UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER DIVISION

Intellectual Ventures II LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	
	§	
BITCO General Insurance Corporation, et. al.,	§	Case No. 6:15-cv-59 (LEAD CASE)
	§	
	§	
Defendants.	§	
	§	
Intellectual Ventures II LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Case No. 6:15-cv-60
	§	
Great West Casualty Company,	§	
	§	
Defendant.	§	

MEMORANDUM OPINION AND ORDER

On December 9, 2015, the Court held a hearing to determine the proper construction of disputed terms in the two Asserted Patents in the above-captioned cases. Having considered the parties' arguments and claim construction briefing (Dkt. Nos. 91, 110-2, 103, and 105), the Court issues this Memorandum Opinion and Order construing the disputed terms.

BACKGROUND AND THE ASSERTED PATENTS

Intellectual Ventures II LLC ("IV") brings two actions: one action is against BITCO General Insurance Corp., f/k/a, Bituminous Casualty Corp. and BITCO National Insurance Co.,

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f/k/a Bituminous Fire and Marine Insurance Co., and the second action is against Great West Casualty Company (all defendant parties collectively, "Defendants"). The actions allege infringement of U.S. Patent Nos. 7,516,177 ("the '177 Patent") and 8,929,555 ("the '555 Patent") (collectively, "the Asserted Patents"). The '177 Patent and the '555 Patent are not related.

The '177 Patent generally relates to a technique for aggregating information content, such as World Wide Web content, at a personalized access point of a user. The '177 Patent abstract recites:

> An apparatus is provided for distributing content objects to a personalized access point of a user over a network-based environment. The apparatus includes a server, a selection client, and a retrieval client. The server includes a database operative to store indicia associated with at least one content object and further operative to store user identifiers as well as information about which content objects have been selected by a particular user. The selection client communicates with the server via a communication link. The selection client is configured to allow a user to select content objects to add to a personalized access point by submitting an indicia and a user identifier to the server. The retrieval client communicates with the server over a communication link allowing a user to retrieve information from a personalized access point. In response to the submission of the indicia and user identifier, at least one of: (a) a content object, and (b) a link to a content object are added to the personalized access point of the particular user and the particular user can retrieve the content object through the personalized access point from the retrieval client. A method is also provided.

'177 Patent Abstract.

The '555 Patent generally relates to data encryption methods that relate to the generation of encryption key seeds that may be utilized for generating data encryption keys. The '555 Patent abstract recites:

> Data encryption systems and methods. The system includes a storage device storing data and an encryption/decryption module. The encryption/decryption module randomly generates a device key seed according to the occurrence time of a specific operation or the interval between two specific operations on the storage device, and applies the device key seed to data encryption.

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'555 Patent Abstract.

APPLICABLE LAW

A. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meanings as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)).

"[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id.* The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent.").

Although extrinsic evidence can be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or

may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

B. Means-Plus-Function Limitations

The parties' disputes include disputes related to alleged means-plus-function limitations that require construction. Where a claim limitation is expressed in "means-plus-function" language and does not recite definite structure in support of its function, the limitation is subject to 35 U.S.C. § 112, ¶ 6. *Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In relevant part, 35 U.S.C. § 112, ¶ 6 mandates that "such a claim limitation 'be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.'" *Id.* (citing 35 U.S.C. § 112, ¶ 6). Accordingly, when faced with means-plus-function limitations, courts "must turn to the written description of the patent to find the structure that corresponds to the means recited in the [limitations]." *Id.*

Construing a means-plus-function limitation involves multiple steps. "The first step in construing [a means-plus-function] limitation is a determination of the function of the means-plus-function limitation." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). Once a court has determined the limitation's function, "the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Id.* A "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim."

Id. Moreover, the focus of the "corresponding structure" inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is "clearly linked or associated with the [recited] function." *Id.*

For mean-plus-function limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The corresponding structure is not a general purpose computer but rather the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

There is a rebuttable presumption that 35 U.S.C. § 112, ¶ 6 does not apply when the term "means" is not utilized. *See Williamson*, 792 F.3d 1339, 1348–1349 (Fed. Cir. 2015) (holding that a presumption exists if the word "means" is not used but overturning the prior standard that the presumption is "strong"). "The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349. Thus, "[w]hen a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.*

C. Claim Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. "[I]ndefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). A

party challenging the definiteness of a claim must show it is invalid by clear and convincing evidence. *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345 (Fed. Cir. 2007).

The definiteness standard of 35 U.S.C. § 112, ¶ 2 requires that:

> [A] patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty. The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable. The standard we adopt accords with opinions of this Court stating that "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter."

Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129–30 (2014) (internal citations omitted).

DISPUTED TERMS

A. '177 Patent Terms

1. Access Point Terms

"centralized access point of a user accessible via a communications link and operative to provide the user with access to content chosen by or for the user" (claim 11)

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6. Should the Court conclude that the term is subject to 35 U.S.C. § 112, ¶ 6, plaintiff proposes the following function and corresponding structure: Claimed Function operative to provide the user with access to content chosen by or for the user Corresponding Structure Figs. 8, 10, 13, 14, and 15; and equivalents thereof.	This term is subject to 35 U.S.C. § 112, ¶ 6. Claimed Functions (1) "accessible via a communications link" (2)"operative to provide the user with access to content chosen by or for the user" Corresponding Structure The "'personal HowZone', or personal web page, 198," FIG. 8; 22:20–23:10; the personal web page, FIG. 10; 24:5–34; the personal web page, FIG. 13; 25:60–26:6; the personal web page, FIG. 14; 26:8–27:8; Fig. 15.

"centralized access point" and "centralized access point of a user" (claim 11)

IV's Construction	Defendants' Construction
No construction necessary. Plain and ordinary meaning. Alternatively, "a network resource accessible to one or more users and that can be used to access content"	Should the Court conclude that these terms are not included in a term subject to 35 U.S.C. § 112, ¶ 6, defendants propose the following construction: "a resource on a network, such as a web page, that is assigned to a user and can be accessed by that user"

"distributed information access point accessible via a communications link and operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point" (claim 11)

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6. Should the Court conclude that the term is subject to 35 U.S.C. § 112, ¶ 6, plaintiff proposes the following function and corresponding structure: <u>Claimed Function</u> operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point <u>Corresponding Structure</u> Figs. 6A, 6B, 7, 9, 11, 12, 16, and 17; and sections of Figs. 8, 13, 14, and 15; and equivalents thereof.	This term is subject to 35 U.S.C. § 112, ¶ 6. <u>Claimed Functions</u> (1) accessible via a communications link (2) operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point" <u>Corresponding Structure</u> The HowZone.com banner 238, FIG 11; 24:35–25:2; the banner 238, FIG. 37; 42:28–44:18.

"distributed information access point" (claims 11–13, 16, 19)

IV's Construction	Defendants' Construction
No construction necessary. Plain and ordinary meaning. Alternatively, "a network resource that enables a user to interact with a centralized access point"	Should the Court conclude that this term is not included in a term subject to 35 U.S.C. § 112, ¶ 6, defendants propose the following construction: "a resource on a network, such as a web page, that is separate from the centralized access point of a user, and can be accessed by and includes information visually perceptible to multiple users"

The primary dispute between the parties is whether the terms are means-plus-function terms under 35 U.S.C. § 112, ¶ 6. If construed as means-plus-function terms, the parties disagree as to the claimed functions and corresponding structures. As discussed below, the Court finds that the terms are not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6. As such, the Court does not reach the function and structure dispute, but rather addresses the proper construction for the stand-alone terms.

Positions of the Parties

With regard to the means-plus-function dispute, IV asserts that in the context of the '177 Patent, an "access point" is a specific software structure that provides access to information. IV cites to *Genband USA LLC v. Metaswitch Networks Ltd.*, No. 2:14-cv-33, 2015 U.S. Dist. Lexis 103512, at *53–59 (E.D. Tex. Aug. 6, 2015) for support of IV's positions. IV asserts that in *Genband*, the Court concluded that a number of "agent" terms were not means-plus-function limitations because those skilled in the art would understand that an "agent" was "particular software structure." (Dkt. No. 91 at 14 (citing *Genband*, 2015 U.S. Dist. Lexis 103512, at *53–59)). IV also asserts that, in other cases, this Court has found terms such as "selector component," "adapter component," and "integration component" were particular software

structures that avoid a means-plus-function construction. (*Id.* (citing *E2E Processing, Inc. v. Cabela's Inc.*, No. 2:14-cv-36, 2015 U.S. Dist. Lexis 86060, at *13–24 (E.D. Tex. July 2, 2015))).

IV asserts that in Defendants' PTAB petitions, the Defendants recognized that an "access point" connotes specific software structure as opposed to a means-plus-function term: "a resource on a network, such as a web page, that allows a user to access links and content objects." (Dkt. No. 91 at 14–15 (quoting Dkt. No. 91 Ex. A at 8)).

IV asserts that the claims provide context as to the terms and describe how the "access point" terms interact with other components. IV asserts that these recitations of inputs, outputs, and operations of the access point weigh toward concluding that the term connotes sufficient definite structure. (Dkt. No. 91 at 16 (citing *SmartFlash LLC v. Apple Inc.*, No. 6:13-cv-447, 2015 U.S. Dist. LEXIS 91669, *9–11 (E.D. Tex. July 15, 2015) ("code responsive to" and "code to evaluate" terms connoted structure because, among other reasons, the claims included substantial additional language describing the operation of the components at issue and their interaction with other components))).

IV asserts that the specification also teaches specifics of the access point software by displaying web pages in web browsers that perform the claimed operations. (Dkt. No. 91 at 16 (citing '177 Patent Figures 7, 9 and 10)).

As to the meaning of the "centralized access point" terms, IV asserts that the claims provide substantial guidance and do not contain the limitations Defendants seek. IV asserts that claim 11 states that the "centralized access point" provides "the user with access to content chosen by or for the user" and that "a user is enabled with the capability to log on to their centralized access point from one or more distributed information access point(s) and access

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content chosen from one or more distributed information access point(s)." IV asserts that Defendants' limitations "such as a web page" and "assigned to a user and can be accessed by that user" lack support in the intrinsic record. IV further asserts that the claims do not require these limitations. (Dkt. No. 91 at 7). Additionally, IV contends that Defendants' constructions are at odds with the constructions that they proposed in the PTAB. IV asserts that in the PTAB, Defendants construed "centralized access point" to mean "an access point that aggregates content objects, or links to content objects, that are selected by or for a user." (*Id.* (quoting Dkt. No. 91 Ex. A at 9)).

As to the meaning of "distributed access point," IV again asserts that the surrounding claim language provides guidance as to the meaning of the term. (Dkt. No. 91 at 4). IV notes that in claim 11, the "distributed access point" is "accessible via a communications link and operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point." '177 Patent claim 11. IV asserts that in claim 16, the content is assembled into the distributed access point, the distributed access point is presented to "one or more potential users," content from the distributed access point is added to a centralized access point of a particular user, and the centralized access point is accessed from the distributed access point to then access the content. (Dkt. No. 91 at 4–5).

IV asserts that the claims do not include Defendants' limitations. IV objects to Defendants' "web page" limitation and notes that dependent claim 12 recites that the access point may be a web page or an email message. IV asserts that this limitation is absent from independent claim 11, and thus, Defendants' attempt to add "resource, such as a web page" fails in light of claim 12. (*Id.* at 5).

IV also objects to Defendants' limitation of "can be accessed by and includes information visually perceptible to multiple users." IV asserts that the specification explains that "visually perceptible" is only "one technique" of distributing information. (*Id.* (citing '177 Patent 6:60–64)). Further, IV notes that claim 16 includes a "visually perceptible" limitation and that claim 11 does not. IV also asserts that claim 16 states that distributed access point information is presented to "one or more potential users." IV argues that this conflicts with Defendants' requirement of "multiple users." IV also contends that claim 11 does not address, at all, how many users must be able to access the "distributed information access point."

Lastly, IV objects to Defendants' requirement that the "distributed information access point" and the "centralized access point" must be "separate." IV asserts that the specification never describes the two resources as "separate." (*Id.* at 5–6). In fact, IV emphasizes that the specification indicates the opposite. IV points to Figure 13 as displaying within the same web page information relating to the distributed information access point as well as the centralized access point of a user. (*Id.* at 6 (arguing that the figure depicts in a browser the "My Know-How" information connected to the centralized access point as well as the "BROWSE" link, which displays a list of links from which content can be added to the centralized access point for Suzi Henriot)). IV notes that in Defendants' IPR petitions to the PTAB, the Defendants' constructions lacked the "separate" requirement by proposing only: "an access point that makes information visually perceptible to multiple users, such as a web page or login page." (*Id.* (quoting Dkt. No. 91 Ex. A at 10)).

Defendants assert that the "access point" terms are drafted in classic means-plus-function format and that "means" is merely replaced with "access point."

Defendants assert that the "centralized access point" term must perform two functions: (1) it is accessible via a communications link and (2) it is operative to provide the user with access to content chosen by or for the user. Defendants contend that the specification confirms that the "access point" limitations lack structure. Further, Defendants argue that the corresponding structure for the "centralized access point" is the "'personal HowZone,' or personal web page, 198." (Dkt. No. 110-2 at 16 (citing '177 Patent 22:20–23:10)). Defendants state that this is also shown in Figures 10, 13, 14, 15, and associated text. Defendants assert that these web pages are "accessible via a communication link" by virtue of being web pages and that the web pages satisfy the "operative to provide" function because of the software algorithm that implements the web pages. (*Id.*). Defendants state that an interface created by that algorithm is shown in Figures 8, 10, 13, 14, and 15 and discussed at '177 Patent 24:5–34, 25:60–26:6, and 26:8–27:8. (*Id.*).

Defendants assert that the "distributed information access point" term has two functions: (1) it is accessible via a communication link, and (2) it is operative to implement one or more of the three functions that the claim specifies. (Dkt. No. 110-2 at 15). Defendants assert that the patent discloses that the "distributed information access point" may refer to any number of hardware or software components, including "a token placed on a product, product packaging, a sign or advertisement" ('177 Patent 6:66–67), "screen displays on client computers or wireless web appliances" (*Id.* at 7:1–2), "a rich media banner ad" (*Id.* at 7:6–7), "co-branding information . . . on a third-party web site" (*Id.* at 7:8–10), "a button, clickable icon, a clickable graphic or a hypertext link" (*Id.* at 14:48–50), or "a networked device such as networked cash register" (*Id.* at 14:51–52). Defendants assert that these broad, scattershot descriptions emphasize

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that the term is described by function, and not by any particular structure. (Dkt. No. 110-2 at 15–16.)

Defendants assert that for both "distributed information access point" functions, the structure is the HowZone.com banner ad labeled 238 in Figures 11 and 37 and discussed at 24:35–25:2 and 42:28–44:18. (*Id.* at 16 (particularly noting '177 Patent 24:41–48)). Defendants assert that the banner ads implement each of the three limitations from the claimed list included in the second recited function. (Dkt. No. 110-2 at 16).

Defendants assert that IV's position is that "access point" is a "specific software structure that provides access to information." (Dkt. No. 110-2 at 16–17 (quoting Dkt. No. 91 at 14)). Defendants assert that the patent states the opposite: that an "access point" can be any number of things, software or hardware. Defendants point to specification passages where the access point is a "web page" or a networked device such as a networked cash register. (*Id.* at 17 (citing '177 Patent 14:43–52, Fig. 2)). Defendants assert that it could even be a "token placed on a product, product packaging, a sign or an advertisement." (*Id.* (quoting '177 Patent 6:66–67)). As to the District Court cases IV cites, Defendants note that none of those cases dealt with the term "access point." As to the IPR petitions, Defendants assert that the claim construction standard is a different and broader standard in such actions.

In reply, IV asserts that Defendants disregard analogous authority from this Court concluding that "agent," "code," "component," and "processor" related terms did not invoke § 112, ¶ 6. (Dkt. No. 103 at 6). IV asserts that Defendants also ignore the operational detail and specific software structure disclosed in the specification. IV further asserts that Defendants mischaracterize the legal test for determining if § 112, ¶ 6 applies. In particular, IV asserts that

Defendants mischaracterize the legal test as merely being whether or not the claims can be rewritten as "means" limitations. (*Id.* at 7).

As to the stand-alone terms ("centralized access point" and "distributed information access point"), IV asserts that the plain language of some of the claims (1) recites "one or more" potential users, not multiple users, (2) includes "visually perceptible" while others do not, and (3) recites "web page" while others do not. (Dkt. No. 103 at 9). IV also asserts that the specification only discloses those features as examples, not requirements. (*Id.*).

As to the "separate" requirement, IV agrees that the terms are different claim elements. However, IV asserts that this does not require the access points to be separate web pages or preclude the access points from powering different portions of the same web page. (*Id.*). IV asserts that the specification teaches that Figure 14 discloses a single web page with both access points. Specifically, IV asserts that the figure discloses, above the personalized portal, the BROWSE link, which is not specific to a user. IV asserts that from this link, the user can select content to add to a personalized portal. IV asserts that the BROWSE link is displayed along with the personalized portal content link. (*Id.*).

As to Defendants' limitation requiring the central access point be "assigned to a user," IV asserts the claims detail the relationship between the access point and the user. IV asserts that the claims do not mention "assign." (*Id.*).

Analysis

There is a rebuttable presumption that 35 U.S.C. § 112, ¶ 6 does not apply when the term "means" is not utilized. *See Williamson*, 792 F.3d 1339, 1348–1349 (Fed. Cir. 2015) (holding that a presumption exists if the word "means" is not used but overturning the prior standard that the presumption is "strong"). "The standard is whether the words of the claim are understood by

persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349. Thus, "[w]hen a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* Defendants have not overcome the presumption.

Defendants' primary argument is that the claim recites function. Mere recitation of function is not the proper legal test. *See id.* Further, Defendants appear to assert that because the element implicates software structure, the term must be considered to be a means-plus-function element. Again, that is not the law. *See id.* In this regard, the holdings of *Apple, Inc. v. Motorola, Inc.*, 757 F.3d 1286 (Fed. Cir. 2014) are still relevant post-*Williamson*:

> Rather, to one of skill in the art, the 'structure' of computer software is understood through, for example, an outline of an algorithm, a flowchart, or a specific set of instructions or rules. Requiring traditional physical structure in software limitations lacking the term means would result in all of these limitations being construed as means-plus-function limitations and subsequently being found indefinite.

Apple, Inc., 757 F.3d at 1298–99 (citations omitted). "Structure may also be provided by describing the claim limitation's operation, such as its input, output, or connections. The limitation's operation is more than just its function; it is how the function is achieved in the context of the invention." *Id.* at 1299.

Here, "access point" is not a mere nonce word. The parties do not provide evidence that, to one skilled in the art, "access point" is generic, structureless, and without any meaning. Further, as described in the context of the specification, the term relates to a network software resource. As to the implications of a term embodying software, the Federal Circuit and this Court have found that software may connate structure. *Apple, Inc.*, 757 F.3d at 1298–99; *Genband.*, 2015 U.S. Dist. Lexis 103512, at *53–59 (finding that "agent" was a particular software structure

and not a means-plus-function term); *Affinity Labs of Texas v. Samsung Elect. Co., et al.*, No. 1-12-cv-557, Dkt. No. 186 at 6–10 (E. D. Tex. June 3, 2014) (finding that the mere use of the word "software" does not rebut the presumption and that "software" is a structure connoting term to one skilled in the art); *Aloft Media, LLC v. Adobe Sys., Inc.*, 570 F. Supp. 2d 887, 897-898 (E.D. Tex. 2008) (finding "computer code" recited sufficient structure to avoid the application of 35 U.S.C. § 112, ¶ 6). The evidence shows that "access point" refers to the structure of a network resource that serves to provide access to the system. '177 Patent at 2:44–3:25, 6:48–7:23, 7:62–8:30, 16:39–58 22:20–45: 24:5–25:2, 25:60–27:8, 42:28–44:18, Figures 8, 10, 11, 13, 14, 15, 37. Moreover, even if the terms were found to be without structural meaning (a finding the Court does not reach), the intrinsic record itself may provide sufficient detail to remove the term from the scope of 35 U.S.C. § 112, ¶ 6. *Apple, Inc.*, 757 F.3d at 1290 (looking at the intrinsic evidence for the inputs, outputs, connections and operation of the recited element). Here the claims and specification provide such detail for both "centralized access point" and "distributed information access point."

Having rejected Defendants' assertions that the terms are means-plus-function terms, the Court turns to the meaning of the stand-alone terms. All parties include the concept of a network resource in their constructions. Defendants seek to add "such as a web page" to both terms. There appears to be no dispute between the parties that a network resource can include web pages. It is noted that Defendants' use of "such as" does not limit the network resources to web pages but merely provides an example. In that regard, Defendants' construction is not helpful and may cause confusion. If access points were read to be limited to web pages, such a construction would exclude embodiments such as described in dependent claim 12 in which the distributed information access point is an email. Other non-web page access points are also

described in the specification. '177 6:65–7:10, 14:43–54. Defendants even acknowledge as much in their briefing. (Dkt. No. 110-2 at 15–16).

As to Defendants' use of "assigned to a user" to construe "centralized access point," the claims characterize the relationship of the user and the access point in the broader context of the "centralized access point" being "of a user" (claim 11) and "of the particular user" (claim 16). Other portions of claim 11 are also in conformance by repeatedly referring to "their centralized access point." The claims themselves may provide guidance in determining the meaning of particular claim terms. *See Phillips*, 415 F.3d at 1314. Here, the claims themselves describe the relationship between the access point and a user as being "of a user" and "their centralized access point" or "of the particular user." Defendants' additional "assigned" is, thus, rejected.

As to "visually perceptible," some claims call out "visually perceptible" while others do not. *Id.* claims 11 and 16. Defendants' "visually perceptible" limitation is rejected. Further, Defendants have not pointed to lexicography or disavowal requiring such a limitation. *See Arlington Industries, Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1254 (Fed. Cir. 2011) ("Even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.") (internal citations omitted).

Defendants' inclusion of "multiple users" within the construction of "distributed information access point" is also contradicted by the claims themselves. Some claims explicitly call out only "one or more users:" "presenting one or more distributed information access points to one or more potential users." '177 Patent claim 16. Thus, in claim 16, the distributed information access point would only need to be presented to one potential user. Though other claims do not include this language, that claim 16 requires only "one or more" provides guidance

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against Defendants' position. Thus, though more than one user may be allowed, it is not required.

Though permissible to be presented to one potential user, the distributed information access point must still be a "distributed" access point. The specification provides context to the meaning of "distributed" in the many examples of access points that are delivered in some form or fashion to a user: "a token placed on a product, product packaging, a sign or advertisement" ('177 Patent 6:66–67), "screen displays on client computers or wireless web appliances" (*Id.* at 7:1–2), "a rich media banner ad" (*Id.* at 7:6–7), "co-branding information . . . on a third-party web site" (*Id.* at 7:8–10), "a button, clickable icon, a clickable graphic or a hypertext link" (*Id.* at 14:48–59), or provision at "a networked device such as networked cash register" (*Id.* at 14:51–52). Such access points are configured to be delivered to provide access to a location, user, etc. The claim only requires such an access point to be provided to one user. What is provided, however, must still be a "distributed access point." IV's construction does not give meaning and context to the "distributed" portion of the claim term. IV acknowledged this at that oral hearing. (Dkt. No. 114 at 23:14–24:22). The Court's construction provided below includes the distribution context.

As to Defendants' "separate" requirement, Defendants have not pointed to any lexicography, disclaimer or disavowal excluding non-separate access points. *See Arlington Industries, Inc.*, 632 F.3d at 1254. Moreover, the specification teaches an example of a distributed access point which may be a banner ad. '177 Patent at 7:6–7, 24:35–61, Figure 11. This banner ad or its HTML contents "can be embedded anywhere within any web page." *Id.* at 42:63–43:10. Thus, as claimed, the distributed information access point may merely be "a portion of a web page." *Id.* at claim 12. As noted above, Defendants acknowledge that a

centralized access point may be a web page. Thus, Defendants' "separate" construction conflicts with the specification because the banner ad or its contents could be embedded in "any web page."

The Court finds that the terms "centralized access point of a user accessible via a communications link and operative to provide the user with access to content chosen by or for the user" and "distributed information access point accessible via a communications link and operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point" are not means-plus-function terms subject to 35 U.S.C. § 112, ¶ 6.

The Court construes "centralized access point of a user" to mean "a user's network resource that can be used to access content." The Court construes "distributed information access point" to mean "a network resource which is delivered to one or more users and that enables a user to interact with a centralized access point."

2. **"[assembling content into] one or more distributed information access points which are in communication with the database over the communication link" (claim 16)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6.
	Claimed Functions
Should the Court conclude that the term is subject to 35 U.S.C. § 112, ¶ 6, plaintiff proposes the following corresponding structure:	one or more distributed information access points (1) "in communication with the database over the communication link"
Corresponding Structure	Corresponding Structure
Figs. 6A, 6B, 7, 9, 11, 12, 16, and 17; and sections of Figs. 8, 13, 14, and 15; and equivalents thereof.	The HowZone.com banner 238, FIG 11; 24:35–25:2; the banner 238, FIG. 37. 42:28–44:18.

The primary dispute between the parties is whether the term is a means-plus-function term under 35 U.S.C. § 112, ¶ 6. If construed as a means-plus-function term, the parties disagree as to the claimed function and corresponding structure. As discussed below, the Court finds that the term is not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6.

Positions of the Parties

IV asserts that the disputed term is not a means-plus-function term for the same reasons described above with regard to the claim 11 term "at least one distributed information access point." Further, IV asserts that the limitations of this term in claim 16 do not recite a function, additional evidence that the term is not a means-plus-function term. (Dkt. No. 91 at 18 (citing *Rodime PLC v. Seagate Tech., Inc.*, 174 F.3d 1294, 1302 (Fed. Cir. 1999))).

Defendants assert that the claimed function is "which are in communication with the database over the communication link." (Dkt. No. 110-2 at 18). Defendants assert that "access points" is a verbal construct which could have been replaced by "means" and, under *Williamson*, the term is a means-plus-function term. Defendants assert that "distributed information access point" is similar to "distributed learning control module" of *Williamson*. (*Id.* at 18).

Analysis

For the same reason as presented above with regard to the "distributed information access point" term of claim 11, the Court finds that the disputed term in claim 16 is not subject to 35 U.S.C. § 112, ¶ 6. It is further noted that in claim 16, the full phrase is found in one of the method steps of the method claim: "assembling content into one or more distributed information access points which are in communication with the database over the communication link." In this context, the claim language is not within the traditional means-plus-function format. Rather,

the language following "distributed information access points" describes the physical relationship of the access point and the database via a communication link.

The Court finds that "one or more distributed information access points which are in communication with the database over the communication link" is not a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6.

Other than the construction of "distributed information access point" as provided elsewhere herein, no further construction is necessary.

3. **"[accessing the centralized access point of the particular user from] one or more distributed information access points to gain access to the selected content" (claim 16)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6.
	Claimed Functions
Should the Court conclude that the term is subject to 35 U.S.C. § 112, ¶ 6, plaintiff proposes the following corresponding structure:	one or more distributed information access points (1) allowing "access to the selected content"
	Corresponding Structure
Corresponding Structure	The HowZone.com banner 238, FIG 11;
Figs. 8, 10, 13, 14, and 15; and equivalents thereof.	24:35–25:2; the banner 238, FIG. 37. 42:28–44:18.

The primary dispute between the parties is whether the term is a means-plus-function term under 35 U.S.C. § 112, ¶ 6. If construed as a means-plus-function term, the parties disagree as to the claimed function and corresponding structure. As discussed below, the Court finds that the term is not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6.

Positions of the Parties

IV asserts that the disputed term is not a means-plus-function term for the same reasons described above with regard to the claim 11 term "centralized access point of a user." Further, IV

asserts the limitations of this term in claim 16 do not recite a function, further evidence that the term is not a means-plus-function term. (Dkt. No. 91 at 18 (citing *Rodime PLC v. Seagate Tech., Inc.*, 174 F.3d 1294, 1302 (Fed. Cir. 1999))).

Defendants assert that the "distributed information access points" must perform a function: they allow access "to the selected content." (Dkt. No. 110-2 at 19). Defendants assert that the recited function "is performed by the 'centralized access point of the particular user.'" (*Id.*). Defendants assert that, as with the prior "distributed information access point" terms, the structure corresponding to the recited function is the HowZone.com banner ad labeled 238 in Figures 11 and 37. (*Id.*). Defendants assert that the patent indicates that the banner ads are "distributed information access points." (*Id.* at 19–20 (citing '177 Patent 2:41–45)). Defendants assert that the banner ads allow a user to access selected content by using the "MyHowZone" link that allows a user to log onto a centralized access point. (*Id.*).

Defendants assert that IV misstates *Rodime*, because in *Rodime* the Federal Circuit concluded that the claim language linked the means to the function. (*Id.*).

Analysis

For the same reason as presented above with regard to the "distributed information access point" term of claim 11, the Court finds that the disputed term in claim 16 is not subject to 35 U.S.C. § 112, ¶ 6. It is further noted that in claim 16, the full phrase is found in one of the method steps of the method claim: "accessing the centralized access point of the particular user from one or more distributed information access points to gain access to the selected content." In this context, the claim language is not within the traditional means-plus-function format. Rather, the term merely describes the "accessing" method step and is not a functional description of the "distributed information access point."

The Court finds that "one or more distributed information access points to gain access to the selected content" is not a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6.

Other than the construction of "distributed information access point" as provided elsewhere herein, no further construction is necessary.

4. "administrative interface in communication with the server and operative to create groupings of content into one or more distributed information access points" (claim 11)

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6. No construction is necessary. Plain and ordinary meaning. Should the Court conclude that the term is subject to 35 U.S.C. § 112, ¶ 6, plaintiff proposes the following function and corresponding structure: Claimed Function operative to create groupings of content into one or more distributed information access points Corresponding Structure Figs. 18, 26, 34A, 34B, and 52; and equivalents thereof.	This term is subject to 35 U.S.C. § 112, ¶ 6. Claimed Functions (1) in communication with the server (2) operative to create groupings of content into one or more distributed information access points" Corresponding Structure This term is indefinite for failure to disclose adequate structure, including at least failure to disclose an algorithm corresponding to a function performed by computer software.

The first dispute between the parties is whether the term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6. If a means-plus-function term, Defendants assert the term is indefinite for failure to disclose adequate structure. As discussed below, the Court finds that the term is not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6. As such, the

Court does not reach the indefinite dispute but rather addresses the proper construction for the term "administrative interface."

Positions of the Parties

IV notes that this Court has found that "interface" connotes structure with regard to the term "telecommunications interface module." (Dkt. No. 91 at 17 (citing *Genband USA LLC v. Metaswitch Networks Ltd.*, 2015 U.S. Dist. Lexis 103512, at *41(E.D. Tex. Aug. 6, 2015))). IV asserts that the *Genband* holding is consistent with how skilled artisans would understand the term. (*Id.* (citing Microsoft Computer Dictionary definition: "software that enables a program to work with the user …, with another program…, or with the computer's hardware.")). IV also asserts that the specification references "interface" as an identifiable structure through describing the "graphical user interface features." (*Id.* (citing '177 Patent 16:39–58 (referencing Figures 5-61))).

IV asserts that an "administrative" interface is one type of interface. IV asserts that claim 11 details the operations of this interface—it communicates with the server, and it operates to create groupings of content into one or more distributed information access points. IV also notes that in the IPR petitions, the Defendants did not allege that the term is a means-plus-function term. (Dkt. No. 91 at 17).

Should the Court find the term to be a means-plus-function term, IV asserts that the specification discloses a number of exemplary administrative interfaces, including Figures 18 and 24–26. IV asserts that its structure is more appropriate than Defendants' alternative structure. (*Id.*).

Defendants assert that IV's argument that the phrase is not means-plus-function is wrong as a matter of law under *Williamson*. (*Id.*). Defendants assert that "interface" is a verbal construct

like "device" and "module" that can reflect almost anything, rather than something definite. (Dkt. No. 110-2 at 9). Defendants assert that this is confirmed by the specification which discloses that the interface may comprise (1) hardware (display screen, keyboard and/or tactile input device), (2) "software resident in memory on web server computer 115" or (3) the display and distribution banner 238 which according to the specification "provides an interface for users." (*Id*. (citing '177 Patent 11:43–44, 16:43–44, 42:41–43)). Defendants assert that this teaches away from any definite structure, and instead, shows that the phrase is simply a verbal construct. (*Id*.).

As to IV's dictionary definition, Defendants assert that nothing in the definition supplies structure sufficient to create groupings of content into one or more distributed information access points. Defendants also assert that the definition simply defines what an interface "does," not the algorithm by which it performs those functions. (*Id*.).

Analysis

There is a rebuttable presumption that 35 U.S.C. § 112, ¶ 6 does not apply when the term "means" is not utilized. *See Williamson*, 792 F.3d 1339, 1348–1349 (Fed. Cir. 2015) (holding that a presumption exists if the word "means" is not used but overturning the prior standard that the presumption is "strong"). "The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349. Thus, "[w]hen a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* Defendants have not overcome the presumption.

Defendants' primary argument is that because the specification provides a wide variety of

types of interfaces, the term "interface" must be considered a nonce word. However, merely because a term has a number of different meanings does not mean the term is merely a verbal construct. Furthermore, the full term in question is "administrative interface." In light of the specification and the claim usage, it is clear that the context of "administrative interface" is not, for example, a keyboard. When reviewing the claims and the specification, "administrative interface" carries a meaning directed toward not just any interface but rather related to the software for the administrative pages and screen displays.

The specification further describes these types of interfaces as a software graphical user interface:

> FIGS 5-61 illustrate by example graphical user interface features as seen from a client by a user or system administrator and comprising hypertext mark-up language (HTML), front end user tools that are provided as an extension to a web server 114 and software resident in memory on web server 115 (of FIG. 1).

'177 Patent at 16:39–44.[1] Thus, the specification provides context for the software of an "administrative page" that is described extensively throughout the specification with regard to Figures 26, 34A, 34B and 52 and the passages describing those figures. '177 Patent Figures 26, 34A, 34B, and 52; '177 Patent 34:61–35:17, 40:16–41:4, 51:46–52:22. The figures are described as "screen display for a HowZone administrative page" or "screen display for an administrative page." '177 Patent 4:60–61, 5:17–18, 6:9–10. These pages allow administrators to perform a variety of administrator functions: "approve user requests for new content" ('177 Patent 4:60–61), "approval of a potential contributor" to the system ('177 Patent 5:18–19), and "approve a content object" ('177 Patent 6:10–11). With reference to Figure 18, the term "administrative page" is not used, but the specification states the figure is "a diagram of a screen display used by HowZone administrators to add a new category to the category listing." '177 Patent 4:31–32.

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[1] At the oral hearing, when asked by the Court what the plain and ordinary meaning was, IV proposed "graphical user interface that an administrator uses to group content objects together." (Dkt. No. 114 at 41:4–11).

This is summarized in the specification as:

> As will be described below in greater detail, staff and administrators at Applicant's web site are able to manage content categories, manage suggestions for content objects, manage content contributors, manage content objects, co-brand categories, and place commerce on content categories. Accordingly, the operation of Applicant's web site, as well as related web properties, is highly automated and is browser based. Accordingly, such administrative implementation scales, or can be increased in capacity or size, without limitation.

'177 Patent 8:38–47. Thus, the specification describes a software management tool that facilitates administrative functions. Overall, the specification usage also conforms to the extrinsic evidence dictionary definition cited by IV for the use of "interface" in the context of a software interface. On balance, the intrinsic and extrinsic evidence shows that "interface" is not a verbal construct but rather connotes sufficiently definite structure to one skilled in the art.

In context of the specification passages and figures noted above, an "administrative interface" is a software management tool that facilitates administrative functions.

The Court finds that the term "administrative interface in communication with the server and operative to create groupings of content into one or more distributed information access points" is not a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6.

The Court construes "administrative interface" to mean "a software management tool that facilitates administrative functions."

5. **"centralized access point of the particular user" (claim 16)**

IV's Construction	Defendants' Construction
The term is not indefinite	This term lacks antecedent basis and is therefore indefinite
Same as "centralized access point of a user"	

The parties dispute whether or not the term is indefinite for lacking an antecedent basis for "the" particular user.

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Positions of the Parties

IV asserts that Defendants focus on the use of "the." IV asserts that Courts have rejected Defendants' types of quibbles of "form over substance." (Dkt. No. 91 at 8). Further, IV asserts that it is well settled that the lack of explicit antecedent basis does not render a claim indefinite when the claim implies the antecedent basis. (*Id.* (citing *Energizer Holdings Inc. v. ITC*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) and *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1376 (Fed. Cir. 2008))). IV asserts that the claim recites that a distributed information access point is presented to "one or more potential users." IV asserts that the claim then states that content is selected from the distributed information access point for addition to the centralized access point "of the particular user" and that the centralized access point "of the particular user" is accessed in order to access the selected content. IV asserts that the claim provides, with reasonable certainty, that the "particular user" is the user from the "one or more potential users" for which content has been selected and accessed. (*Id.* at 9).

Defendants assert that the claim is not reasonably certain under *Nautilus*. Defendants assert that the claim first recites any number of potential users: "one or more potential users." Defendants assert that the next step requires "selecting content . . . for addition to a centralized access point of the particular user." Defendants assert that of the many "potential users" that the claim contemplates, the claim does not specify which one is "the particular user." (Dkt. No. 110-2 at 28). Defendants assert that the claim then requires "accessing the centralized access point of the particular user from one or more distributed information access points to gain access to the selected content." Defendants assert that, again, the claim does not specify which particular "potential user" is "the particular user." (*Id.*).

Defendants assert that the patent discloses that <u>existing</u> users, and not <u>potential</u> users, have a centralized access point. (Dkt. No. 105 at 5). Defendants assert that claim 16 does not indicate who or what selects content. Defendants assert that the claim does not make clear on whose centralized access point content is placed—an existing user, a new user, or one of the potential users. Defendants assert that the claim could be read to cover a method whereby a particular user selects content and signs up for a centralized access point, thereby becoming the particular user. (*Id.*). Alternatively, Defendants assert that even IV suggests the claim can be read to cover the situation where an administrator selects content to add to an existing user's page, as in the "RECOMMENDED FOR YOU" feature cited in IV's tutorial. (*Id.*).

Defendants assert that the facts are similar to *Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, No. 2:13-cv-655, 2014 WL 4352489 (E.D. Tex. Sept. 2, 2014). Defendants assert that in that case, a first claimed step required "one or more computers," a second claimed step required "one or more computers," and then the claim required an action performed by "the at least one of the one or more computers." Defendants assert that the Court noted that pre-*Nautilus* the Court might have been able to read the third step to be "at least one of the one or more computers." But, under *Nautilus*, the Court was "left to guess" the claim's meaning *Id.* at *5. Defendants assert that, here, the claim similarly presents "one or more" things, but the later limitation refers to "the." Defendants assert that the patentee made a conscious choice to depart from the prior language, but it is unknown which among the many potential users is "the particular user." (Dkt. No. 110-2 at 29).

Defendants assert that the claim does not provide "implicit" antecedent basis. Defendants assert that the claim does not describe how a potential user obtains a centralized access point such that one of the potential users is "the particular user." (*Id.*). Defendants assert that one

cannot determine if the recited centralized access point is assigned to a potential user in the process of selection content or was already assigned to a user before then. Defendants assert that dependent claim 17 exacerbates the ambiguity by requiring that "selecting and accessing are implemented by the particular user." Defendants assert that this suggests that a user already has a centralized access point at the time content is selected from the distributed information access point. (*Id.*). Defendants assert this is inconsistent with the claim language that says content is presented to "one or more potential users."

In reply, IV asserts that it is undisputed that "the particular user" refers to one of the "one or more potential users" recited earlier in the claim. IV asserts that the sole issue is whether the claim need also specify which user of the one or more potential users is "the particular user." IV asserts that the claim does not have to make such identification to be definite. (Dkt. No. 103 at 10). IV asserts that the claim has the same scope regardless of which user is "the particular user." IV asserts that in this manner, the present claims are different from those of *Loyalty Conversion Systems*. IV asserts that in *Loyalty Conversion Systems* it was unclear which computers performed the third step: the first set, the second set, or both sets. (*Id.* (citing *Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, No. 2:13-cv-655, 2014 LEXIS 122181 at *17–20 (E.D. Tex. Sept. 2, 2014))). IV asserts that the Court would have still found the term definite, except that a dependent claim recited that the third operation was performed by different computers than those that performed the first two operations. *Id.*

Analysis

The definiteness standard of 35 U.S.C. § 112, ¶ 2 requires that:

[A] patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty. The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable.

Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129–30 (2014). Here, the claim language itself is reasonably certain. The presenting step is performed "to one or more potential users." Next, the selected content is "for addition to a centralized access of *the* particular user." In context of the entire claim, that the claim uses "the" instead of "a" does not generate uncertainty. The "particular" user is merely one of the "one or more potential users." This is not a case such as *Loyalty Conversion Systems*. In *Loyalty Conversion Systems*, the independent claim required "at least one of one or more computers detecting," "at least one of one or more computers granting," and "the at least one of the one or more computers accepting." A dependent claim then required that "different ones of the one or more computers" performed the three functions. The Court stated that, standing alone, the use of "the" in the independent claim did not render the independent claim indefinite. The Court stated, however, that the inconsistent dependent claim rendered the claim indefinite. *Loyalty Conversion Sys. Corp.*, 2014 LEXIS 122181 at *17–20. This is not the case here. As in *Loyalty Conversion Sys.*, the mere use of "the" does not inherently render the claim indefinite. However, in contrast to *Loyalty Conversion Sys.*, '177 Patent dependent claim 17 does not conflict with independent claim 16. Here, the dependent claim adds the requirement that the "selecting and accessing are implemented by the particular user." Such a limitation is merely an additional requirement presented in the dependent claim and does not conflict with the requirements of independent claim 16.

Defendants assert that of the many "potential users" that the independent claim contemplates, the claim does not specify which one is "the particular user." However, the claim is not required to make such an identification. As presented in the claim, the "particular" user is merely one of the "one or more potential users." Defendants further assert that one cannot determine if the recited centralized access point is assigned to a potential user in the process of

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selection content or was already assigned to a user before then. Again, Defendants are adding limitations to the independent claim that are not recited nor required by the claim.

The Court finds that the "centralized access point of the particular user" is definite. The Court construes "centralized access point of the particular user" to mean "the particular user's network resource that can be used to access content."

B. '555 Patent Terms

1. "device key seed S_d" (claims 1, 7, 13-15)

IV's Construction	Defendants' Construction
"a digital value used to generate cryptographic keys, referred to as S_d"	"a digital value referred to as S_d, generated by the storage device, used to generate cryptographic keys"

The parties dispute whether the construction should include "generated by the storage device."

Positions of the Parties

IV asserts that the claim language resolves the dispute as some claims explicitly require the "storage device" to generate the device key seed, while others do not. IV notes that claim 1 recites that the "storage device is adapted to randomly generate the device key seed S_d." IV notes that, in contrast, claim 7 does not have such requirement and only recites "randomly generating a device key seed S_d according [to] a time interval between two specific operations on a storage device." IV asserts that claim differences should end the inquiry. (Dkt. No. 91 at 20).

IV further asserts that the specification does not require the storage device to generate the device key seed. IV asserts that some embodiments teach that the encryption/decryption module generates the device key seed. '555 Patent Abstract, 3:16–20. IV further asserts that the module

may or may not reside in the storage device.[2] (Dkt. No. 91 at 20). IV asserts that the specification is, thus, broader than Defendants' construction. IV further asserts that even if the specification was not broader, Defendants' construction fails because nothing in the specification clearly limits the term to being always generated by the storage device. IV also notes that Defendants did not include "generated by the storage device" in their IPR petition constructions. (*Id.*).

IV asserts that Defendants' argument would render superfluous claim 1's "storage device" limitations. IV also asserts that Defendants' argument ignores that the device key seed could be linked to the storage device in other ways: the seed is based on information from the storage device, even if generated elsewhere. (Dkt. No. 103 at 8).

Defendants assert that the plain language of the claims requires their construction. Defendants assert that the term refers to "<u>device</u> key seed," not a generic key seed. Defendants assert that, in the specification, the device key seed is generated in response to operations or interrupts that occur on the storage device. (Dkt. No. 110-2 at 21 (citing '555 Patent 1:35–43, 2:10–19, Figures 1–2)). Defendants assert that IV's construction reads out of the term the relationship the "device key seed" has with the "storage device." Defendants assert that IV's construction could, thus, refer to any digital value used to generate cryptographic keys. Defendants assert that "device" must be given effect. (*Id.*). At the oral hearing, Defendants also emphasized that dependent claim 2 recited a host key seed. Defendants asserted that the construction needs to distinguish between a host key seed and a device key seed.

Analysis

Some of the claims explicitly require the storage device to be adapted to generate the device key seed S_d (claim 1) and others do not (claims 7 and 15). The fact that some claims

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[2] IV does not provide specification citations for any embodiments in which the module does not reside with the storage device.

explicitly include such requirements and other claims do not counsels that such limitation is not found inherently in every claim. *Phillips*, 415 F.3d at 1314 (a term's context in the various claims can be very instructive).

Further, to the extent that the term "device key seed" requires a relationship to the "storage device," each of the claims explicitly recites that relationship. As noted, claim 1 states that "the storage device is adapted to randomly generate the device key seed." Claims 7 and 15 state that the device key seed is generated "according a time interval between two specific operations on a storage device" and that the device key seed is "randomly generated in response to interrupts that notify the storage device of occurrence of the two specific operations." Thus, though Defendants argue that "device" is not given effect in IV's construction, it is clear that the claims themselves provide the particular effect and relationship to the storage device that is claimed in each instance.

Similarly, the claim language itself provides the relationship of the "host key seed" to the host. Thus, for example, claim 2 describes the "host adapted . . . to generate a host key seed." And claims 8 and 16 describe "a host key seed generated by the host." Thus, the claims themselves provide the context of the key seeds to both the device and host.

Defendants have not pointed to any lexicography, disclaimer or disavowal requiring that the "device key seed be generated in the storage device." *See Arlington Industries, Inc.*, 632 F.3d at 1254 ("Even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.") (internal citations omitted). As such, Defendants' construction is not mandated.

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As noted above, the claims themselves provide the context of the meaning of a "device" or "host" key seed in each claim. In light of the surrounding claim language, and the rejection of Defendants' additional limitations, the Court need only construe "key seed."

The Court construes "key seed" to mean "a digital value used to generate cryptographic keys."

2. **"storage device adapted to store data D, … wherein the storage device is adapted to randomly generate the device key seed S_d in response to interrupts that notify the storage device of occurrence of the two specific operations" (claim 1)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6. Claimed Functions (1) storing data D (2) randomly generating the device key seed S_d in response to interrupts that notify the storage device of occurrence of the two specific operations Corresponding Structure (1) a mobile device, such as a mobile phone, USB handy disk, or a language learning machine (2) This term is indefinite for failure to disclose adequate structure, including at least failure to disclose an algorithm corresponding to a function performed by computer software.

The primary dispute between the parties is whether the term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6. If a means-plus-function term, Defendants assert the term is indefinite for failure to disclose adequate structure/algorithm. As discussed below, the Court finds that the term is not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6. As such, the Court does not reach the indefinite dispute but rather addresses infra the proper construction for the term "storage device."

Positions of the Parties

IV asserts that "storage device" is a structural element. Further, IV cites to a case which found "storage means" to not be a means-plus-function term because "storage" identifies a structural term to one in the art. (Dkt. No. 91 at 22-–3 (citing *i4i LP v. Microsoft Corp.*, No. 6:07-cv-113 (E.D. Tex. 2008))). IV also notes that technical dictionaries define "storage device" in structural terms. (*Id.* at 23 (citing Dkt. No. 91 Ex. E at 424)). IV asserts that the "storage device" used in the '555 Patent relates to computer components, and the specification identifies it as structure: "[t]he storage device 120 may be a mobile device, such as a mobile phone, USB handy disk, or a language learning machine." '555 Patent 3:9–11.

Defendants assert that IV ignores the claim language surrounding "storage device." Defendants assert that such language recites function that makes the term a means-plus-function term. (Dkt. No. 110-2 at 3–4). Defendants assert that claim 1 provides two functions for the storage device: (1) store data and (2) randomly generate the device key seed in response to interrupts. As such, Defendants assert not just any storage device is claimed. Further, Defendants assert that the claim is drafted in means-plus-function form and would mean the same if "storage device" was replaced with "storage means." (*Id.*).

Defendants assert that the claim would be valid if the only function was the first function, which is storing data. However, Defendants assert that there is no structure disclosed in the specification for the second function. Defendants assert that the specification merely suggests a general-purpose computer that is specially programmed through a variety of methods. (*Id.* at 4). Defendants assert that, in such cases, an algorithm for performing the function must be disclosed. Defendants assert that no such algorithm is disclosed and that the "storage device" is literally a black box. (*Id.*).

In reply, IV asserts that it is undisputed that "storage device" has long been understood to have structural meaning. IV asserts that under the *Williamson* test (whether the term is "understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure") the term is not a means term. (Dkt. No. 103 at 2). IV asserts that it has pointed to both intrinsic and extrinsic evidence that indicates "storage device" has a structural meaning. IV asserts that Defendants have offered no evidence that "storage device" does not carry a sufficiently definite structural meaning.

Even if a means-plus-function term, IV asserts that the term is still valid. IV asserts that the specification states the key seed generation operations can be "implemented in hardware or software" and can cause a processor to execute program code such that it operates analogous to application specific logic circuits. (*Id.* at 3 (citing '555 Patent 3:15–20, 4:48–65)).

Analysis

There is a rebuttable presumption that 35 U.S.C. § 112, ¶ 6 does not apply when the term "means" is not utilized. *See Williamson,* 792 F.3d 1339, 1348–1349 (Fed. Cir. 2015) (holding that a presumption exists if the word "means" is not used but overturning the prior standard that the presumption is "strong"). "The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349. Thus, "[w]hen a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* Defendants have not overcome the presumption.

Defendants' primary argument is that the claim recites function. Mere recitation of function is not the proper legal test. *See id.* Defendants do not appear to contest that the term

"storage device" connotes a structural meaning to those of skill in the art. Similarly, the '555 Patent clearly describes the term in structural terms: "[t]he storage device 120 may be a mobile device, such as a mobile phone, USB hand disk or a language learning machine." '555 Patent 3:9–11. IV also presents extrinsic evidence from a Microsoft Computer Dictionary that indicates the term carries structural meaning to those skilled in the art. (Dkt. No. 91 Ex. at 424 ("An apparatus for recording computer data in permanent or semi-permanent form . . . the former refers to random access memory (RAM) and the latter refers to disk drivers and other external devices.")). In the context of the intrinsic and extrinsic evidence, it is clear that "storage device" is not merely a nonce word and does not operate as a substitute for "means." Rather, the term carries structural meaning. *See Williamson,* 792 F.3d at 1350–51.

The Court finds that the term "storage device adapted to store data D, … wherein the storage device is adapted to randomly generate the device key seed S_d in response to interrupts that notify the storage device of occurrence of the two specific operations" is not a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6.

3. **"wherein the device key seed S_d is said randomly generated in response to interrupts that notify the storage device of occurrence of the two specific operations" (claims 7 and 15)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6. Claimed Function randomly generating a device key seed S_d in response to interrupts that notify the storage device of occurrence of the two specific operations Corresponding Structure This term is indefinite for failure to disclose adequate structure, including at least failure to disclose an algorithm corresponding to a

| | function performed by computer software. |

The first dispute between the parties is whether the term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6. If a means-plus-function term, Defendants assert the term is indefinite for failure to disclose adequate structure/algorithm. As discussed below, the Court finds that the term is not subject to a means-plus-function analysis under 35 U.S.C. § 112, ¶ 6. As such, the Court does not reach the indefinite dispute but rather addresses infra the proper construction for the term "storage device."

Positions of the Parties

IV asserts that the term is not a means-plus-function term. IV notes that the claim is a method claim and asserts that method claims are drawn to processes and thus there is no requirement that structure be disclosed. (Dkt. No. 91 at 26). IV asserts that the means-plus-function analysis should end there. IV asserts that Defendants' objections to the claim language are written description and enablement arguments cloaked as a means-plus-function challenge. IV asserts that such issues should be addressed in summary judgement and trial. IV notes that this is especially true when the examiner raised written description and enablement rejections and the patentees successfully traversed such rejections. (*Id.* at 27).

Defendants assert that the claim limitation states the device key seed is "randomly generating in response to interrupts." Defendants further assert that these interrupts occur on the storage device, which means that the storage device performs the "generating" step. (Dkt. No. 110-2 at 8). Defendants assert that in prosecution, the applicants added the wherein clause at issue. Defendants assert that, as to claim 1, the applicants stressed that the prior art did not teach "a storage device [] adapted to randomly generate the device key seed S_d in response to interrupts. . . ." (*Id.* (quoting Dkt. No. 99 Ex. 2 at IV-INSEDTX00000224-27)). Defendants

assert that with regard to claims 7 and 15, the applicant stated that they had amended the claim "generally similar to claim 1" and that the same arguments applied. (*Id*. (quoting Dkt. No. 99 Ex. 2 at IV-INSEDTX00000224-27)). Defendants assert that the applicants, thus, incorporated the structural limitations of the "storage device" into the method claims 7 and 15. (Dkt. No. 110-2 at 8).

Defendants cite to a District Court case for the proposition that when a method claim recites a structural limitation but does not describe sufficiently definite structure for that limitation, the claim term is a means-plus-function term. (Dkt. No. 110-2 at 8 (citing *Intellectual Ventures II, LLC v. AT&T Corp.*, No. 1:13-cv-116, 2015 WL 4138590 at *15 (W.D. Tex. Jul. 8, 2015))). Defendants assert this is the case here because "storage device" does not provide sufficiently definite structure. Moreover, Defendants assert that the assigned function has no corresponding algorithmic structure in the specification. (Dkt. No. 110-2 at 8–9).

In reply, IV asserts that the claims are not written in means-plus-function format. Further, IV asserts that the prosecution history statements on which Defendants rely are not a clear and unmistakable disclaimer regarding the "storage device." IV notes that the arguments do not relate to the storage device itself generating the key seed. Rather, IV asserts the arguments were directed toward distinguishing the art as not teaching the generation of the key seed in response to interrupts. (Dkt. No. 103 at 5 (citing Dkt. No. 99 Ex. 2 at IV-INSEDTX00000232-33)). IV also asserts that even accepting Defendants' position, the Applicant only stated that method claims 7 and 15 were "generally similar" to claim 1. IV asserts that the Applicant never asserted that the claims were identical. (*Id.*).

<u>Analysis</u>

The means-plus-function analysis regarding the use of "storage device" in claim 1, presented above, is equally applicable to claims 7 and 15. Thus, the disputed term in claims 7 and 15 is not a means-plus-function term. Further, in the method claims 7 and 15, the language Defendants point to is merely the language of the method steps. This is not a case as in *Williamson* where it was found that the passage in question "is nonetheless in a format consistent with traditional means-plus function claim limitations." *See Williamson*, 792 F.3d at 1350. Here, the passage in question is, in fact, the opposite, as it is not drafted in a format consistent with traditional means-plus-function claim limitations.

The Court finds that "wherein the device key seed S$_d$ is said randomly generated in response to interrupts that notify the storage device of occurrence of the two specific operations" is not a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6.

4. "storage device" (claims 1, 7, 15)

IV's Construction	Defendants' Construction
No construction is necessary. Plain and ordinary meaning. Alternatively, "volatile or nonvolatile memory for storing data"	Should the Court conclude that this term is not part of a term subject to 35 U.S.C. § 112, ¶ 6, defendants propose the following construction: "a device that has non-volatile memory for the non-transitory storage of data to be encrypted"

The parties dispute whether the storage device is limited to non-volatile memory and whether the storage device must include the data to be encrypted.

<u>Positions of the Parties</u>

IV asserts that the '555 Patent does not provide any special meaning to "storage device." IV cites to a variety of passages utilizing the term in a general sense. (Dkt. No. 91 at 21 (citing

'555 Patent Abstract, 1:24–26, 3:2–4)). IV asserts that absent lexicography, disavowal, or disclaimer, the plain meaning should control. (*Id.*). If the term is construed, IV asserts its construction is consistent with the intrinsic and extrinsic evidence. IV asserts that the intrinsic evidence does not differentiate between volatile and non-volatile memory or require the storage device to provide for non-transitory storage of data to be encrypted. IV asserts that the term "volatile" does not appear in the patent and that Defendants did not include this term in their IPR petition constructions. (*Id.*). IV asserts that the Microsoft Computer Dictionary defines a "storage device" as encompassing volatile memory such as RAM:

> An apparatus for recording computer data in permanent or semi-permanent form. When a distinction is made between primary (main) storage devices and secondary (auxiliary) storage devices the former refers to random access memory (RAM) and the latter refers to disk drives and other external devices.

(Dkt. No. 91 Ex. E at 424).

Defendants assert that lay jurors may understand the term in other context (lockers, luggage, etc.), but since this is software patent, what is relevant is the understanding of one skilled in the software field. (Dkt. No. 110-2 at 21).

Defendants assert that its construction requires the memory to be permanent or semi-permanent, while IV contends the memory can also be transitory or volatile. Defendants assert that the Microsoft Computer Dictionary supports Defendants' construction, because the definition for "storage device" begins by stating that it is an apparatus that records data in "permanent or semi-permanent form." Defendants assert that the Microsoft Computer Dictionary defines "volatile memory" as "[m]emory, such as RAM, that loses its data when the power is shut off." (Dkt. No. 99 Ex. 4 at 9). Defendants assert that clearly the patent did not contemplate that the data would be lost when the power is shut off. (Dkt. No. 110-2 at 21–22).

Defendants further assert that the surrounding claim limitations point away from a volatile memory. Defendants assert that the other claim limitations require the storage device to (1) include an encryption/decryption module adapted to generate a device key seed and adapted to apply the seed to data encryption of the data and (2) be adapted to randomly generate the device key seed in response to interrupts. (Dkt. No. 110-2 at 22–23 (citing claim 1)). Defendants assert the claimed functionality is inconsistent with the notion that the data could be lost at some point in the process if the power were to be shut off. Defendants further assert that claim 15 recites a "tangible non-transitory computer-readable medium." Defendants further assert that the examples in the specification are examples of permanent or semi-permanent memory: "mobile phone, USB disk, or a language learning machine." '555 Patent 3:9–11.

Defendants finally assert that IV's construction does not require the storage device to contain the data to be encrypted. Defendants assert that the claims have this requirement, citing claim 1. Defendants note that claim 1 requires the storage device to be adapted "to store data D" and then later the claim recites that the encryption/decryption module included in the storage data device is "adapted to generate the device key seed S_d to data encryption of the data D." Defendants similarly assert that the specification states that the system "includes a storage device storing data D and an encryption/decryption module" and that the encryption/decryption module "applies the device key seed S_d and a seed generated by a host to data encryption." '555 Patent 1:35–43.

In reply, IV asserts that nothing in the specification excludes RAM, and the relevant dictionary definition explicitly includes RAM. IV asserts that the specification discloses that the storage device could be a "mobile device" ('555 Patent 3:9–11) and that mobile devices can

include processors with RAM. IV asserts there is no evidence to support the assertion that RAM is inconsistent with the claims.

As to whether the claims require the "storage device" to contain the data to be encrypted, IV asserts that the claims teach that this is not required. In particular, IV notes that though claim 1 requires the "storage device" to be "adapted to store data D," claim 7 does not have such restrictions. As to the specification passage at 1:35–43 relied upon by Defendants, IV notes that the specification passage makes clear that this is "in an exemplary embodiment." '555 Patent 1:35–36.

Analysis

Defendants have not pointed to any lexicography, disclaimer or disavowal excluding volatile memory such as RAM. *See Arlington Industries, Inc.*, 632 F.3d at 1254 ("Even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.") (internal citations omitted). Absent such restrictions, the plain meaning should control. *Thorner v. Sony Computer Entertainment America LLC*, 669 F.3d 1362, 1365–67 (Fed. Cir. 2012). The plain meaning evidence cited by both parties makes clear that the plain meaning of "storage device" is inclusive of volatile memory such as RAM. (Dkt. No. 91 Ex. E at 424); (Dkt. No. 99 Ex. 4 at 9).

Defendants make much of asserting that claimed functionality (claim 1) is inconsistent with the notion that the data could be lost at some point in the process if the power were to be shut off. However, nothing in the claim language or specification mandates such a position. As to the claim 15 recitation of a "tangible non-transitory computer-readable medium," this language is directed toward the medium that stores the computer executable instructions. This language is

separate from the "storage device" language found later in the claim. The Court rejects

Defendants' position that "storage device" is limited to "non-volatile" memory.

As to whether the "storage device" must include the data to be encrypted, again such a

limitation is merely an embodiment in the specification. Moreover, the fact that some claims

explicitly include such requirements and other claims do not further counsels that such limitation

is not found inherently in every claim. *Phillips*, 415 F.3d at 1314 (a term's context in the various

claims can be very instructive). Having rejected the Defendants' position that the storage device

is limited to non-volatile memory for non-transitory storage, the Court has resolved the dispute

between the parties. The Court thus finds that no further construction is needed.

The Court finds that "storage device" requires no further construction and the plain

and ordinary meaning applies.

5. **"encryption/decryption module adapted to randomly generate a device key seed S_d according to a time interval between two specific operations on the storage device, and adapted to apply the generated device key seed S_d to data encryption of the data D" (claim 1)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6.
No construction is necessary. Plain and ordinary meaning.	Claimed Functions (1) randomly generating a device key seed S_d according to a time interval between two specific operations on the storage device (2) applying the generated device key seed S_d to data encryption of the data D Corresponding Structure (1) This term is indefinite for failure to disclose adequate structure, including at least failure to disclose an algorithm corresponding to a function performed by computer software. (2) The key generation algorithm described at 4:12-14, and the encryption mechanisms

	described at 4:24-30, including "left rotating r bits of authentication data" and TEA (Tiny Encryption Algorithm)

The first dispute between the parties is whether the term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6. If a means-plus-function term, Defendants assert the term is indefinite for failure to disclose an adequate structure/algorithm. IV does not propose any construction under 35 U.S.C. § 112, ¶ 6.

Positions of the Parties

IV asserts that while in some contexts "module," by itself, might not be sufficient definite structure, the term "encryption/decryption module" in the '555 Patent connotes structure. IV cites for support *Genband USA LLC v. Metaswitch Networks Ltd.*, No. 2:14-cv-33, 2015 U.S. Dist. LEXIS 103512, *40 (E.D. Tex. Aug. 6, 2015). IV notes that *Genband* found that "telecommunications interface module" was not a means-plus-function term. (Dkt. No. 91 at 24). IV asserts that a person skilled in the art would know that an encryption/decryption module can be implemented in hardware or software. IV asserts that this conforms to the specification which states that "to reduce cost, a software implementation may be the best choice." '555 Patent 3:16–17. IV asserts that the encryption mechanism can be "any symmetric encryption, and the complexity and security level of a software encryption method can be selected according to the hardware and security requirements." *Id.* at 4:21–24. IV further notes that off-the-shelf components could contain the module. (Dkt. No. 91 at 24–25 (citing a passage ('555 Patent 4:48–52) which states that the encryption may take the form of program code embodied on tangible media such as floppy diskettes, CD-ROMS, hard drives or any other readable storage medium)).

IV asserts that, in prosecution, to overcome a written description rejection, the patentee emphasized that the limitation was adequately described because pseudo-random generators were known in the art. In particular, in prosecution, IV emphasized prior art which indicated that it was known that a seed number could be used for a pseudo-random generator. IV thus asserts that one skilled in the art would understand that a device key seed could be obtained from a time interval value. (Dkt. No. 91 at 25).

IV asserts that extrinsic evidence supports the finding that an "encryption/decryption module" exists as stand-alone, structural software. In particular, IV cites to a variety of extrinsic evidence software documentation for software programs that could be off-the-shelf "encryption/decryption" modules. (*Id*. at 25–26).

Defendants assert that the claim limitation provides two functions for the module: (1) randomly generate a device key seed according to a time interval between two operations on the storage device and (2) apply the generated device key seed to data encryption of the data. Defendants assert that these functions are recited in standard means-plus-function format and that replacing "module" with "means" would yield the same claim meaning. Thus, Defendants assert that according to *Williamson*, the claim term is a means-plus-function claim term. (Dkt. No. 110-2 at 5).

Defendants assert that under *Williamson*, as a matter of law, "module" itself does not provide structure. (Dkt. No. 110-2 at 5 (citing *Williamson*, 792 F.3d at 1350)). Defendants also assert that just as the "distributed learning control" modifier of *Williamson* did not provide structure to "module," here "encryption/decryption" similarly only describes what the module does. (*Id.*). Defendants assert that the structure, if any, only comes from a means-plus-function analysis of the specification. Defendants assert that IV's admission that the "module" can be any

hardware or software, so long as it performs the claimed function, confirms that the term is a means-plus-function term. (Dkt. No. 105 at 3).

For the second function ("apply the generated device key seed…"), Defendants assert that the specification provides structure. In particular, Defendants state that the specification lists one algorithm for generating a key from the device key seed. (Dkt. No. 110-2 at 5 (citing '555 Patent at 4:4–19)). Defendants also state that two algorithms for encrypting data with a key are disclosed. (*Id.* at 5–6 (citing '555 Patent at 4:24–27, 4:27–30)). But, Defendants assert that the specification provides no algorithms for the first function: "randomly generate a device key seed S_d according to a time interval…." Defendants assert that the patentee conceded this during prosecution. (*Id.* at 6 (citing Dkt. No. 91 Ex. F at IV-INSEDTX-00000024-25)). Defendants assert that although the specification states that the function could be performed by code loaded on a general purpose computer, the specification provides no algorithm for the claimed function. (*Id.*).

Defendants assert that IV merely argues that the specification discloses that hardware or software could be utilized. Defendants assert, under the law, that is not enough. Defendants assert that a computer implemented function still requires the algorithm to be disclosed. (Dkt. No. 110-2 at 6). Defendants assert that if IV asserts that the specification discloses hardware could be used, such a position does not save IV. Defendants assert that during prosecution, the patentee argued that the function "generating a device key seed S_d according to a time interval…" did not exist in the prior art. (*Id.* at 7). Defendants assert that this contradicts any assertion that the patentee envisioned a specific structure for the claimed module at the time of the invention. (*Id.*).

As to IV's extrinsic evidence regarding encryption/decryption software, Defendants assert that it is not relevant for two reasons. First, Defendants assert that none of the evidence reflects the understanding of one in the art at the time of the invention (November 2004). Second, Defendants assert that nothing in the extrinsic evidence reflects the claim language regarding "generate a device key seed S_d according to a time interval between two specific operations on the storage device." (*Id.*).

In reply, IV asserts that the mere use of "module" does not end the inquiry as to whether the term is a means-plus-function term. IV asserts that the extrinsic evidence cited by both parties identifies encryption/decryption modules. (Dkt. No. 103 at 4 (citing Dkt. No. 91 at 25 (evidence that encryption/decryption structure often exists as a type of software structure) and Dkt. No. 99-4 (providing a "cryptographic module" government specification))).

IV asserts that the intrinsic record teaches structure, in particular hardware or software. As to software, IV asserts that the module may take the form of program code. (Dkt. No. 103 at 4 (citing '555 Patent 3:15–16, 4:48–65)). IV quotes the patent: "[w]hen implemented on a general purpose processor, the program code combines with the processor to provide a unique apparatus that operates analogously to application specific logic circuits." '555 Patent 4:62–65. IV asserts that the module thus acts like a circuit performing the claimed function. IV points to multiple Federal Circuit cases that have found "circuits" to be sufficient structure. (Dkt. No. 103 at 4).

IV asserts that even if a means-plus-function term, Defendants have not shown that there is a lack of corresponding structure. IV asserts that, as explained, disclosure of circuitry is sufficient and, at a minimum, there is a genuine issue of fact on that point. (Dkt. No. 103 at 5).

<u>Analysis</u>

"'Module' is a well-known nonce word that can operate as a substitute for "means" in the context of § 112, para. 6." *Williamson*, 792 F.3d at 1350. Further, the claim term in question is drafted in a traditional means-plus-function format. IV is correct that this Court, in *Genband*, found that "telephone line interface module" is not subject to a means-plus-function analysis. However, the evidence presented in that case made it clear that a "telephone line interface" was a well-known particular structure. Thus, the "prefix" before "module" connoted particular structure. Further, in the art "telephone line interface modules" reference physical telephone line interface units that are interchangeable with other such units. In contrast, the evidence here does not show that "encryption/decryption" carries a known structural context. The *Genband* Court also found that other "module" terms, "packetization modules" and "echo cancellation modules," were means-plus-function terms that merely refer to any structure that can perform the "packetization" and "echo cancellation" functions. The term here, "encryption/decryption module" is more similar to those terms.

IV cites to extrinsic evidence that encryption/decryption mechanisms exist as software (Dkt. No. 91 at 25–26) and that the term "cryptographic module" can be found in a government specification (Dkt. No. 103 at 4). However, those references do not teach that "encryption/decryption module" provides a known structural connotation. Further, as IV asserted, the specification merely indicates that the term can mean any "software or hardware". (Dkt. No. 91 at 24); '555 Patent 3:15–16. In context of the specification, the "encryption/decryption module" is merely a black box that could be anything. Further, even if limited to software, the specification does not seem to limit the term beyond the function as the specification appears to teach that any software that performs the function is possible: "any

symmetric encryption, and the complexity and security level of a software encryption method can be selected according to the hardware and security requirements." '555 Patent at 4:21–24. In light of the intrinsic and extrinsic evidence, on balance, the Court finds that Defendants have overcome the presumption that, despite the absence of the word "means," "encryption/decryption module" is a means-plus-function term.

Having found the term to be a means-plus-function term, the claimed function and corresponding structure must be identified.[3] The claim term itself states two functions: (1) "to randomly generate a device key seed S_d according to a time interval between two specific operations on the storage device," and (2) "to apply the generated device key seed S_d to data encryption of the data D." The Court finds that no corresponding structure is disclosed for function (1). Though the specification describes techniques for determining the time interval ('555 Patent 3:34–56), the specification does not disclose structure that "to randomly generate a device key seed S_d according to a time interval." IV emphasizes that to overcome a written description rejection, the patentee cited prior art to assert that the limitation was adequately described because pseudo-random generators were known in the art for achieving this function. However, the written description requirements and the requirements under § 112, 6 are different. Under § 112, ¶ 6, even if the specification had explicitly stated[4] that known structure could be utilized "to randomly generate a device key seed S_d according to a time interval," such a statement is not sufficient:

> The inquiry is whether one of skill in the art would understand the specification itself to disclose a structure, not simply whether that person would be capable of implementing a structure. *Med. Instrumentation*, 344 F.3d at 1212 (citing *Atmel*, 198 F.3d at 1382). Accordingly, a bare statement that known techniques or methods can be used does not disclose structure. To conclude otherwise would

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[3] The Court notes that IV has provided no alternative function and structure construction.
[4] IV has not pointed to such statement.

vitiate the language of the statute requiring "corresponding structure, material, or acts described in the specification."

Biomedino, LLC v. Waters Technologies Corp., 490 F.3d 946, 953 (Fed. Cir. 2007) (finding a term indefinite for failure to disclose corresponding structure for a § 112, ¶ 6 term); s*ee also Aristocrat Technologies Australia PTY Ltd v. International Game Technology*, 521 F.3d 1328, 1334 (Fed. Cir. 2008) (finding that a statement in the specification that "appropriate programming" within the capability of a worker in the art is not sufficient disclosure under § 112, ¶ 6).

The Court construes "encryption/decryption module adapted to randomly generate a device key seed S_d according to a time interval between two specific operations on the storage device, and adapted to apply the generated device key seed S_d to data encryption of the data D" as a means-plus-function term subject to § 112, ¶ 6. The Court further finds the term to be indefinite for failure to disclosure structure corresponding to the function "to randomly generate a device key seed S_d according to a time interval between two specific operations on the storage device."

6. **"the encryption/decryption module is further adapted to randomly generate the device key seed S_d according to an occurrence time of one of the specific operations as obtained from a clock" (claim 13)**

IV's Construction	Defendants' Construction
This term is not subject to 35 U.S.C. § 112, ¶ 6.	This term is subject to 35 U.S.C. § 112, ¶ 6.
No construction is necessary. Plain and ordinary meaning.	Claimed Function randomly generating a device key seed S_d according to an occurrence time of one of the specific operations as obtained from a clock Corresponding Structure This term is indefinite for failure to disclose adequate structure, including at least failure to disclose an algorithm corresponding to a

	function performed by computer software.

The dispute between the parties is substantially similar to the "encryption/decryption module" term of claim 1.

Positions of the Parties

IV asserts that the dispute is the same as the prior encryption/decryption module dispute regarding claim 1. IV asserts that the added language regarding the occurrence time obtained from a clock does not change the issues presented. (Dkt. No. 91 at 28). IV asserts that the '555 Patent teaches using time differences for operations and the use of a clock. '555 Patent 3:27–29, 3:34–45, 3:52–56. IV asserts that because the "encryption/decryption module" is structural and the '555 Patent teaches using clock inputs to generate the seed, the claim term is definite. (Dkt. No. 91 at 29).

Defendants assert that claim 13 adds a third function to the "encryption/decryption module" of claim 1 (regarding the occurrence time obtained from a clock). Defendants assert that for this function, the specification provides no algorithm. Though IV identifies a clock in the specification, Defendants assert that IV does not identify the algorithm for carrying out the claimed function. (Dkt. No. 110-2 at 6).

Analysis

The basic dispute between the parties is the same as with the preceding "encryption/decryption module" term. For the reasons presented above, the Court finds that the term is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6. The function is "to randomly generate the device key seed S_d according to an occurrence time of one of the specific operations as obtained from a clock." The passage at '555 Patent 3:34–56 concludes with "the storage device 120 can obtain the system clock wherein the operation occurred." This disclosure

addresses the functional language related to "one of the specific operations as obtained from a clock." However, for the reasons also described above for the preceding "encryption/decryption module" term, the specification fails to provide structure for the function "to randomly generate the device key seed S_d according to an occurrence time." For the same reasons as discussed with regard to the prior "encryption/decryption module" term, this "encryption/decryption module" is also indefinite.

The Court construes "the encryption/decryption module is further adapted to randomly generate the device key seed S_d according to an occurrence time of one of the specific operations as obtained from a clock" as a means-plus-function term subject to § 112, ¶ 6. The Court further finds the term to be indefinite for failure to disclosure structure corresponding to the function "to randomly generate the device key seed S_d according to an occurrence time of one of the specific operations as obtained from a clock."

CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are **ORDERED** that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are **ORDERED** to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

Within thirty (30) days of the issuance of this Memorandum Opinion and Order, the parties are hereby **ORDERED**, in good faith, to mediate this case with the mediator agreed upon by the parties. As a part of such mediation, each party shall appear by counsel and by at least one corporate officer possessing sufficient authority and control to unilaterally make binding

decisions for the corporation adequate to address any good faith offer or counteroffer of settlement that might arise during such mediation. Failure to do so shall be deemed by the Court as a failure to mediate in good faith and may subject that party to such sanctions as the Court deems appropriate.

        So ORDERED and SIGNED this 11th day of January, 2016.

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RODNEY   GILSTRAP
UNITED STATES DISTRICT JUDGE