

DIGITAL RETAIL APPS, INC., Plaintiff,**v.****H-E-B, LP, Defendant.**Civil No. 6-19-cv-00167-ADA.**United States District Court, W.D. Texas, Waco Division.**

January 23, 2020.

Digital Retail Apps, Inc., Plaintiff, represented by Matthew C. Holohan, Sheridan Ross P.C., pro hac vice, Tara K. Hawkes, Sheridan Ross P.C., pro hac vice, Benjamin R. Johnson, Toler Law Group, PC, Robert R. Brunelli, Sheridan Ross P.C., Todd P. Blakely, Sheridan Ross P.C. & Jeffrey G. Toler, Toler Law Group, PC.

H-E-B, LP, Defendant, represented by Joseph P. Reid, Perkins Coie LLP, pro hac vice, Skyler M. Howton, Perkins Coie LLP, Thomas N. Millikan, Perkins Coie LLP & Andrew N. Klein, Perkins Coie LLP, pro hac vice.

CLAIM CONSTRUCTION ORDER

ALAN D. ALBRIGHT, District Judge.

Before the Court are the Parties' claim construction briefs: Plaintiff Digital Retail Apps, Inc's ("DRA") opening, responsive, and reply briefs (ECF No. 53, 55, and 59, respectively) and Defendant H-E-B, LP's opening, responsive, and reply briefs (ECF No. 54, 56, and 60, respectively). The Court held the Markman hearing on January 9, 2020. ECF No. 65. During that hearing, the Court informed the Parties of the constructions it intended to provide for all terms. This Order does not alter any of those constructions.

I. BACKGROUND

DRA filed this lawsuit on February 20, 2019, alleging that H-E-B infringed U.S. Patent Nos. 9,262,781 ("the '781 Patent") and 9,934,506 ("the '506 Patent"). The '506 Patent is a continuation of the '781 Patent and they share a common specification. The patents are generally directed to loss and theft prevention when in-store electronic sales are happening real time. The "background" section of the specification describes how in-store electronic transactions can accelerate business in the retail environment, but then caveats such benefits with the contention that "existing mobile shopping applications do not provide a complete and secure solution for in-store mobile payment and self-checkout." Because such solutions do not exist, the specification states that the patent will provide "a system that allows a consumer to proceed with a transaction for goods on demand, and to do so in a secure fashion that is acceptable to both the consumer and the retailer."

Although the technology is not something completely new, the patents describe how the in-store self-service transaction process is performed. First, a retailer enables a consumer to use a mobile device to purchase goods or services in the retailer's store. In the asserted claims of the '781 patent, a server receives data from a consumer's mobile device relating to the consumer's purchase of goods or services from the retailer. Next, the server communicates with a payment processing system to confirm that the transaction is approved. On approval of the transaction, a unique token associated with the purchase is generated and transmitted to the mobile device and a retailer device. Finally, the retailer device, such as a kiosk or other stationary hardware, communicates with the server to verify the token and confirm that the transaction is valid.

The '506 patent, as a continuation of the '781 patent, focuses on certain functions of the retailer device. "In particular, the retailer device receives a token from the consumer's mobile device and communicates with a server to verify the token and confirm that the transaction is valid." ECF No. 53 at 2. Furthermore, the claims of the '506 patent also describe prompting a user of a retailer device to confirm that the consumer's purchase has been inspected and approved.

II. LEGAL PRINCIPLES

The general rule is that claim terms are generally given their plain-and-ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds by* 135 S. Ct. 1846, 1846 (2015). ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time."). The plain and ordinary meaning of a term is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1313.

"Although 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)). "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

Although extrinsic evidence can also 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. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)). Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony also may be helpful, but an expert's conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

The "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* To disavow the full scope of a claim term, the patentee's statements in the specification or prosecution history must represent "a clear disavowal of claim scope." *Id.* at 1366. Accordingly, when "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Proprs. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

Under the doctrine of claim differentiation, a court presumes that each claim in a patent has a different scope. *Phillips*, 415 F.3d at 1314-15. The presumption is rebutted when, for example, the "construction of an independent claim leads to a clear conclusion inconsistent with a dependent claim." *Id.* The presumption is also rebutted when there is a "contrary construction dictated by the written description or prosecution history." *Seachange Int'l., Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005). The presumption does not apply if it serves to broaden the claims beyond their meaning in light of the specification. *Intellectual Ventures I LLC v. Motorola Mobility LLC*, 870 F.3d 1320, 1326 (Fed. Cir. 2017).

A. Means-Plus Function Claiming

A patent claim may be expressed using functional language. See 36 U.S.C. § 112(f); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347-49 (Fed. Cir. 2015). In particular, § 112(f) provides that a structure may be claimed as a "means . . . for performing a specified function" and that an act may be claimed as a "step for performing a specified function." *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002). While there is a rebuttable presumption § 112(f) applies when the claim language includes "means" or "step for" terms, and that it does not apply in the absence of those terms, the presumption stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function. *Id.*

When it applies, § 112(f) limits the scope of the functional term "to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof." *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation involves multiple steps. "The first step . . . 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). "

[T]he 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.* 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.* The corresponding structure "must include all structure that actually performs the recited function." *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112 does not permit "incorporation of structure from the written description beyond that necessary to perform the claimed function." *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112(f) 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. Austral. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

B. Indefiniteness

"[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). Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application was filed. *Id.* at 911.

In the context of a claim governed by 35 U.S.C. § 112, 6, the claim is indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351-52. The disclosure is inadequate when one of ordinary skill in the art "would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim." *Id.* at 1352. Computer-implemented means-plus-function claims are indefinite unless the specification discloses an algorithm to perform the function associated with the limitation. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1319 (Fed. Cir. 2012)

III. ANALYSIS

After reviewing the parties' briefing, the Court determines that "user of the retailer device," "verifying," "currently unavailable for purchase," "transmitting to the electronic device the goods or services purchased by the consumer," and "displaying on the electronic device the goods or services purchased,"^[1] be given their plain and ordinary meaning that a person of ordinary skill in the art would ascribe to it. For all these terms, neither of the exceptions to the general rule that plain and ordinary meaning applies. *Thorner*, 669 F.3d at 1365. Furthermore, none of these terms are difficult technical terms for which a construction would help the jury understand the meaning of the term. *Kroy IP Holdings, LLC v. Safeway, Inc.*, No. 2:12-cv-800-WCB, 2014 WL 3735222, at *2 (E.D. Tex., July 28, 2014). Therefore, the Court need not provide any additional construction.

A. "first communication module" ('506 Patent Cls. 12, 18)

DRA's Proposed Construction

H-E-B's Proposed Construction

Plain and ordinary meaning. Not subject to Section 112(f).

Subject to Section 112(f).

Alternatively, subject to Section 112(f).

Functions: (1) "transmitting a request for the server to verify the consumers in store purchase of goods and services, said request including the unique token;" (2) "receiving a response from the server indicating whether the unique token is valid;" (3) "receiving from the server purchase information associated with the unique token"

Structure: "the service provider's web API"

Functions: (1) "transmitting a request for the server to verify the consumers in store purchase of goods and services, said request including the unique token;" (2) "receiving a response from the server indicating whether the unique token is valid;" (3) "receiving from the server purchase information associated with the unique token"

Structure: Indefinite due to a lack of corresponding structure.

DRA contends that "first communication module" should bear its plain-and-ordinary meaning because of the lack of means-plus-function language creates a presumption that the term is not a means-plus-function term. ECF No. 53 at 9; *Diebold Nixdorf, Inc. v. Int'l Trade Comm'n*, 899 F.3d 1291, 1298 (Fed. Cir. 2018). DRA further argues H-E-B cannot overcome this presumption because the term "communication module" is a definite structure in the context of the '506 Patent. DRA argues "the specification makes clear that the term 'module' refers to software and thus 'communication module' recites software related to communication." *Id.*

H-E-B contends "first communication module" requires construction because 'module' is a nonce word; thus, the nonce word "module" operates as a substitute for 'means' in the context of section 112, paragraph 6. ECF No. 54 at 15-16.

Additionally, and assuming the Court finds the term requires a means-plus-function construction, both parties provided alternative constructions. Both parties agree on the functions of "first communication module." However, H-E-B argues the claim is indefinite due to a lack of structure. On the other hand, DRA contends "the service provider's web API" connotes sufficient structure. The Court will first address whether the claim requires construction.

1. "first communication module" is subject to the application of § 112(f).

The lack of means-plus-function language creates a presumption that the term is not a means-plus-function term. *Diebold Nixdorf*, 899 F.3d at 1298. In order to overcome this presumption, H-E-B must demonstrate that "the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Id.* H-E-B has overcome the presumption in this case.

In *Williamson v. Citrix Online, LLC*, the Federal Circuit faced a similar term at issue: "distributed learning control module." 792 F.3d at 1348-54. Although that term did not expressly invoke the word "means," the Federal Circuit noted that "[m]odule' is a well-known nonce word that can operate as a substitute for 'means' in the context of § 112, para. 6." *Id.* at 1350. Furthermore, the court went on to explain that "'module' is simply a generic description for software or hardware that performs a specified function." *Id.* The Court finds this case, using similar language to the claim at issue, persuasive. Similarly, the term "communication module" simply refers to a module that is used in communication. Other than generic references, the patent provides no specific details concerning the "first communication module," such as what type of communication it undertakes or how the module is implemented.

Moreover, the patent in this case further supports the proposition that "first communication module" is a means-plus-function term. Consistent with *Williamson*, the patents use "module" to connote portions of software that perform certain functions. For instance, the specification states that "[i]n the preferred embodiment, the self-payment application is one of 21 shopper activity-based software modules that comprise a suite of white label branded mobile shopping 'apps' brand-customized for an individual retailer." '506 Patent at 8:45-49 (emphasis added). Additionally, as H-E-B pointed out, "various functionality is described as being performed by 'modules' within the software application, including: self-payment functionality ('506 Patent at 14:31-35); the QR generator ('506 Patent at 25:60-63); and other optional features ('506 Patent at 52:66-Col.53:4, Col. 53:7-11). Thus, the overwhelming evidence supports H-E-B's contention that "first communication module" is a means-plus-function claim.

DRA contends that even though "module" may be a nonce term, "first communication module" does not fall within means-plus-function claiming because "communication" confers sufficient structure to avoid means-plus-function construction. ECF No. 55 at 11. DRA further contends that the claim is not a means-plus-function term because the "claims recite a specific set of communications between specific components, and thus describe sufficient structure to avoid means-plus-function construction." *Id.* The Court, however, is not persuaded.

In *Williamson*, the Federal Circuit concluded "module" was a nonce word because it did "not provide any indication of structure" but instead "set forth the same black box recitation of structure for providing the same specified function as if the term 'means' had been used." 792 F.3d at 1350. Furthermore, the addition of the "prefix 'distributed learning control' d[id] not impart structure into the term 'module'" because although "portions of the claim did describe certain inputs and outputs at a very high level," the claim did "not describe how the 'distributed learning control module' interacts with other components . . . in a way that might inform the structural character of the limitation-in-question or otherwise impart structure. *Id.* at 1351. Similarly, the prefix "first communication" does not impart structure into the term 'module' beyond anything that is purely functional. The specification never attributes "communications" to a particular structure or group of structures within the description of the invention. Instead, "communication" and "communications" are referenced broadly throughout the specification, in what appears to be an attempt to capture all possible means of communication. See, e.g., Col. 10:40-44; Col. 20:20-22.

Furthermore, the case cited by DRA does not support their position. In *Diebold Nixdorf, Inc v. Int'l Trade Comm'n*, the Federal Circuit faced a similar argument by the defendant. The defendant argued "cheque standby unit" was a means-plus-function claim. Diebold, 899 F.3d at 1298-99. The Federal Circuit stated that the term "cheque standby unit" "both fails to recite sufficiently definite structure and recites a function without reciting sufficient structure for performing that function." *Id.* Rather, the claims described the term "'cheque standby unit' solely in relation to its function and location in the apparatus." *Id.* Likewise, DRA cannot point to "sufficiently definite structure" for the "first communication module" term, as previously discussed. In fact, the patent only describes "first communication module" in relation to the three functions both parties identified. Just as "cheque standby" and "distributed learning control" failed to provide sufficiently definite structure to the nonce term they modify, the term "first communication" also similarly fails to define a sufficient structure. As previously discussed, even though "module" refers to software, and "communication module" certainly refers to software related to communication, this is nowhere near the "sufficiently definite structure" required by Federal Circuit precedent. See Diebold, 899 F.3d at 1298; Williamson, 792 F.3d at 1350. Therefore, the Court finds "first communication module" is subject to the application of § 112, para. 6.

2. "first communication module" is indefinite due to a lack of structure.

Because the parties agree what the function is for a "first communication module," the only remaining issue is whether there is sufficient structure. DRA contends that corresponding structure for the function is "the service provider's web API." ECF No. 53 at 10. DRA further argues that an API (Application Programming Interface), as a piece of software, can provide corresponding structure and because the API is the conduit for all three communication functions recited in the claims, it is not indefinite. ECF No. 55 at 14-15. H-E-B counters by stating that software alone cannot provide sufficient structure. ECF No. 56 at 10-11. Additionally, H-E-B contends the web API does not perform all the asserted functions.^[2] *Id.* at 11-12.

The Court finds the claim "first communication module" to be indefinite for the reasons that follow. First, the "web API" is itself software (that provides an interface for a client device to interact with the server). "Web API" is not an algorithm, but rather just a functional label for specific types of software. DRA does not point to a structure that runs the web API or a specific algorithm included in the web API to perform the required functions.^[3] Therefore, although software can serve as a corresponding structure, in this case, because DRA does not identify any structure for the web API itself and because the specification does not disclose any corresponding structure for the "web API," web API concomitantly cannot be the corresponding structure for "first communications module."

When it comes to means-plus-function claims, one must identify how the software performs the functions by disclosing an algorithm in order to provide structural specificity. Functional Media, L.L.C. v. Google, Inc., 708 F.3d 1310, 1318 (Fed Cir. 2013) ("It is well settled that simply disclosing software, however, without providing some detail about the means to

accomplish the function, is not enough.") (internal quotations omitted); see also Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1312 (Fed. Cir. 2012) (distinguishing between software means plus function claims in which no algorithm is disclosed, which are indefinite, and claims in which an algorithm is disclosed); Here, DRA points to no algorithm or any other specific instructions that address each of the required functions.^[4] See ECF No. 9-10; Hrg. Tr. 23:13-20. Thus, the claim is invalid for indefiniteness.

Second, the web API cannot be the structure for the "first communications module" because it is not located within the retailer device. Claim 13 provides that the first communication module (which DRA claims is the web API) is within the retailer's electronic device. '506 Patent at Cl. 13 ("An electronic device for use by a retailer . . . comprising: . . . a first communication module"). However, the passage cited by DRA recites that the retailer's electronic storage device transmits to the web API. '506 Patent at 26:47-48 ("Once the retailer's device captures the QR code, it sends a request to the service provider web API to determine whether the QR code is valid"). Thus, from the previous sentence in the specification,^[5] it is clear that the web API is not located on the retailer's electronic device. The only reason that the retailer device needs to transmit a request to the web API is because the web API is not located on the retailer's device. See Hrg. Tr. 25:7-25, 26:1-10. In other words, the web API cannot be the corresponding structure for the "first communications module" because the former is located on the server-side while the latter is located on the client-side. Because the claimed means is not located within the same device as the corresponding structure, the web API cannot be the corresponding structure for the "first communications module."

DRA's argument that "the service provider's web API" is sufficient structure suffers from yet another fatal flaw. The only passage from the specification that DRA identifies as the corresponding structure fails to address the first enumerated function claimed by both parties. The first function of the "first communication module" is "*transmitting* a request for the server to verify the consumer's instore purchase of goods and services, said request including the unique token." However, the specification language discusses how the web API *receives* this request. '506 Patent at 26:43-49. Because receiving and transmitting are clearly two different functions, the structure (web API) does not perform one of the required functions. Therefore, DRA's argument is unavailing.

Because the specification in the '506 Patent does not contain an adequate disclosure of the structure that corresponds to the claimed function, DRA "failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112, which renders the claim invalid for indefiniteness." In re Donaldson Co., 16 F. 3d 1189, 1195 (Fed. Cir. 1994) (*en banc*). Therefore, the Court finds "first communication module" indefinite.

B. "spot checking" ('506 Patent Cls. 1, 13)

DRA's Proposed Construction

Plain and ordinary meaning.

Alternatively, "inspecting either: (1) a receipt, (2) purchased items, and/or (3) token to verify the consumer's purchase"

H-E-B's Proposed Construction

"the retailer physically or visually inspecting either a consumer and receipt, or a consumer's purchased items and receipt, after the purchase transaction is conducted to ensure the consumer is not engaging in theft of goods or services"

This term appears in the preamble of '506 Patent, Claim 1 and 13. The parties differ whether the preamble is a limitation and the meaning of this term. DRA contends that "spot checking" should bear its plain-and-ordinary meaning, relying on the presumption that terms are given their plain-and-ordinary meaning. ECF No. 53 at 3. DRA also argues that the preamble is not limiting because it is used only to state purpose or intended use for the invention, and the claim inventions are fully described in the bodies of the claims. *Id.* at 3-4.

H-E-B argues that the preamble is a limitation because the preamble provides antecedent basis for the limitations in the claim body. ECF No. 56 at 13. Additionally, H-E-B contends the preamble term is essential to understand the limitations or terms in the claim body. *Id.* at 13-14. The Court agrees.

1. "Spot Checking" is a Limiting Preamble Term

Courts presume that the preamble does not limit the claims. *Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358 (Fed. Cir. 2010) (quoting *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002)) ("Generally," we have said, "the preamble does not limit the claims."). But "[i]n general, a preamble limits the invention if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim." *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999)). "Conversely, a preamble is not limiting 'where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.'" *Catalina*, 289 F.3d at 808 (quoting *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997)). The Federal Circuit has provided some "guideposts" regarding whether the preamble is limiting: (1) preamble provides antecedent basis, (2) preamble is essential to understand limitations or terms in the claim body, (3) preamble recites "additional structure or steps underscored as important by the specification," and (4) "clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art." *Catalina*, 289 F.3d at 808-09.

Based upon Federal Circuit precedent, the Court finds several reasons "spot checking" is limiting and requires construction. First, terms within the claim body rely on the preamble for antecedent basis. See *Catalina*, 289 F.3d at 808. As H-E-B correctly points out, the body of claim 1 in the '506 patent begins with "*the* retailer electronic device receiving from *the* consumer's mobile device prior to *the* consumer exiting the store a unique token that uniquely corresponds to *the* consumer's in-store purchase of goods and services." [6] '506 Patent at Cl. 1 (emphasis added). All of these terms are present within the preamble of claim 1. Additionally, the second limitation of claim 1 also provides the claim body's first reference to "*the* server." *Id.* (emphasis added). Obviously, these terms make no sense without the preamble of claim 1, which provides the antecedent basis for each term. *Id.* at Preamble ("A computer-implemented method for spot-checking and verifying *a consumer's* in store purchase of goods and services from a retailer . . . said retailer having an electronic device capable of communicating with *a server* and with *a consumer's mobile device*, the method comprising of the following steps:" (emphasis added). Thus, the Court finds the preamble limiting because the preamble provides the antecedent basis for limitations in the body.

Second, the Court finds the term "spot checking" essential to understand limitations or terms in the claim body. *Catalina*, 289 F.3d at 808-09. The preamble of claim 1 begins with "[a] computer-implemented method for spot-checking and verifying *a consumer's* in store purchase of goods and services from a retailer" '506 Patent at Preamble. Clearly, the terms "verifying" and "spot-checking" are distinct terms that are not interchangeable. See *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1119 (Fed. Cir. 2004) ("[W]hen an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms."). Moreover, both parties argued and provided different constructions for both terms. See ECF No. 62 at 2. Finally, the specification provides that a "spot check" is "a procedure in which the retailer physically or visually inspects the consumer or his/her purchase items and receipt after the transaction is conducted to ensure the consumer is not engaging in theft of goods or services." '506 Patent at 8:8-12; see also *id.* at 45:1-4 ("[A] spot check is the physical act of the retailer verifying a consumer's purchase."). Because the term "spot checking" is distinct from "verifying," the Court finds its use essential to understand the limitations and terms in the claim body.

With this distinction in mind, the claim limitations of the '506 patent sharply come into focus. As the patent explains, after the consumer's purchase is verified, the additional spot checking limitations include "prompting the user of the retailer device for a response indicating whether the customer's in-store purchase of goods and services have been inspected and approved," and "transmitting to the server information indicating that the customer's in-store purchase of goods and services has been inspected and approved by the user of the retailer device." '506 Patent at Cls. 1, 13. Thus, without the preamble term, one could be confused on the differences between "verifying" and its respective claim limitations, and the "spot checking" limitations just described.

Finally, the Court finds clear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art. *Catalina*, 289 F.3d at 808-09. During prosecution, all proposed claims were rejected as obvious over Carney (US 2012/280040). In order to distinguish the current patent, DRA amended to add the introductory phrase, "upon receiving an indication from the server indicating that the token is valid," in order to "make clear that the step of prompting occurs in

each spot check." ('506 Patent File History, June 2, 2017 Response After Final Office Action, Ex. 4 at 1995-6.). Specifically, DRA provided the following disclaimer to distinguish its invention from Carney:

[In Carney,] [n]o interaction by store employees or personnel is required. In fact, Carney *explicitly disparages the use of personnel for each spot-check*: . . . Carney makes clear that store personnel are only involved if a problem or discrepancy is detected by the automated reader: . . . Carney includes absolutely no disclosure regarding the clearing of flags or clearing of alerts. Again, this is consistent with Carney's disparagement of the use of personnel, and Carney's focus on limiting the use of personnel to the greatest extent possible.

Id. The disclaimer could not be any clearer: the applicant distinguished the invention from Carney based on the idea that the invention uses *retail personnel* for each spot-check. Given that retail personnel must inspect the customer's purchase, and the claims require transmitting information indicating "that the customer's [purchase] has been inspected," the Court is convinced the applicant used the preamble during prosecution to distinguish the claimed invention from prior art. See '506 Patent at Cls. 1, 13.

2. The Court's Construction for "Spot Checking"

Because the Court finds "spot checking" as a limiting preamble term, the Court construes "spot checking" as "physically or visually inspecting (1) purchase items and (2) either a receipt or token to verify a consumer's purchase." Hrg. Tr. 39:18-22. Furthermore, the Court need not provide justification for this construction because both parties agreed to the construction at the claim construction hearing. Hrg. Tr. 37:3-9, 39:1-5.

C. "wirelessly transmitting said unique token to a retailer electronic device" ('781 Patent, Cls. 1, 15)

DRA's Proposed Construction

Plain and ordinary meaning.

Alternatively, "transmitting said unique token at least in part via a wireless medium to a retailer electronic device"

H-E-B's Proposed Construction

"consumer's mobile device wirelessly transmitting said unique token to a retailer electronic device; not a retailer electronic device scanning or reading the unique token from the consumer's mobile device.

The dispute over "wirelessly transmitting said unique token to a retailer electronic device" concerns the distinction between (1) wirelessly transmitting, and (2) photographing or otherwise scanning a code (optical scanning). DRA contends the term should bear its plain and ordinary meaning. ECF No. 53 at 11. DRA further argues H-E-B's construction would exclude a preferred embodiment. *Id.* at 11-12.

H-E-B contends the term requires construction because the patent makes clear that "wirelessly transmitting" does not include optical scanning. ECF No. 54 at 25. By contrast, DRA's proposed construction includes optical scanning as one type of wireless transmission. Hrg. Tr. 44:2-9. Even though the Court believes that this term should have its plain-and-ordinary meaning, because the parties differ with respect to what the plain-and-ordinary meaning is, the Court will provide a construction for the plain-and-ordinary meaning. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute.").

1. "Wirelessly transmitting" does not include photographing or otherwise scanning a code

The Court finds that "wirelessly transmitting" cannot include photographing or otherwise scanning a code because the specification makes clear the two are distinct. First, the claims of the '781 Patent use "wireless transmission" only when referring to the step of getting the unique token from the consumer's mobile device to the retailer for verification. See '781 Patent at Cls. 1, 7, 9-10, 22. Secondly, in contrast to the use of "wireless transmission" in the '781 patent, the claims of the '506 patent show that entirely different word choice is used when referring to optical scanning, namely, "capturing." '506 Patent at Cl. 6 ("*capturing* the code displayed on the mobile device" (emphasis added)); '506 Patent at Cl. 12 ("*capturing* via the camera a code displayed on the mobile device" (emphasis added)).

Further clarifying the distinction between the two methods, a later dependent claim uses the term "wirelessly transmitting" to define the claim." '506 Claim 8 ("receiving from the mobile device a unique token . . . is accomplished via *bi-directional wireless communication protocol*, comprising . . . the retailer device *wirelessly transmitting* to the mobile device" (emphasis added)). Finally, the '781 patent specification recites that capturing the unique code "can encompass a variety of methods, including *scanning or reading a code* containing this information, *as well as receiving a wireless transmission* of the information." '781 Patent at 9:62-66 (emphasis added). Thus, because the applicant used both "wirelessly transmitting" and "capturing/scanning" within the patents in suit distinctly, the Court concludes wirelessly transmitting does not encompass optical scanning. See *Innova/Pure Water, Inc.*, 381 F.3d at 1119 ("[W]hen an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms.")

2. The Court's construction of wirelessly transmitting said unique token to a retailer electronic device

For the reasons described above, the Court construes "wirelessly transmitting said unique token to a retailer electronic device" as having its plain-and-ordinary meaning wherein the plain-and-ordinary meaning does not include photographing or scanning.

D. Printed Matter Terms

Claim Term	Patents	DRA Proposal	HEB Proposal
"list of goods and services" and "list of goods and services purchased"	'506 Patent: 3, 19	"list of goods and/or services purchased."	Indefinite
"time and place of the purchase"	'506 Patent: 4, 20	Plain and ordinary meaning. "information indicating a time and a location associated with a purchase of goods and/or services"	Indefinite
"identity of the consumer who made the purchase"	'506 Patent: 5, 21	Plain and ordinary meaning. "information indicating the customer who made the purchase"	Indefinite

DRA contends that "list of goods and services" and "list of goods and services purchased," "time and place of the purchase," and "identity of the consumer who made the purchase" should all bear their plain-and-ordinary meaning, relying on the presumption that terms are given their plain-and-ordinary meaning. DRA also argues that the terms do not fall within the printed matter doctrine because each of the terms is a "species of 'purchase information' in Claims 1 and 8, which is

information communicated by the server to the retailer device." ECF No. 53. Thus, DRA contends, "the information recited in these claims is *communicated* from one component of the claimed system to another in order to facilitate the operation of the system, not information that is printed on a substrate." *Id.* (emphasis in original).

H-E-B's primary argument is that the terms are indefinite because they fall under the printed matter doctrine. Specifically, H-E-B contends that each of these terms, which are data, are "displayed." ECF No. 56 at 25. Thus, as H-E-B argues, the terms are printed matter because the information is not functionally related to the substrate. *Id.* at 26. The Court agrees with H-E-B.^[7]

1. Printed Matter Doctrine Analysis

"Claim limitations directed to printed matter are not entitled to patentable weight unless the printed matter is functionally related to the substrate on which the printed matter is applied." *Praxair Distrib., Inc. v. Mallinckrodt Hosp. Prods. IP Ltd.*, 890 F.3d 1024, 1031-32 (Fed. Cir. 2018). Cases have established a necessary condition for falling into the category of printed matter: a limitation is printed matter if it claims the content of information, *i.e.*, the printed matter must be matter claimed for what it communicates. See *Praxair*, 890 F.3d at 1032; see also *In re Distefano*, 808 F.3d 845, 848-49 (Fed. Cir. 2015) (holding that a limitation is printed matter only if it claims the content of information).

The first step of the printed matter analysis is the determination that the limitation in question is in fact directed toward printed matter. As previously discussed, a limitation is only printed matter if it claims the content of information. See *In re Distefano*, 808 F.3d at 848. Here, it is difficult to argue that a "list of goods and services" or "list of goods and services purchased" is not printed matter—both limitations are information displayed on some type of electronic device. With that being said, DRA first attempts to argue the Court should not consider H-E-B's arguments regarding this term because they were disclosed in an untimely manner. ECF No. 55 at 17. However, the Court is not persuaded. H-E-B disclosed its printed matter theory in a § 285 letter sent prior to the parties' meet and confer. See ECF No. 54-7. DRA also argues the terms do not fall within the printed matter doctrine because the "information recited in this claims [sic] is *communicated* from one component of the claimed system to another in order to facilitate the operation of the system, not information that is printed on a substrate." ECF No. 53 at 12. However, this argument is also without merit. The terms in this case are printed matter, not because they are communicated; rather, they fall within the doctrine because printed matter must be matter claimed for what it communicates (in this case, a list of purchase information). Thus, the Court finds the terms in question fall within the printed matter doctrine.

The second step of the printed matter analysis is to determine the question of whether the printed matter nevertheless should be given patentable weight. *In re Distefano*, 808 F.3d at 850. "Printed matter is given such weight if the claimed informational content has a functional or structural relation to the substrate." *Id.* Likewise, "[w]here the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability." *Praxair*, 890 F.3d at 1034 (quoting *In re Ngai*, 367 F.3d at 1339 (Fed. Cir. 2004) (alteration in original) (internal quotation marks omitted). To be entitled to patentable weight, the printed matter "must be interrelated with the rest of the claim." *Praxair*, 890 F.3d at 1034.

Here, the Court finds the terms in question are not entitled to patentable weight. The claimed information, "purchase information," does not have a functional or structural relation to the substrate. Rather, the claimed information is exactly that—information, which is "displayed" by the retailer electronic device. See '506 Patent at Cl. 2; *id.* at Cl. 18 ("displaying the purchase information"). Other than being displayed on the retailer electronic device, the claimed information does not play any other role in the claim. See generally '506 Patent at Cls. 1-5. DRA attempts to analogize the present case with *In re Lowry*, 32 F.3d 1579 (Fed. Cir. 1994), where the court found printed matter cases inapplicable to machine-readable data structures that were never displayed to human eyes. However, as previously discussed, the present is readily distinguishable from *Lowry* by a simple explanation: the data categories in this case are displayed by a device for a person to see. Conversely, the computer-based structural database in *Lowry* was not printed matter, not because it involved a computer, but because "the data structures contained both information used by application programs and information regarding their physical interrelationships within a memory." *Id.* at 1583-84. There is no such equivalent in this case. Thus, DRA's reliance on *Lowry* is misplaced.

Because the Court finds the terms in question are not functionally or structurally related to the physical substrate holding the printed matter, the terms are not entitled to patentable weight. Therefore, the Court finds the following terms indefinite: "list of goods and services" and "list of goods and services purchased," "time and place of the purchase," and "identity of the consumer who made the purchase."

IV. CONCLUSION

As described herein, the Court provides the following constructions:

Term	Court's Construction
"first communication module"	Indefinite
"spot checking"	"physically or visually inspecting (1) purchase items and (2) either a receipt or token to verify a consumer's purchase"
"Wirelessly transmitting said unique token to a retailer electronic device"	plain-and-ordinary meaning and where the plain-and-ordinary meaning does not include photographing or scanning.
"list of goods and services" and "list of goods and services purchased"	Indefinite
"time and place of purchase"	Indefinite
"identity of the consumer who made the purchase"	Indefinite

[1] The Court will not provide a construction for "transmitting to the electronic device the goods or services purchased by the consumer" and "displaying on the electronic device the goods or services purchased" because a person ordinarily skilled in the art would understand the terms are not referring to matter-energy transport (*i.e.*, transporting the literal "goods and services"). Rather a person ordinarily skilled in the art, let alone a lay person, would understand the patent is describing transmitting information (*i.e.*, a list of the goods purchased) to the electronic device. Although the Court appreciates the Star Trek reference made by H-E-B, the jury will understand teleporting is not quite yet in existence. Instead, the terms are the result of poor draftsmanship; however, careless draftsmanship is not enough to create ambiguity in patent claims to require construction. See Vidir Mach. Inc. v. United Fixtures Co., 570 F. Supp. 2d 693, 707 n.10 (M.D. Pa. 2008) ("careless drafting in the prosecution of the patent . . . does not create ambiguity in the meaning of the patent's claims nor demonstrate that a person skilled in the art would be unable to discern its readily understood meaning within the context of the patent.").

[2] The Court also finds H-E-B's argument that DRA cannot point to a function as a corresponding structure persuasive. An API (Application Programming Interface) is itself a function. An API is comprised of a set of functions and procedures allowing the creation of applications. Thus, a patentee cannot provide "structure" by pointing to another function element.

[3] DRA does not point to any combination of physical structures that would be necessary to perform the three identified communication functions the "first communication module" is designed to undertake. Because the patent is completely devoid of language "linking" the three functions to any physical structure, DRA points to software as the corresponding structure for the "first communication module." See Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc., 248 F.3d 1303, 1311 (Fed Cir. 2001) ("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.") (citation omitted). However, this argument is unavailing for the reasons that follow.

[4] DRA claims the "algorithm" is the "transmitting and receiving process in the claim specification," *i.e.*, the three functions identified by the parties. Hrg. Tr. 23:130-20. However, as pointed out by H-E-B, DRA's reasoning is completely circular. See ECF No. 60 at 8.

[5] "Through the use of the retailer verification app or compatible hardware or software running the service provider's web API such as a POS system, the retailer captures the QR code that is displayed on the consumer's device."

[6] The use of the article "the" rather than "a" is significant. The Manual of Patent Examining Procedure dictates how the articles "a" and "the" are used in patent claims. Specifically, the first time a noun is mentioned, the article "a" is used, while thereafter the article "the" or "said" is used to refer back to the

antecedent basis. MPEP § 2173.05(3) (9th ed., Jan. 2018). Thus, it is clear the patentee was referring back to the preamble of the claim because of her choice of the article "the."

[Z] The Court also agrees that "purchase information" lacks an antecedent basis. See Hrg. Tr. 51:13-19. Claims 3-5 ('506 Patent), which include the disputed terms above, depend from Claim 1 and recited "the purchase information." '506 Patent at Cl. 1, 3-5. However, Claim 1 does not disclose "purchase information." Therefore, "the purchase information" in Claims 3-5 lack an antecedent basis, rendering those claims invalid for that reason as well.

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