regulating mechanism.” *Automatic*, Merriam-Webster’s Collegiate Dictionary (10th ed.1998). The court believes a person of ordinary skill in the art could decipher the meaning of “automatically generated” in the context of Claim 4 and the ‘980 Patent.

As for the second point, the Supreme Court has provided guidance on the indefiniteness standard when constructing claims. *See Nautilus, Inc. v. Biosig Instruments Inc.*, 572 U.S. 898 (2014) (“*Nautilus IP*”). Instead of the “unreliable compass of ‘insoluble ambiguity,’” the court is now instructed to follow a “reasonable certainty” standard when constructing claims. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1380 (Fed. Cir. 2015), *on remand from Nautilus II*, 572 U.S. 898. The Federal Circuit has interpreted this new “bright star” standard as applying to “determine whether one of the embodiments provided ‘a reasonably clear and exclusive definition,’ with a focus on the ‘relationship’ between the embodiments and the claim language, and whether the embodiments created ‘objective boundaries’ for those skilled in the art.” *Id.* at 1381 (citing *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245, 1260-61 (Fed. Cir. 2014) (interpreting the reasonable certainty standard after *Nautilus II*)); *see also id.* (“[I]n the wake of *Nautilus II*, judges have had no problem operating under the reasonable certainty standard. For example, . . . ‘indefiniteness is a legal determination, if the court concludes that a person of ordinary skill in the art, with the aid of specification, would understand what is claimed, the claim is not indefinite.’”) (citing *Feeny v. Apple Inc.*, No. 2:13-CV-00361-WCB, 2014 WL 4294505, at *4 (E.D. Tex. Aug. 28, 2014) (Byson, J., sitting by designation)). Thus, the court needs to consider if someone possessing ordinary skill in the art would be able to determine, with reasonable certainty, whether the claim language and embodiments of the patent make evident what is claimed by the patent. *See id.*

The court concludes the claim language is sufficiently definite to allow a person skilled the art to determine the claimed scope of the patents with reasonable certainty. While there is some ambiguity about which computer system would be automatically generating this report, the court does not believe this ambiguity creates any definiteness issues regarding the scope of the patent claims. Indeed, defendants themselves concede there is “additional context” from Claim 1 that illuminates which computer system Claim 4 is referencing. Defs.’ Claim Constr. Br. at 29 (“[C]laim 1 explains that “a computer system associated with a security system central

monitoring station’ is configured to ‘generate additional information associated with the received imagery data.’”). Additional certainty is provided when reading the claims in context of the other claims and the patent itself. For example, respecting biometric information, Claim 2 of the ‘980 Patent provides in part that “the computer system associated with the security system central monitoring station is further configured to analyze the biometric information.” ’980 Patent, Claim 2.

In short, the court concludes that a person of ordinary skill in the art could (and should) ascertain with “reasonably certainty” the scope of term 12 and claim 4 of the ’980 Patent. Therefore, the court does not believe construction is necessary for term 12.

Term 13: “**Analyzing the biometric information**” and “**analyze the biometric information**”:

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
Plain and ordinary meaning	“Comparing[/compare] the biometric information to information stored in a database.” Defs.’ Claim Constr. Br. at 29.

Term 13 appears in dependent Claims 2, 3, and 13 of the ’980 patent; dependent Claims 47, 49 of the ’085 patent; and does not appear in the ’344 patent. In context, the claims of the ’085 patent refer to “[t]he method of Claim 38 further comprising the steps of: capturing biometric information from an individual located at the secured location; and analyzing the biometric information,” ’085 Patent, col. 15, lines 24-28, and “the computer system associated with the security system central monitoring station is further configured to analyze the biometric information,” ’980 Patent, col. 12, lines 57-59.

Plaintiffs again argue term 13 should be construed according to its plain and ordinary meaning, as “[a] [person of ordinary skill in the art] would understanding the meaning of the term as basic terminology used in this field.” Pls.’ Resp. at 32. Defendants, on the other hand, are concerned that no mode or technique defining “analysis” is listed within the claim. *See* Defs.’ Claim Constr. Br. at 30. They propose construing the term to mean “comparing the biometric information to information stored in a database.” *Id.*

As the defendants note, the specification for the ’085 Patent references how the analysis step is completed – “the biometric information is compared to information stored in a database. Defs.’ Claim Constr. Br. at 30 (citing ’085 Patent, col. 10, lines 48-52). Collected biometric information would be quite useless without the corresponding database of permitted and prohibited individuals.²² The court accordingly adopts defendants’ proffered construction of term 13, *i.e.*, “analyzing the biometric information” and “analyze the biometric information”

²²This would be similar to receiving an encrypted message in the absence of your cipher machine.

means **comparing [compare] the biometrics information to information stored in a database.**

CONCLUSION

For the reasons stated, defendants' motion for judgment on the pleading is DENIED without prejudice, and plaintiffs' second motion for leave to amend their complaint is GRANTED. The 13 terms identified by the parties shall be construed as stated.

It is so **ORDERED.**

s/ Charles F. Lettow _____
Charles F. Lettow
Senior Judge