

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

LUMINATI NETWORKS LTD.

Plaintiff,

v.

BISCIENCE INC.,

Defendant.

Case No. 2:18-cv-00483-JRG

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Before the Court is the opening claim construction brief of Luminati Networks Ltd. (“Plaintiff”) (Dkt. No. 109, filed on October 15, 2019),¹ the response of BIScience (2009) Ltd. (“Defendant”) (Dkt. No. 115, filed under seal on November 4, 2019; a redacted version was submitted as Dkt. No. 115), and Plaintiff’s reply (Dkt. No. 119, filed on November 14, 2019). The Court held a hearing on the issues of claim construction and claim definiteness on November 26, 2019. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

¹ Citations to the parties’ filings are to the filing’s number in the docket (Dkt. No.) and pin cites are to the page numbers assigned through ECF.

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I. BACKGROUND

Plaintiff alleges infringement of two U.S. Patents: No. 9,241,044 (the “’044 Patent”) and No. 9,742,866 (the “’866 Patent”) (collectively, the “Asserted Patents”). Each of the Asserted Patents is entitled System and Method for Improving Internet Communication by Using Intermediate Nodes. The patents are related: the ’866 Patent issued from a divisional application of the ’044 Patent’s application and both claim priority to a provisional application filed on August 28, 2013.

In general, the Asserted Patents are directed to technology for fetching content over the Internet.

The abstracts of the Asserted Patents are identical and provide:

A method for fetching a content from a web server to a client device is disclosed, using tunnel devices serving as intermediate devices. The client device access an acceleration server to receive a list of available tunnel devices. The requested content is partitioned into slices, and the client device sends a request for the slices to the available tunnel devices. The tunnel devices in turn fetch the slices from the data server, and send the slices to the client device, where the content is reconstructed from the received slices. A client device may also serve as a tunnel device, serving as an intermediate device to other client devices. Similarly, a tunnel device may also serve as a client device for fetching content from a data server. The selection of tunnel devices to be used by a client device may be in the acceleration server, in the client device, or in both. The partition into slices may be overlapping or non-overlapping, and the same slice (or the whole content) may be fetched via multiple tunnel devices.

Plaintiff asserts three independent claims: Claims 81 and 108 of the ’044 Patent and Claim 15 of the ’866 Patent. These claims recite as follows:

81. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:

- (a) sending the first identifier to the first server;
 - (b) sending a first request to the first server;
 - (c) receiving the second identifier from the first server;
 - (d) sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier;
- and

(e) receiving the first content from the second device.

108. A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:

- (a) sending the second identifier to the first server;
- (b) receiving a second request from the first device, the second request includes the first content identifier and the third identifier;
- (c) in response to receiving the second request, sending the first content identifier to the second server using the third identifier;
- (d) receiving the first content from the second server; and
- (e) in response to receiving the first content, sending the first content to the first device using the first identifier.

15. A method for fetching a content over the Internet from a first server identified in the Internet by a second identifier via a group of multiple devices, each identified in the Internet by an associated group device identifier, the method comprising the step of partitioning the content into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier, and for each of the content slices, comprising the steps of:

- (a) selecting a device from the group;
- (b) sending over the Internet a first request to the selected device using the group device identifier of the selected device, the first request including the content slice identifier and the second identifier;
- (c) in response to receiving the sent first request by the selected device, receiving over the Internet the content slice from the selected device; and wherein the method further comprising the step of constructing the content from the received plurality of content slices, and wherein each of the devices in the group is a client device.

The Court previously construed the Asserted Patents in *Luminati Networks Ltd. v. UAB Tesonet et al.*, No. 2:18-cv-00299-JRG, Claim Construction Memorandum and Order, 2019 U.S. Dist. LEXIS 141513 (E.D. Tex. Aug. 20, 2019), Dkt. No. 121 (“*Tesonet*”). Many of the disputes before the Court here are identical or substantially similar to the disputes addressed in *Tesonet*.

II. LEGAL PRINCIPLES

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 Grp., 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. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (quotation marks omitted) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) *cert. granted, judgment vacated*, 135 S. Ct. 1846 (2015).

“The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). “[I]n all aspects of claim construction, ‘the name of the game is the claim.’” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)) *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). First, a term’s context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. 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. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). 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. “[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).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office (“PTO”) and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the

specification and thus is less useful for claim construction purposes.” *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be “unhelpful as an interpretive resource”).

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.*, 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 not helpful to a court. *Id.* Extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.* The Supreme Court has explained the role of extrinsic evidence in claim construction:

In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be “so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning”). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the “evidentiary underpinnings” of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning: “1) when a patentee sets out a definition and acts as his own

lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.”² *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); see also *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal.”). The standards for finding lexicography or disavowal are “exacting.” *GE Lighting Sols.*, 750 F.3d at 1309.

To act as his 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.* (quoting *Thorner*, 669 F.3d at 1365); see also *Renishaw*, 158 F.3d at 1249. The patentee’s lexicography must appear “with reasonable clarity, deliberateness, and precision.” *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee’s statements in the specification or prosecution history must amount to a “clear and unmistakable” surrender. *Cordis Corp. v. Bos. Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); see also *Thorner*, 669 F.3d at 1366 (“The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.”). “Where an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

² Some cases have characterized other principles of claim construction as “exceptions” to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. See, e.g., *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002).

C. Definiteness Under 35 U.S.C. § 112, ¶ 2 (pre-AIA) / § 112(b) (AIA)

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112(b). 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(b) 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 for the patent was filed. *Id.* at 911. As it is a challenge to the validity of a patent, the failure of any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017). “[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).

When a term of degree is used in a claim, “the court must determine whether the patent provides some standard for measuring that degree.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (quotation marks omitted). Likewise, when a subjective term is used in a claim, “a court must determine whether the patent’s specification supplies some standard for measuring the scope of the [term].” *Ernie Ball, Inc. v. Earvana, LLC*, 502 F. App’x 971, 980 (Fed. Cir. 2013) (citations omitted). The standard “must provide objective boundaries for those of skill in the art.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014).

III. CONSTRUCTION OF DISPUTED TERMS

A. Preambles of Claims 81 and 108 of the '044 Patent

Disputed Term ³	Plaintiff's Proposed Construction	Defendant's Proposed Construction
<p>"A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:"</p> <ul style="list-style-type: none">• '044 Patent Claim 81	<p>The preamble is limiting to the extent the terms set out network structure used by the claimed methods.</p>	<p>The preamble is limiting.</p>
<p>"A method for fetching over the Internet a first content, identified by a first content identifier, by a first device, identified in the Internet by a first identifier, from a second server identified in the Internet by a third identifier via a second device identified in the Internet by a second identifier, using a first server, the method comprising the steps of:"</p> <ul style="list-style-type: none">• '044 Patent Claim 108	<p>The preamble is limiting to the extent the terms set out network structure used by the claimed methods.</p>	<p>The preamble is limiting.</p>

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

³ The term charts in this order list the claims in which the term is found but: (1) only the highest-level claim in each dependency chain is listed, and (2) only asserted claims identified in the parties' Patent Rule 4-5(d) Joint Claim Construction Chart (Dkt. No. 122) are listed.

The Parties' Positions

Plaintiff submits: It does not dispute applying the *Tesonet* holding that the preambles of Claims 81 and 108 are limiting, but only “to the extent the terms set out the network structure used by the claimed methods.” Dkt. No. 109 at 13.

Defendant responds: The preambles of Claims 81 and 108 each set forth important aspects of the invention that are not separately recited in the body of the claims; namely, that the devices and servers of the claims that fetch content across the Internet are separated across the Internet. The preambles are limiting, as set forth in *Tesonet*, and include the limitations “that the content must be fetched across the Internet, and that the components identified within the preambles be separated across the Internet.” Dkt. No. 115 at 5–7.

Plaintiff replies: There is no dispute with respect to the preambles being limiting “to the extent that terms in the claimed methods are part of a network structure set forth in the preambles.” The preamble of Claim 108 does not, however, require the “first device” to perform the steps of the claimed method. Dkt. No. 119 at 4.

Analysis

The issue in dispute is whether the preambles of Claims 81 and 108 of the '044 Patent are limiting in their entirety. They are.

The Court reiterates and adopts the ruling and reasoning on this issue that it set forth in *Tesonet*. 2019 U.S. Dist. LEXIS 141513, at *12–21, *83–86.

The disputed preambles are limiting in their entirety. Under Federal Circuit precedent “[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.” *Acceleration Bay, LLC v. Activision Blizzard, Inc.*, 908 F.3d 765, 770 (Fed. Cir. 2018) (quotation marks and

citations omitted). A preamble is limiting, however, when it “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) (quotation marks and citations omitted). For example, “dependence on a particular disputed preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention.” *Id.* “Likewise, when the preamble is essential to understand limitations or terms in the claim body, the preamble limits claim scope.” *Id.* “Further, when reciting additional structure or steps underscored as important by the specification, the preamble may operate as a claim limitation.” *Id.* Here, the preambles provide more than simply a statement of intended use, they reflect important aspects of the described invention and they are essential to properly understanding limitations in the claim bodies.

A preamble is limiting when it tethers the claim body to the described invention. For example, in *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, the Federal Circuit noted that the “specification makes clear that the inventors were working on the particular problem of an effective optical communication system not on general improvements in conventional optical fibers” and held the “optical waveguide” language in the preamble was limiting when the claim body was ostensibly directed to optical fibers irrespective of any waveguide properties. 868 F.2d 1251, 1257 (Fed. Cir. 1989). In other words, the claim body was properly understood only with reference to the preamble and the preamble was thus limiting. *Id.* Similarly, in *Gen. Elec. Co. v. Nintendo Co.*, the Federal Circuit noted that “the ’125 specification makes clear that the inventors were working on the particular problem of displaying binary data on a raster scan display device and not general improvements to all display systems” and held “system for displaying a pattern on a raster scanned display device” in the preamble as limiting when the claim body was ostensibly directed to all types of display systems. 179 F.3d 1350, 1361–62 (Fed. Cir. 1999). The Federal

Circuit addressed a similar issue in *Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc.*, 98 F.3d 1563 (Fed. Cir. 1996). There, it noted that the “specification also states that the purpose of the invention” was to address a problem in a “cold purge process” and held “[i]n a cold purge process” in the preamble as limiting. *Id.* at 1571–73. *See also*, *Poly-Am., L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1309–10 (Fed. Cir. 2004) (reading the preamble as limiting because the patent document “shows that the inventor considered that the . . . preamble language represented an important characteristic of the claimed invention”); *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1343–44 (Fed. Cir. 2006) (reading the preamble as limiting because “it states the framework of the invention . . . [that] is fundamental to the [] invention” as described in the patent and therefore “embraces the totality of [the recited] limitations, and limits the claim to the subject matter of the preamble”); *MEMS Tech. Berhad v. Int’l Trade Comm’n*, 447 F. App’x 142, 153–54 (Fed. Cir. 2011) (reading the preamble as limiting because it states “the essence of the invention” and “standing alone, the bodies of [the claims] do not require” the important characteristic of the invention recited in the preamble). Common to these cases is that the preamble is limiting when the preamble tethers the claim to the focus of the described invention—when it provides an important aspect of the invention when that aspect is not understood solely from body of the claim.

As explained in *Tesonet*, the preambles of Claims 81 and 108 provide antecedent basis for numerous terms in bodies of the claims and define important attributes of those terms and their relationships in the invention that are not expressed in the bodies of the claims. *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *15–21, *84–86. For example, each of the preambles (which are identical) sets forth important attributes of the “first identifier,” “second identifier,” and “third identifier” that are not expressed in the bodies of the claims; namely, that they “identif[y] in the Internet” a

“first device,” “second device,” and “second server,” respectively. Similarly, the preamble sets forth an important attribute of the “content” that is not expressed in the bodies; namely, that it is “fetch[ed] over the Internet.” And the preambles set forth an important attribute of the relationship among the components that is not expressed in the bodies; namely, the “fetching” is “by a first device . . . from a second server . . . via a second device . . . using a first server.”

The aspects of the invention set forth in the preambles are essential to properly understanding the claims. For example, the '044 Patent is clear that the focus of the invention is “improving communication over the Internet by using intermediate nodes.” '044 Patent col.1 ll.13–17; *see also*, col.51 ll.19–22 (“A system may comprise multiple data servers and multiple client and tunnel devices, each data server may be storing a respective content that may be fetched by the client devices via the Internet.”); col.52 ll.31–36 (“A method is disclosed for fetching over the Internet a first content . . . by a first device . . . from a second server . . . via a second device . . . by using a first server.”). Both the Internet and the intermediate-node aspects of the invention are not apparent from the body of the claims alone. For example, the role of the second device as an intermediary in Claim 81 is apparent only when read in light of the preamble’s definition of the content being fetched “by a first device . . . from a second server . . . via a second device.” For example, divorced from the preamble, the claim body ostensibly covers a situation in which the second device is the original source of the content rather than an intermediary. Similarly, without reference to the preamble, the body ostensibly covers local fetching rather than fetching over the Internet. Claim 108 suffers similar issues. Without each preamble in its entirety limiting the claims, the claims fail to capture important aspects of the invention. The preambles are essential to a proper understanding of the claims and are therefore limiting.

The Court rejects Plaintiff's position that the preambles are limiting only "to the extent the terms set out network structure used by the claimed methods." First, it is not entirely clear what Plaintiff means by its caveat. Second, Plaintiff's argument appears to be based on an improper application of *Uniloc USA Inc. v. Microsoft Corp.*, 632 F.3d 1292 (Fed. Cir. 2011). Dkt. No. 109 at 15 n.2; *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *17 n.3. *Uniloc* addressed an issue of divided-infringement of a system claim rather than the effect of a preamble on the scope of a method claim. *Uniloc*, 632 F.3d at 1309 ("That other parties are necessary to complete the environment in which the claimed element functions does not necessarily divide the infringement between the necessary parties."). *Uniloc* was further explained in *Advanced Software Design Corp. v. Fiserv, Inc.* 641 F.3d 1368, 1374 (Fed. Cir. 2011) ("Like the claim in *Uniloc*, the claims at issue in this case contain preambles that define the environment in which an accused infringer must act or describe capabilities that an accused device must have."). The issue addressed in *Uniloc* and *Advanced Software* was not whether particular claim language was limiting but rather was to "distinguish between those limitations that describe the environment in which a claim operates from the limitations that must be performed by an accused infringer." *Advanced Software*, 641 F.3d at 1375. Indeed, the environmental language in *Uniloc* and *Advanced Software* was limiting. This distinction is explained succinctly in *Advanced Software*. There, the Federal Circuit held that claims directed to validating a financial instrument having encrypted information in which the method of encryption is defined in the preamble may be infringed without performing the encryption method. But the claims will not be infringed if the instrument that is validated has not been "encrypted . . . in accordance with steps described in the preamble." *Id.* at 1373–75. Thus, the environment in *Advanced Software*, namely, the encrypted information specified in the

preamble, was a limitation of the claim. Here, the issue is whether the preambles are limiting, not whether the claims invoke a divided-infringement issue.

Accordingly, the Court holds that the preambles of Claims 81 and 108 of the '044 Patent are limiting in their entirety.

B. Definiteness of Claims 81 and 108 of the '044 Patent

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
• '044 Patent Claim 81	not indefinite	indefinite
• '044 Patent Claim 108	not indefinite	indefinite

Because the parties' arguments and proposed constructions with respect to these issues are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: Defendant has not provided information under the Local Patent Rules that is sufficient to "overcome the presumption of definiteness and validity to which Luminati is entitled." The scope of each of Claims 81 and 104 of the '044 Patent is reasonably certain: Claim 81 sets forth how the "first device" relates to other elements of the claim as the method is performed. Claim 108 sets forth how the "second device" relates to other elements of the claim as the method is performed. The method of Claim 81 "can be performed by the 'first device.'" The method of Claim 108 "can be performed by the 'second device.'" "[T]he claimed methods do not require steps to be performed [by] each of [these] components." The preamble of Claim 108, which refers to fetching by the first device, does not require the steps in the body to be performed by the first device. Rather, while this preamble sets forth the network in which the steps recited in the body of the claim are to be performed, the actions recited in the preamble are not claim limitations. Dkt. No. 109 at 13–17 & n.2.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '044 Patent figs.5–16, col.81 l.32 – col.83 l.18, col.83 ll.43–65, col.84 ll.12–18, col.86 ll.15–42, col.88 l.46 – col.89 l.49, col.106 ll.32–40. **Extrinsic evidence:** Rhyne Decl.⁴ ¶¶ 6–19 (Plaintiff's Ex. D, Dkt. No. 109-5).

Defendant responds: It is not reasonably certain whether Claims 81 and 108 encompass methods for fetching local content or are restricted to fetching content over the Internet, as recited in the preambles. It is not reasonably certain which of the recited devices must perform the steps of the methods. If the preamble of Claim 81 is limiting, it indicates that the “first device” performs the steps recited in the body of the claim. But the steps in Claim 108, which has the identical preamble, are not performed by the “first device.” Thus, the scopes of the claims are not reasonably certain. Further, the Court has already held Claim 108 indefinite in *Tesonet* and the reasons expressed there also apply here. Dkt. No. 115 at 7–9.

In addition to the claims themselves, Defendant cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶¶ 9, 12, 14 (Plaintiff's Ex. D, Dkt. No. 109-5).

Plaintiff replies: Defendant did not explain its indefiniteness position as required under Local Patent Rule 4-2 and did not provide expert testimony on the issue and thus cannot meet the clear-and-convincing standard of proving either Claim 81 or Claim 108 invalid as indefinite. The common preamble of the two claims “sets out all the major components and their roles, even though two different devices perform different steps set forth in the different claims.” Dkt. No. 119 at 4–6.

⁴ Declaration of Dr. Vernon Thomas Rhyne Jr. in Support of Plaintiff Luminati Network Ltd.'s Claim Constructions.

Analysis

The issues in dispute distill to: (1) whether it is reasonably certain that Claims 81 and 108 of the '044 Patent are restricted to fetching content over the Internet and (2) whether it is reasonably certain which of the devices listed in the claims performs the steps recited in the claims. As set forth above, the claims require “fetching over the Internet a first content.” Further, the role of the various recited components in performing the claimed steps, and thus claim scope, is reasonably certain in Claim 81 but not in Claim 108.

The Court reiterates and adopts the reasoning and ruling expressed in *Tesonet* regarding the role of the various components in performing the steps of Claim 81. *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *76–83. Specifically, “[a] fair reading of the claim as a whole is that the lettered method steps are performed ‘by a first device,’ which is set forth in the preamble. The claim scope is ‘reasonabl[y] certain[]’ in this respect.” *Id.* at *80 (citing *Nautilus*, 572 U.S. at 910).

The Court also reiterates and adopts the reasoning and ruling expressed in *Tesonet* regarding the role of the various components in performing the steps of Claim 108. *Id.* at *86–88. Specifically, “the analysis set forth above as to Claim 81 does not apply to Claim 108 because the preamble recites that the method is performed ‘by a first device,’ not by the second device. The recital of ‘via a second device’ in Claim 108 fails to find any reasonably clear meaning in the context of the remainder of the claim, in particular as to the steps recited in the body of the claim. The scope of the claim therefore lacks ‘reasonable certainty.’” *Id.* at *88 (citing *Nautilus*, 572 U.S. at 910). The Court is not persuaded otherwise by Plaintiff’s expert’s testimony. While the Court does not take issue with Dr. Rhyne’s explanation of the exemplary embodiments of Figures 5b and 11a of the '044 Patent or his explanation of how Claim 108 may encompass those embodiments, the Court finds his ultimate opinion—that “each claim step[] **can be** performed by the second

device,” Rhyne Decl. ¶ 14 (emphasis added)—unhelpful. Plaintiff’s argument is similarly unhelpful, stating that “each of the claimed steps *can be* performed by the second device.” Dkt. No. 109 at 16–17 (emphasis added). It is not reasonably certain from the language of the claim whether any or all the steps *must be* performed by the second device to effect fetching of content “via a second device.” Plaintiff and its expert have provided little, if any, certainty regarding this issue. Ultimately, Claim 108 as written, and even in light of Plaintiff’s argument and evidence, leaves a “zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims.” *Nautilus*, 572 U.S. at 909–10. Therefore, Claim 108 is indefinite.

Accordingly, the Court holds that Defendant has not met its burden to prove Claim 81 of the ’044 Patent is indefinite. Conversely, the Court holds Claim 108 of the ’044 Patent as indefinite.

C. “first device,” “first server,” “second device,” “second server”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“first device” <ul style="list-style-type: none"> • ’044 Patent Claims 81, 108 	not indefinite / preamble not limiting / plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • a device, separate from the second device, the first server, and the second server, that receives the Internet content from the second device
“first server” <ul style="list-style-type: none"> • ’044 Patent Claims 81, 108 	not indefinite / preamble not limiting / plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • a server, separate from the second device, the first device, and the second server, that receives the Internet content from the second device

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
“second device” <ul style="list-style-type: none"> • '044 Patent Claims 81, 108 	not indefinite / preamble not limiting / plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • a device, separate from the first device, the first server, and the second server, that is communicatively positioned between the first device and the second server
“second server” <ul style="list-style-type: none"> • '044 Patent Claims 81, 108 	not indefinite / preamble not limiting / plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • a server, separate from the first device, the second device, and the first server, from which the Internet content is fetched

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The Court should construe these terms as it did in *Tesonet*; namely, that these terms have their plain and ordinary meanings. Further, Defendant's proposed constructions are unhelpful and potentially confusing. For example, it is not clear how “separate” is being used in Defendant's proposals and the claims do not require geographic separation. Dkt. No. 109 at 18.

Defendant responds: These terms should be construed to clarify that: (1) the four components are arranged as provided in the preambles of Claims 81 and 108 of the '044 Patent, (2) the communication amongst the components is as provided in the preambles, (3) the content of the claims is content that is fetched over the Internet as provided in the preambles (i.e., it is “Internet content”), and (4) the “first device,” “second device,” “first server,” and “second server” of the

claims are separate components in that a single component cannot satisfy more than one of these limitations. Dkt. No. 115 at 10–11.

Plaintiff replies: Defendant’s proposed “separate” limitation does not resolve any dispute or clarify claim scope as Defendant has not explained what “separate” here means or asserted that Plaintiff is accusing a single device or server as satisfying more than one of these terms. Dkt. No. 119 at 6–7.

Analysis

The issues here largely overlap with the issues regarding the limiting effect of the preambles of Claims 81 and 108 of the ’044 Patent. In addition, there appears to be a dispute as to whether the “first device,” “second device,” “first server,” and “second server” are necessarily distinct components. As set forth above, the preambles are limiting in their entirety. Therefore, the Court declines to separately inject the preamble’s limitations into these device and server terms. With respect to whether the devices and servers are necessarily separate (i.e., distinct) components, the Court understands the plain import of separately reciting these claim elements is that they are distinct components.

To the extent Defendant’s proposed constructions simply restate the limitations explicit in the preambles, the Court rejects the constructions as unnecessary and potentially confusing. The Court also rejects as improper Defendant’s limitations that are not explicit in the preambles or elsewhere in the claims. For example, to the extent Defendant proposes that “Internet content” is anything other than content that is fetched over the Internet, as provided in the preamble’s “fetching over the Internet a first content,” the Court rejects the limitation as improper.

With respect to whether the devices and servers of the claims are “separate,” the Court holds that they are distinct, though not necessarily geographically separate. Indeed, this is the plain

meaning of the claim language, which lists these as separate components. *See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (“Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention.” (quotation and modification marks omitted)). Plaintiff has not established, or even suggested, that this clearly implied distinct nature does not apply.

Finally, the Court understands Defendant’s primary position of indefiniteness to be that addressed above.

Accordingly, the Court determines that these terms have their plain and ordinary meanings, under which the separately recited claim elements correspond to distinct components, without the need for further construction.

D. “first content identifier”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“first content identifier” <ul style="list-style-type: none"> • ’044 Patent Claims 81, 108 	plain and ordinary meaning	identification of the Internet content that is to be fetched

The Parties’ Positions

Plaintiff submits: The plain and ordinary meaning of “identifier” is easily understood, so there is no need to construe “first content identifier.” Further, “content” should not be rewritten as “Internet content” as it is not clear what “Internet content” means and there is no support that “content” in the ’044 Patent has a meaning other than its ordinary, broad, meaning. Dkt. No. 109 at 18–20.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’044 Patent fig.15, col.5 ll.2–47, col.8 ll.12–29, col.12 ll.28–49, col.19 l.49 – col.20 l.36, col.46 ll.30–43, col.47 ll.37–44, col.51 l.19 – col.56

l.19, col.56 ll.30–36, col.56 l.59 – col.57 l.36, col.58 ll.20–30, col.61 l.65 – col.62 l.63, col.63 ll.43–56, col.73 ll.41–47, col.95 ll.16–17, col.95 l.25 – col.96 l.3, col.102 ll.45–59, col.107 ll.34–47, col.110 l.33 – col.111 l.10, col.124 ll.26–57, col.141 ll.47–49. **Extrinsic evidence:** International Telecommunications Union (ITU) definitions of “content” (Plaintiff’s Ex. E,⁵ Dkt. No. 109-6; Plaintiff’s Ex. F,⁶ Dkt. No. 109-7) and “identifier” (Plaintiff’s Ex. G,⁷ Dkt. No. 109-8; Plaintiff’s Ex. H,⁸ Dkt. No. 109-10).

Defendant responds: The term “first content identifier” should be construed to clarify that the “content” of the claims is the content that is fetched over the Internet (i.e., it is “Internet content”). This does not encompass content that is not fetched over the Internet, such as locally stored content. This is mandated by the preambles of Claims 81 and 108, which each recite “fetching over the Internet a first content.” Dkt. No. 115 at 12–13.

Plaintiff replies: “Whether content is fetched over the Internet or not has nothing to do with the content itself.” Further, “content” was construed in *Tesonet* as “digital data.” Finally, Plaintiff does not contend that the claims encompass “fetching local content from local storage devices.” Rather, the “preamble clearly requires ‘fetching ... a first content ... from a second server identified in the Internet’ (ellipses in original). Dkt. No. 119 at 7 & n.3.

⁵ <https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink=%7b46309866-F797-45BC-81E9-2B6B2DAC1F32%7d>

⁶ <https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink=%7b0A3C5266-56D4-4ED8-9076-A4345192D7EB%7d>

⁷ <https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink=%7b5C58FBE6-BE32-4E31-81CE-676FCB191E2B%7d>

⁸ <https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink=%7bA842D85F-D255-4218-98D1-D8AD272C9067%7d>

Analysis

The issue in dispute entirely overlaps with the issues regarding the limiting effect of the preambles of Claims 81 and 108 of the '044 Patent. As set forth above, the preambles are limiting in their entirety. Therefore, the Court declines to inject the preamble's "Internet" limitation into the "first content identifier" as Defendant proposes. The Court rejects the remainder of Defendant's proposed construction, "identification of the [] content that is to be fetched" as merely redundant of other express claim language and therefore unnecessary.

Accordingly, the Court determines the "first content identifier" has its plain and ordinary meaning without the need for further construction.

E. "identified in the Internet by a first identifier," "identified in the Internet by a second identifier," and "identified in the Internet by a third identifier"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
"identified in the Internet by a first identifier" <ul style="list-style-type: none">'044 Patent Claims 81, 108	preamble not limiting / plain and ordinary meaning	identified by a first identifier that is different than the third identifier, although there may be some overlap
"identified in the Internet by a second identifier" <ul style="list-style-type: none">'044 Patent Claims 81, 108	preamble not limiting / plain and ordinary meaning	identified by information that includes an address of the second device
"identified in the Internet by a third identifier" <ul style="list-style-type: none">'044 Patent Claims 81, 108	preamble not limiting / plain and ordinary meaning ⁹	identified by a third identifier that is different than the first identifier, although there may be some overlap

⁹ Plaintiff did not state a position in the P.R. 4-5(d) chart for the "third identifier" term. Dkt. No. 122-1 at 15–16. The position set forth in the briefing is "plain and ordinary meaning." Dkt. No. 109 at 21. As the briefing positions on the "first identifier" and "second identifier" terms were also "plain and ordinary meaning," the Court understands that Plaintiff's position on all three terms are as expressed in the P.R. 4-5(d) chart for the "first identifier" and "second identifier" terms.

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: The first, second, and third identifiers simply identify without comparison to other identifiers. This does not need to be clarified and the plain and ordinary meaning of "identifier" is easily understood. Further, while the '044 Patent describes that an identifier may include an address, these are exemplary embodiments and do not mandate an address. Claim 44 of the '044 Patent, for example, recites that "each of the identifiers is an IP address or a URL" and a URL is not an address. Dkt. No. 109 at 21–22.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: '044 Patent col.20 ll.3–4, col.39 ll.23–24, col.40 l.21, col.54 ll.7–22, col.58 ll.20–30, col.61 l.64 – col.62 l.33, col.63 ll.4–13, col.73 ll.41–47, col.95 ll.16–17, col.95 l.25 – col.96 l.3, col.102 ll.45–59, col.110 l.33 – col.111 l.10, col.124 ll.26–38; '866 Patent col.55 ll.31–32, col.83 ll.54–59.

Defendant responds: These terms should be construed to clarify that a single identifier may not satisfy more than one of the first, second, and third identifier limitations. According to the patent examiner, the separate identifiers are what distinguish the claims over the prior art. Further, including the "address" in the second identifier clarifies that the claims require Internet traffic. Dkt. No. 115 at 13–15.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: '044 Patent File Wrapper September 11, 2015 Notice of Allowability at 2 (Defendant's Ex. A, Dkt. No. 115-1 at 31).

Plaintiff replies: The term “identifier” is used according to its broad plain and ordinary meaning and was not narrowed during prosecution. Dkt. No. 119 at 7–9.

Analysis

There are two issues in dispute. First, whether “address” should be injected into the construction of “second identifier.” It should not. Second, whether the first, second, and third identifiers are necessarily distinct from each other. According to a plain reading of the claims, under which separately recited elements correspond to distinct components, the identifiers are different from each other (i.e., they are distinct).

The Court rejects Defendant’s proposed “address” limitation. The Court addressed a substantially similar issue in *Tesonet* and the Court here reiterates and adopts the reasoning and ruling expressed there. *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *22–28. Specifically, it is not necessary to inject “address” into a limitation to affect an “Internet” limitation that is already explicit in the claim. Further, the Court refuses to equate an “identifier” with an “address” simply because the identifier “identifie[s] in the Internet.” Rather, the Asserted Patents provide that an address is simply an exemplary Internet identifier and therefore allows for identifiers other than addresses. *See, e.g.*, ’044 Patent col.54 ll.7–8 (“Each of the identifiers herein **may be** a URL or an IP address in IPv4 or IPv6 form.” (emphasis added)); *see also, id.* at col.50 ll.18–31 (describing the “Domain Name System (DNS)” which “translates easily memorized domain names to the numerical IP addresses needed for the purpose of locating computer services and devices worldwide”).

With respect to whether the first, second, and third identifiers of the claims are “separate,” the Court holds that they are distinct. Indeed, this is the plain meaning of the claim language, which

lists these as separate components. *See Becton, Dickinson & Co.*, 616 F.3d at 1254. Plaintiff has not established, or even suggested, that this clearly implied distinct nature does not apply.

Accordingly, the Court rejects Defendant’s proposed “address” limitation in “second identifier” and determines that these terms have their plain and ordinary meanings, under which the separately recited claim elements correspond to distinct components, without the need for further construction.

- F. “receiving the second identifier from the first server,” “sending the second identifier to the first server,” “sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier,” “receiving a second request from the first device, the second request includes the first content identifier and the third identifier,” and “in response to receiving the first content, sending the first content to the first device using the first identifier”**

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“receiving the second identifier from the first server” <ul style="list-style-type: none"> • ’044 Patent Claim 81 	plain and ordinary meaning	receiving, by the first device from the first server, identification of the second device that includes an address of the second device
“sending the second identifier to the first server” <ul style="list-style-type: none"> • ’044 Patent Claim 108 	plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • sending, by the second device to the first server, identification of the second device that includes an address of the second device
“sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier” <ul style="list-style-type: none"> • ’044 Patent Claims 81 	plain and ordinary meaning	sending, by the first device to the second device, using the address of the second device that was received from the first server, a request for the Internet content which is to be fetched that includes both (1) identification of the Internet content that is to be fetched and also (2) the address of the second server

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
“receiving a second request from the first device, the second request includes the first content identifier and the third identifier” <ul style="list-style-type: none"> • '044 Patent Claim 108 	plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • receiving, by the second device from the first device, a request for the Internet content that includes both (1) identification of the Internet content that is to be fetched and also (2) the address of the second server
“in response to receiving the first content, sending the first content to the first device using the first identifier” <ul style="list-style-type: none"> • '044 Patent Claim 108 	plain and ordinary meaning	indefinite under 35 U.S.C. § 112 Alternatively: <ul style="list-style-type: none"> • after the second device receives the Internet content, the second device forwards the Internet content to the first device using an address of the first device

Because the parties' arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits: Defendant's proposals are improper for a variety of reasons: First, the “second identifier” does not necessarily include an address so sending or receiving the “second identifier” does not necessarily require sending or receiving an address. Second, the “content” is not necessarily “Internet content.” Third, the “first device” of the claims does not necessarily perform the sending or receiving steps, which may instead be performed by another device on behalf of the first device. Finally, sending “in response to receiving” is not simply sending after receiving but rather indicates a causal relationship between the sending and receiving. Dkt. No. 109 at 23–26.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '044 Patent fig.15, col.5 ll.2–47, col.8 ll.12–29, col.12 ll.28–49, col.19 l.49 – col.20 l.36, col.46 ll.30–43, col.47 ll.37–44, col.51 l.19 – col.56 l.29, col.56 l.59 – col.57 l.36, col.58 ll.20–30, col.61 l.65 – col.62 l.63, col.63 ll.43–56, col.64 l.48 – col.65 l.5, col.73 ll.41–47, col.95 l.25 – col.96 l.3, col.102 ll.45–49, col.107 ll.34–47, col.110 l.33 – col.111 l.10, col.124 ll.26–57. **Extrinsic evidence:** International Electrotechnical Commission (IEC) definition of “server” (Plaintiff’s Ex. I,¹⁰ Dkt. No. 109-10).

Defendant responds: These proposed constructions are largely based on Defendant’s proposed constructions and positions on other terms: The sending and receiving steps in Claim 81 of the '044 Patent are performed by the “first device,” as set forth in the preamble and as held in *Tesonet*. The “address of the second device” is included in the “second identifier.” The “content” that is requested is necessarily Internet content. And the first, second, and third identifiers are separate. Further, the sending that is “in response to receiving” should be clarified to denote the temporal relationship between the sending and receiving: that the sending is “after” the receiving. Finally, Defendant “proposes [Claim 108’s] contingent constructions only in the alternative should the Court find [Claim 108] is not indefinite.” Dkt. No. 115 at 15–18.

In addition to the claims themselves, Defendant cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶ 14 (Plaintiff’s Ex. D, Dkt. No. 109-5).

Plaintiff replies: Defendant’s proposals here are improper for the same reasons that its proposals for the “first identifier,” “second identifier” and “third identifier” terms are improper. Dkt. No. 119 at 9–10.

¹⁰ <http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12>

Plaintiff cites further **intrinsic evidence** to support its position: '044 Patent col.50 ll.18–31, col.72 ll.52–55, col.75 ll.48–63.

Analysis

Other than whether “in response to” in Claim 108 of the '044 Patent should be rewritten as “after,” the issues in dispute here have been addressed with respect to other terms. The Court reiterates that: (1) “receiving . . .” and “sending . . .” steps of Claim 81 of the '044 Patent are performed by the “first device”; (2) none of the “first identifier,” “second identifier,” or “third identifier” are necessarily an address; (3) it is unnecessary and potentially confusing to include the “Internet” limitation of the preamble into a construction of “first content” or “first content identifier”; and (4) Claim 108 is indefinite. The Court rejects that “in response to” should be rewritten as “after.” Doing so is not necessary to clarify any temporal relationship and threatens to change the scope of the claim. Further, since Claim 108 is indefinite, there is no need to address the propriety of Defendant’s alternative constructions for the “sending . . .,” “receiving . . .,” and “in response to receiving . . .” or “sending . . .” limitations of Claim 108.

Finally, subject to the foregoing and the constructions of their constituent terms, the Court construes the “sending . . .” and “receiving . . .” limitations of Claim 81 as follows:

- “receiving the second identifier from the first server” means “receiving, by the first device, the second identifier from the first server” and
- “sending a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier” means “sending, by the first device, a second request to the second device using the second identifier, the second request includes the first content identifier and the third identifier.”

G. “multitasking or multiprocessing” and “proximity to the second server”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“multitasking or multiprocessing” <ul style="list-style-type: none">• ’044 Patent Claims 86, 88, 91, 107	multiple tasks being performed in overlapping time periods using common processing resources	BIScience does not challenge Luminati’s proposed construction
“proximity to the second server” <ul style="list-style-type: none">• ’044 Patent Claim 97	distance from second server	BIScience does not challenge Luminati’s proposed construction ¹¹

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits: Its proposed constructions for these terms are that which was agreed to by the parties and adopted by the Court in *Tesonet*. Dkt. No. 109 at 24–25.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’044 Patent col.24 l.60 – col.25 l.4, col.53 ll.55–59, col.90 l.43 – col.91 l.15. **Extrinsic evidence:** International Electrotechnical Commission (IEC) definition of “multitasking” (Plaintiff’s Ex. J,¹² Dkt. No. 109-11); Merriam-Webster online definition of “multitasking” (Plaintiff’s Ex. K,¹³ Dkt. No. 109-12); Dictionary.com definition of “proximity” (Plaintiff’s Ex. L,¹⁴ Dkt. No. 109-13).

¹¹ Defendant did not state a position in the P.R. 4-5(d) chart for the “proximity” term, Dkt. No. 122-1 at 24–25, but based on the briefing, the Court understands Defendant’s position to be the same as that expressed for the “multitasking” term.

¹² <http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=171-05-69>

¹³ <https://www.merriam-webster.com/dictionary/multitasking>

¹⁴ <https://www.dictionary.com/browse/proximity?s=t>

Defendant responds: “To ease the burden on the Court, BIScience is not challenging Luminati’s proposed constructions. However, BIScience does not concede that Luminati’s proposed constructions are proper.” Dkt. No. 115 at 18.

Plaintiff replies: Since Defendant is not challenging Plaintiff’s proposed constructions of these terms, the Court should adopt them. Dkt. No. 119 at 10.

Analysis

There appears to be no dispute to resolve. Accordingly, the Court adopts Plaintiff’s proposed constructions:

- “multitasking or multiprocessing” means “multiple tasks being performed in overlapping time periods using common processing resources”; and
- “proximity to the second server” means “distance from second server.”

H. “past activities”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“past activities” <ul style="list-style-type: none">• ’040 Patent Claim 99	past actions or performance	indefinite alternatively: <ul style="list-style-type: none">• plain and ordinary meaning

The Parties’ Positions

The parties did not submit any argument or evidence on the meaning of “past activities” but listed their positions in the P.R. 4-5(d) chart. Dkt. No. 122-1 at 25.

Analysis

Given that the parties provided no argument or evidence on this dispute and that the proposed constructions are identical to that considered in *Tesonet*, the Court reiterates and adopts the ruling and reasoning on this term that it set forth in *Tesonet*. 2019 U.S. Dist. LEXIS 141513, at *46–49.

Accordingly, the Court determines that “past activities” has its plain and ordinary meaning without the need for further construction.

I. Preamble of Claim 15 of the ’866 Patent

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
<p>“A method for fetching a content over the Internet from a first server identified in the Internet by a second identifier via a group of multiple devices, each identified in the Internet by an associated group device identifier, the method comprising the step of partitioning the content into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier, and for each of the content slices, comprising the steps of:”</p> <ul style="list-style-type: none"> • ’866 Patent Claim 15 	<p>Preamble is limiting to the extent it sets forth the components of the residential proxy network.</p>	<p>The preamble is limiting.</p>

The Parties’ Positions

Plaintiff submits: “[T]he preamble [of Claim 15 of the ’866 Patent] may be limiting to the extent it sets forth the components of the residential proxy network and particularly to the extent those components introduced in the preamble act as antecedent bases for the terms in the body of the claim.” Dkt. No. 109 at 26–27.

Defendant responds: The preamble of Claim 15 of the ’866 Patent is fully limiting for reasons similar to those for Claim 81 of the ’044 Patent. Further, the preamble is:

A method for fetching a content over the Internet from a first server identified in the Internet by a second identifier via a group of multiple devices, each identified in the Internet by an associated group device identifier, the method comprising,

'866 Patent col.173 ll.41–45, rather than:

A method for fetching a content over the Internet from a first server identified in the Internet by a second identifier via a group of multiple devices, each identified in the Internet by an associated group device identifier, the method comprising the step of partitioning the content into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier, and for each of the content slices, comprising the steps of,

id. col.173 ll.41–49. Plaintiff's infringement contentions indicate that Plaintiff improperly includes "partitioning the content into a plurality of content slices, each content slice containing at least part of the content, and identified using a content slice identifier, and for each of the content slices, comprising the steps of" in the preamble. Dkt. No. 115 at 18–21.

In addition to the claims themselves, Defendant cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶ 23 (Plaintiff's Ex. D, Dkt. No. 109-5).

Plaintiff replies: "There appears to be no real dispute here. To the extent there is any confusion, Luminati agrees the preamble is limiting." Dkt. No. 119 at 10.

Analysis

There appear to be two issues in dispute. First, whether the preamble of Claim 15 of the '866 is entirely or only partially limiting. It is entirely limiting. Second, whether the preamble ends at "the method comprising" or at "comprising the steps of." It ends at "the method comprising."

To begin, under a plain reading of Claim 15 of the '866 Patent, the preamble ends at the phrase "the method comprising." Plaintiff has not provided any reason to deviate from this plain reading, or even indicated a position on this issue. In any event, and as set forth below, the Court holds the preamble is limiting in its entirety.

The preamble of Claim 15 of the '866 Patent is limiting in its entirety for reasons similar to that provided above with respect to the preambles of Claims 81 and 108 of the '044 Patent. Specifically, the preamble of Claim 15 of the '866 Patent provides antecedent basis for numerous

terms in body of the claims and defines important attributes of those terms and their relationships in the invention that are not expressed in the body of the claims. Claim 15, with emphasis added, provides:

15. A method for fetching *a content* over the Internet from a first server identified in the Internet by *a second identifier* via *a group of multiple devices*, each identified in the Internet by *an associated group device identifier*, the method comprising the step of partitioning the content into *a plurality of content slices*, each content slice containing at least part of the content, and identified using *a content slice identifier*, and for each of the content slices, comprising the steps of:

- (a) selecting a device from *the group*;
- (b) sending over the Internet a first request to the selected device using *the group device identifier* of the selected device, the first request including *the content slice identifier* and *the second identifier*;
- (c) in response to receiving the sent first request by the selected device, receiving over the Internet *the content slice* from the selected device; and wherein the method further comprising the step of constructing *the content* from the received plurality of content slices, and wherein each of *the devices in the group* is a client device.

Specifically, “the group,” “the group device identifier,” “the second identifier,” “the content,” and “the devices in the group” recited in the body of the claim each have their antecedent basis in the preamble, considering the preamble terminates at “the method comprising the step of.” The preamble also defines important attributes of these components and how they relate to one another. For example, the “content” is defined as being “fetch[ed] over the Internet from a first server . . . via a group of multiple devices,” the “second identifier” identifies the first server “in the Internet,” and each device of the group is “identified in the Internet by an associated group identifier.” As explained above, the use of a preamble to provide antecedent basis and define important aspects of the invention that are essential to a proper understanding of the claim body renders the preamble entirely limiting. *See, e.g., Catalina Mktg. Int’l*, 289 F.3d 801, 808.

Even were the preamble to include the “step of partitioning . . . for each of the content slices comprising the steps of,” the entire preamble would be limiting. The step-of-partitioning clause

provides the antecedent basis for “the content slice identifier” and “the content slice” and defines that the “each content slice contain[s] at least part of the content” and that “each content slice ... [is] identified using a content slice identifier.”

Accordingly, the Court holds that the preamble of Claim 15 of the '866 Patent is limiting in its entirety and ends at “the method comprising” transition.

J. Definiteness of Claim 15 of the '866 Patent

The Parties' Positions

Defendant submits: It is not reasonably certain which devices or components perform the steps of Claim 15 of the '866 Patent and thus the claim is indefinite. Dkt. No. 115 at 21–22.

Plaintiff replies: There is nothing indefinite about Claim 15: “the method is performed by the device that performs the method, and it performs all the steps of the method.” Dkt. No. 119 at 10–11.

Plaintiff cites further **extrinsic evidence** to support its position: Rhyne Decl. ¶¶ 20–25 (Plaintiff's Ex. D, Dkt. No. 109-5).

Analysis

The issue in dispute here is twofold: whether it is reasonably certain what device or devices perform the steps of the method of Claim 15 of the '866 Patent and, if not, whether that uncertainty renders the claim indefinite. The Court determines that specifying a device or devices that perform the steps of the claim is not important to understanding the claim and that the claim otherwise sets forth with reasonable certainty the relationship of the various claim elements.

The scope of Claim 15 is reasonably certain. The claim is directed to a method for fetching content over the Internet from a first server via a group of multiple devices that includes partitioning the content into slices and receiving the various slices from the devices of the group. The only hardware components mentioned in the claim are the devices of the group and the server.

The role of these two components in the method is reasonably certain: the content is fetched in slices from the server via the devices of the group with each content slice received from a selected device of the group. While the claim is silent on which specific device must perform many of the steps, the Court understands this to mean that what performs the steps is not important. The claim otherwise defines the role of the server and group of devices, and specifically how the fetching is accomplished “via” the group, with reasonable certainty, and the claim is not limited as to what device performs the other steps.

Accordingly, the Court holds that Defendant has not proven Claim 15 of the ’866 Patent is indefinite for failing to specify which device or devices perform the steps of the claim.

K. “first server” and “a group of multiple devices”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“first server” <ul style="list-style-type: none"> • ’866 Patent Claim 15 	plain and ordinary meaning	a server, separate from the first device, the second device, and the group of multiple devices, from which the Internet content is fetched
“a group of multiple devices” <ul style="list-style-type: none"> • ’866 Patent Claim 15 	plain and ordinary meaning	a plurality of devices that are able to fetch the Internet content from the first server and which does not include the first device and the second server

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits: Defendant’s proposed constructions for these terms include many of the same errors found in previous terms: For example, the proposed constructions improperly limit the “content” from the “first server” to “Internet content” and they unnecessarily and confusingly

inject “separate.” Further, Defendant’s proposed constructions include “second device” and “second server” which do not appear in the claim. Dkt. No. 109 at 27–29.

Defendant responds: Its proposed constructions clarify that the “first server,” the “first device,” and the “second server” are each distinct from the “group of multiple devices.” Dkt. No. 115 at 22–23.

Plaintiff replies: Defendant’s proposed constructions confuse rather than clarify claim scope. Dkt. No. 119 at 10.

Analysis

The main issues in dispute here distill to: (1) whether the Internet aspect of the preamble should be expressed in constructions of these terms and (2) whether the “first server” and the devices of the “group of multiple devices” are necessarily separate (i.e., distinct) components. As set forth above, the preambles are limiting in their entirety and express that the content is fetched over the Internet. Therefore, the Court declines to inject an “Internet content” limitation into these terms as Defendant proposes. With respect to whether the devices and servers are necessarily separate (i.e., distinct) components, the Court understands the plain import of separately reciting these claim elements is that they are distinct components. *See Becton, Dickinson & Co.*, 616 F.3d at 1254.

The Court rejects the other limitations proposed by Defendant. With respect to “a group of multiple devices,” the Court rejects Defendant’s proposed “able to fetch the internet content from the first server” and “which does not include . . . the second server” limitations and refuses to rewrite “multiple devices” as “a plurality of devices.” Defendant did not provide argument or evidence to support the “able to fetch the . . . content from the first server” limitation. Similarly, Defendant did not provide any argument or evidence regarding “the second server” and there is no

mention of any “second server” in the claim. And rewriting “multiple devices” as “a plurality of devices,” as Defendant proposes, does not clarify claim scope or address any dispute. With respect to “first server,” Defendant did not provide any argument or evidence regarding “the second device” and there is no mention of any “second device” in the claim. The Court therefore rejects Defendant’s proposed constructions.

Accordingly, the Court determines that these terms have their plain and ordinary meanings, under which the separately recited claim elements correspond to distinct components, without the need for further construction.

L. “identified in the Internet by a second identifier”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“identified in the Internet by a second identifier” <ul style="list-style-type: none"> • ’866 Patent Claim 15 	plain and ordinary meaning	identified by information that includes an address of the first server

The Parties’ Positions

Plaintiff submits: Defendant’s proposed construction for this term in Claim 15 of ’866 Patent is improper for same reasons its proposed construction for this term in Claims 81 and 108 of the ’044 Patent is improper. Dkt. No. 109 at 27–28.

Defendant responds: This term has the same meaning as it does in Claims 81 and 108 of the ’044 Patent. Dkt. No. 115 at 23.

Plaintiff replies: Plaintiff “agrees the claim term and scope are the same in both patents.” Dkt. No. 119 at 7 n.4.

Analysis

The issues in dispute here are the same as for the identical term in Claims 81 and 108 of the ’044 Patent and the Court holds that “identified in the Internet by a second identifier” in the ’866

Patent has the same meaning as that term in the '044 Patent. Accordingly, the Court rejects Defendant's proposed "address" limitation in "second identifier" and determines that this term has its plain and ordinary meaning without the need for further construction.

M. "partitioning the content into a plurality of content slices"

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
<p>"partitioning the content into a plurality of content slices"</p> <ul style="list-style-type: none"> '866 Patent Claim 15 	<p>plain and ordinary meaning</p>	<p>indefinite under 35 U.S.C. § 112</p> <p>Alternatively:</p> <ul style="list-style-type: none"> dividing, by a group of multiple devices that is fetching Internet content, the Internet content to be fetched into a plurality (more than just one) of portions, although the portions can have overlapping content

The Parties' Positions

Plaintiff submits: In *Tesonet*, the Court held this term has definite meaning. And the meaning of this term is plain without construction: the content is partitioned into content slices. As described in the '866 Patent, the slices may be of entirely distinct content, partially overlapping content, or entirely overlapping (identical) content. Dkt. No. 109 at 29–30.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '866 Patent col.53 ll.43–48, col.62 ll.26–29, col.63 ll.62–63, col.168 ll.48–50. **Extrinsic evidence:** Rhyne Decl. ¶¶ 20–25 (Plaintiff's Ex. D, Dkt. No. 109-5).

Defendant responds: It is not certain from the claim language what device or devices perform the partitioning step and thus Claim 15 of the '866 Patent is indefinite. Defendant's proposed

alternative construction sets forth the only partitioning scheme described in the '866 Patent, in which the client device defines the partitioning and the partitioning is “carried out by the group of devices acting as proxies to actually fetch the content.” It is important to clarify this partitioning scheme in the construction to avoid a potential “unreasonable broadening of the claims by rendering significant limitations into admitted prior art” such as the packetizing scheme set forth in Figure 2a of the patent. Dkt. No. 115 at 23–27.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '866 Patent figs.2a, 10, 23, 23a, col.4 l.6, col.94 ll.63–67, col.109 l.39–44, col.114 ll.48–54. **Extrinsic evidence:** Rhyne Decl. ¶ 22¹⁵ (Plaintiff’s Ex. D, Dkt. No. 109-5).

Plaintiff replies: The device that performs the partitioning is the device the performs all the steps of Claim 15. Thus, a person of ordinary skill in the art “would clearly understand that a device that performs those steps practices the patent claim.” And the “partitioning” of the claim includes “requesting partitioned content in content slices, which can be done by a single device.” Further, the patent expressly teaches that “[t]wo or more content parts may be identical and may contain the same data” (quoting '866 Patent col.63 ll.62–63). Dkt. No. 119 at 10–12.

Plaintiff cites further **intrinsic evidence** to support its position: '866 Patent col.53 ll.36–47, col.94 ll.23–26, col.104 ll.19–22.

Analysis

There are two main issues in dispute. First, whether Claim 15 of the '866 Patent is indefinite for not specifying the device that performs the partitioning step. As set forth above, it is not.

¹⁵ Defendant cites paragraph 15 but quotes material from paragraph 22.

Second, whether the “partitioning” limitation should be limited to partitioning “by a group of multiple devices that is fetching Internet content.” It should not.

To begin, for reasons set forth in other terms, the Court rejects Defendant’s proposal to rewrite “content” as “Internet content to be fetched.”

The Court also rejects Defendant’s proposal that partitioning is necessarily “by a group of multiple devices that is fetching Internet content.” To begin, Defendant suggests that because the only partitioning described in the ’866 Patent is performed by a group of multiple devices that is fetching Internet content the claimed partitioning must be limited to the described embodiment. Defendant’s position is contrary to law. *Phillips*, 415 F.3d at 1323 (“In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.”); *see also*, *Thorner*, 669 F.3d at 1366 (“It is likewise not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that.”). Further, Defendant mischaracterizes the ’866 Patent. For example, the patent teaches allocating slices of partitioned content to multiple devices without any suggestion that the devices must form the slices. ’866 Patent col.117 ll.23–57, col.168 ll.48–50. Simply put, the record does not support limiting partitioning as Defendant proposes.

The Court addressed the concept of partitioning into slices in *Tesonet* and the Court here reiterates and adopts the reasoning and ruling there expressed. *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *63–67. Specifically, *Tesonet* construed “partitioning the content” as “splitting the content into content slices (the resulting content slices may be overlapping or non-overlapping).” *Id.* at *67. Other than improperly limiting the partitioning function to a group of multiple devices, Defendant’s proposal strays from the *Tesonet* construction primarily by replacing “splitting” with

“dividing” and by replacing “slices” with “portions.” Although “splitting” and “dividing” convey similar concepts, the Court prefers “splitting” as that language is found in the patent, ’866 Patent at col.32 ll.9–14, and it better captures “partitioning” in that “dividing” could improperly imply making the whole smaller instead of simply splitting it into parts. With respect to “slices” or “portions,” the Court in *Tesonet* construed “content slices” as “some or all of the content, created by partitioning the content and useable with other content slices to reconstruct the content” to give effect to the patent’s teaching that a “content slice” may include all of the content. *Tesonet*, 2019 U.S. Dist. LEXIS 141513, at *56–62 (citing ’866 Patent col.168 ll.48–50). Defendant’s proposed “portion” may improperly imply that a content slice is necessarily less than all of the content. The remaining differences between the Tesonet construction and Defendant’s proposed construction relate to the “into a plurality of content slices” clause. The Court declines to rewrite “plurality” as “plurality (more than just one)” as it is an unwieldy and unnecessary clarification.

Accordingly, the Court construes “partitioning the content into a plurality of content slices” as follows:

- “partitioning the content into a plurality of content slices” means “splitting the content into multiple content slices that each include some or all of the content (the resulting content slices may be overlapping or non-overlapping).”

N. “each content slice containing at least part of the content” and “each content slice ... identified using a content slice identifier”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“each content slice containing at least part of the content” <ul style="list-style-type: none"> • ’866 Patent Claim 15 	plain and ordinary meaning	each portion contains at least part of the Internet content

Disputed Term	Plaintiff's Proposed Construction	Defendant's Proposed Construction
“each content slice . . . identified using a content slice identifier” <ul style="list-style-type: none"> • ’866 Patent Claim 15 	plain and ordinary meaning	each portion is identified uniquely relative to the other portions

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits: The plain meanings of these terms are easily understood. Rewriting “content slice” as “portion” and “content” as “Internet content” does not clarify scope but rather confuses and threatens to improperly limit the scope of these terms. Further, there is no reason that content slices, which may be identical, must have unique identifiers relative to each other. Dkt. No. 109 at 30–31.

Defendant responds: The terms should be construed as proposed by Defendant to clarify that the “content” is the content that is fetched over the Internet and that the goal of Claim 15 of the ’866 Patent is “constructing the content from the received plurality of content slices.” Dkt. No. 115 at 27.

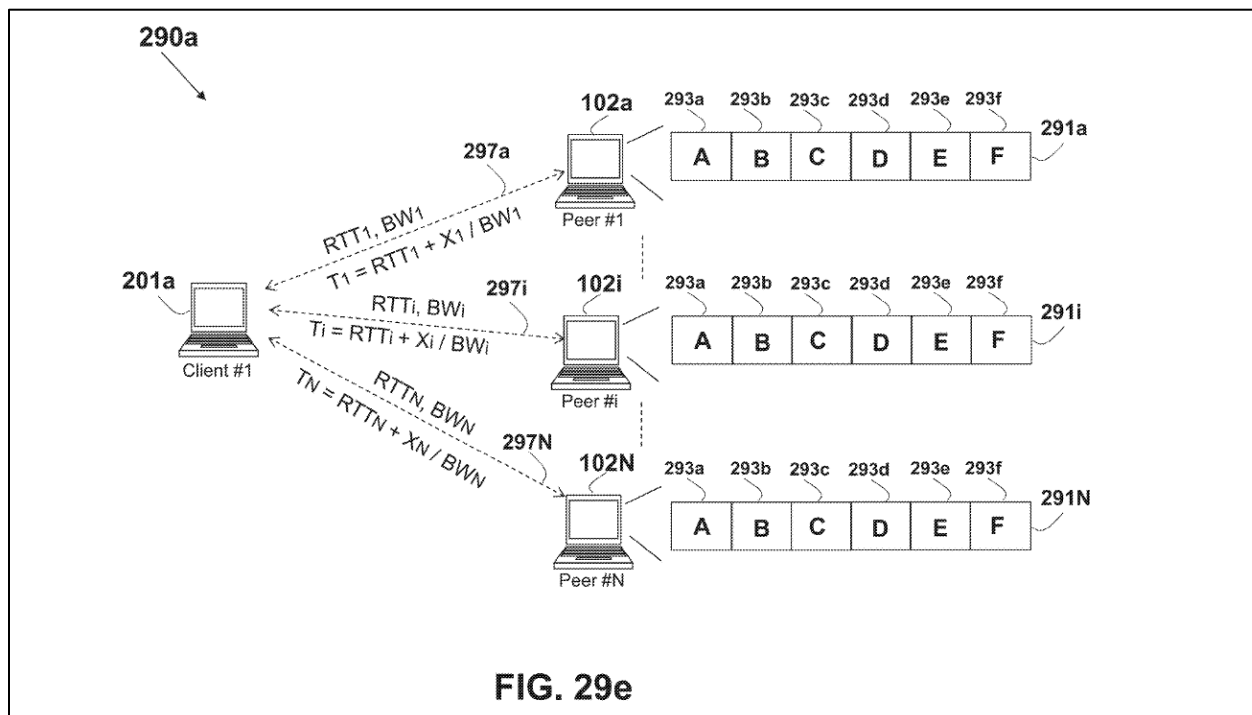
Plaintiff replies: Whether the “content” is sent over the Internet is independent of the meaning of “content,” so it would be improper to change “content” to “Internet content.” And Defendant does not provide any reason to change “content slice” to “portion.” Finally, the content identifiers need not be unique since contents slices can be identical. Dkt. No. 119 at 12.

Plaintiff cites further **intrinsic evidence** to support its position: ’866 Patent col.63 ll.62–63.

Analysis

There are two main issues in dispute. First, whether “content” should be changed to clarify that it is the content that is fetched over the Internet (i.e., “Internet content”). For the reasons set forth above, it should not as doing so would introduce a potentially confusing redundancy of a limitation expressed in the preamble. Second, whether the identification of the content slice is necessarily unique. It is not.

On the record before it, the Court refuses to limit “identified” to “identified uniquely” as Defendant proposes. Defendant does not support this limitation with any argument or evidence. And the patent teaches that two or more content slices may be identical. ’866 Patent col.62 ll.28–29, col.63 ll.62–63. The Court discerns no reason that two identical content slices must be uniquely identified relative to each other. Indeed, the embodiment of Figure 29e (reproduced here) depicts three devices, each associated with the same six content slices, and each identical content slice identified with the same identifier (e.g., “A” or “B”). *Id.* at col.118 l.47 – col.119 l.8. This suggests that the identifiers of identical slices allocated to different devices may not be unique.



Finally, and for the reasons stated above, the Court refuses to rewrite “content slice” as “portion.”

Accordingly, the Court determines that these terms have their plain and ordinary meanings without the need for further construction.

O. “a plurality of content slices ... and for each of the content slices”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“a plurality of content slices . . . and for each of the content slices” • ’866 Patent Claim 15	plain and ordinary meaning	performing the following steps for each of the plurality of content slices (portions), rather than just a single time for the entirety of the fetched Internet content

The Parties’ Positions

Plaintiff submits: Again, “content” should not be rewritten as “Internet content.” Further, performance of the steps of Claim 15 does not need to be repeated for each content slice but rather a single performance of a step may apply to each slice. Dkt. No. 109 at 31–32.

Defendant responds: The plain meaning of the claim is that the steps of the claim are repeated for each of the plurality of content slices. For example, if there are three slices then three devices are selected. Dkt. No. 115 at 27–29.

In addition to the claims themselves, Defendant cites the following **intrinsic evidence** to support its position: ’866 Patent fig.23a.

Plaintiff replies: Defendant “fails to dispute ... that the method can be performed once but applied to each of the content slices.” Dkt. No. 119 at 12.

Analysis

There issue in dispute here appears to be whether each step in the claim has to be performed anew for each content slice. It does not.

The Court is not persuaded by Defendant’s interpretation requiring that each step of Claim 15 must be separately performed for each content slice. Rather, a plain reading of the claim and the teaching of the ’866 Patent suggests that the steps may be accomplished for each slice by performing the step for more than one slice at a time. While the claim states that “for each of the content slices” certain steps are taken, it does not specify that each step must be performed for each slice separately from the performance of that step for every other slice. And the patent suggests otherwise. For example, in the six-slice embodiment described with reference to Figure 29a, three slices are allocated to a first device, one to a second, and two to a third. ’866 Patent col.117 ll.23–39. Similarly, for the embodiment described with reference to Figure 29e, the patent teaches that the slices may be allocated to any of multiple devices, or even to only one of the devices. *Id.* at col.118 ll.48–58. These teachings establish that although a device is selected for each slice, one device may be selected for multiple slices. And in the content-fetch flow described with reference to Figure 23a, the client selects one or more devices and then “retrieves the relevant chunks from each of the selected . . . devices.” *Id.* at col.110 ll.12–52. This indicates that a single device selection may apply to each of multiple slices (chunks) allocated to that device.

Accordingly, the Court rejects Defendant’s proposal to require each step in the claim to be performed separately for each content slice and construes “and for each of the content slices, comprising the steps of:” as follows:

- “and for each of the content slices, comprising the steps of:” means “and for each of the content slices, independently or in any combinations, the method further comprising the steps of:”

P. “selecting a device from the group” and “sending over the Internet a first request to the selected device using the group device identifier of the selected device”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“selecting a device from the group” <ul style="list-style-type: none">• ’866 Patent Claim 15	plain and ordinary meaning	selecting, by some node other than the first server and one of the group of multiple devices, a device within the group of multiple devices
“sending over the Internet a first request to the selected device using the group device identifier of the selected device” <ul style="list-style-type: none">• ’866 Patent Claim 15	plain and ordinary meaning	sending, by some node other than the first server and one of the group of multiple devices, to the selected device, a request to fetch the Internet content device within the group of multiple devices and that uses the selected device’s unique identification

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits: Contrary to Defendant’s proposed construction, under the plain meaning of the terms the device that performs the “selecting a device from the group” or the “sending over the Internet” may itself be one of the devices of the group. Further, it would be improper to replace “content” with “Internet content” or to require a “unique identification” when the claims do not recite such limitations. Dkt. No. 109 at 32–33.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: ’866 Patent col.71 ll.45–47.

Defendant responds: The '866 Patent teaches only that the client device selects a device from the group. “No other operation, apart from the client device performing the selection, is disclosed or enabled by the specification.” Dkt. No. 115 at 29–30.

In addition to the claims themselves, Defendant cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '866 Patent fig.23a, col.109 ll.33–44. **Extrinsic evidence:** Rhyne Decl. ¶ 22 (Plaintiff’s Ex. D, Dkt. No. 109-5).

Plaintiff replies: While the embodiment of Figure 23a may inform the meaning of Claim 15, the exemplary embodiment does not limit the claim as Defendant suggests. Dkt. No. 119 at 13.

Analysis

Other than Defendant’s proposed “Internet content” and “unique identification” limitations, which are addressed above, the issue in dispute appears to be whether the device that performs the selecting or sending steps is necessarily other than the “first server” and any device in the group of multiple devices. The Court rejects such a negative limitation.

Defendant’s proposed construction would improperly supplant the claims, which express no limitation on what device may perform the “selecting . . .” or “sending . . .” steps, with an exemplary embodiment. This is contrary to law. *Phillips*, 415 F.3d at 1323; *see also*, *Thorne*, 669 F.3d at 1366.

Accordingly, the Court rejects Defendant’s proposed construction and determines that these terms have their plain and ordinary meanings without the need for further construction.

Q. “the first request including the content slice identifier and the second identifier”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“the first request including the content slice identifier and the second identifier” <ul style="list-style-type: none">• ’866 Patent Claim 15	plain and ordinary meaning	the request for fetching the Internet content, that is sent to the selected device, includes (1) the content slice identifier and (2) information that includes the address of the first server

The Parties’ Positions

Plaintiff submits: As explained with reference to other terms, it would be improper to change “content” to “Internet content” or to require an “address” in the “identifier.” Dkt. No. 109 at 33.

Defendant responds: Its proposed constructions clarify that the “content” is fetched from across the Internet and the second identifier includes an address, as explained with respect to other terms. Dkt. No. 115 at 30.

Plaintiff replies: For the reasons expressed with respect to other terms, Defendant’s proposed construction is improper. Dkt. No. 119 at 13.

Analysis

The dispute here distills to two issues. First, whether the “fetching a content over the Internet” from Claim 15’s limiting preamble should be incorporated into the construction of another term. Second, whether the “second identifier” necessarily includes an address. For the reasons set forth above, the Court declines to incorporate an Internet limitation that is expressed in the limiting preamble and rejects that the “second identifier” necessarily includes an address.

Accordingly, the Court determines that this term has its plain and ordinary meaning without the need for further construction.

R. “the partitioning is based webpages level”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“the partitioning is based webpages level” <ul style="list-style-type: none">• ’866 Patent Claim 18	plain and ordinary meaning	each of the plurality (more than just one) of portions of the fetched Internet content corresponds to one or more webpages

The Parties’ Positions

Plaintiff submits: As explained in the ’866 Patent, the partitioning may be based on a web pages level where each slice may include one or a few webpages. That is the plain and ordinary meaning of this term. The “plurality,” “portions,” and “Internet content” limitations proposed by Defendant are improper. Dkt. No. 109 at 33–34.

In addition to the claims themselves, Plaintiff cites the following **intrinsic evidence** to support its position: ’866 Patent col.53 ll.44–48, col.57 ll.65–67.

Defendant responds: Its “proposed construction clarifies that there is plurality of partitions and that the content is fetched from across the Internet,” as argued with respect to other terms. Dkt. No. 115 at 30–31.

Plaintiff replies: For the reasons expressed with respect to other terms, Defendant’s proposed construction is improper. Dkt. No. 119 at 13.

Analysis

The issues in dispute here are whether the “Internet” and “plurality of content slices” limitations expressed in Claim 15, from which Claim 18 depends, should be restated in the construction of this term. They should not. Including these limitations in the construction would not clarify claim scope but rather threatens to confuse. The Court, however, determines that this term would benefit from some construction to clarify what it means to partition on a webpages-

level basis. And the parties appear to fundamentally agree that webpages-level-based partitioning means the slices include one or more webpages. *See* '866 Patent col.53 ll.36–46 (“The content requested by the client device may be partitioned into multiple parts or ‘slices’. . . . The content may be a website content composed of multiple webpages, and each slice may include one (or few) webpages.”).

Accordingly, the Court declines to include the “fetched Internet content” and the “plurality (more than just one) of the portions” limitations into the claim and construes “the partitioning is based webpages level” as follows:

- “the partitioning is based webpages level” means “each of the content slices resulting from the partitioning includes one or more webpages.”

S. “all of the parts of the content are included in all of the content slices”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“all of the parts of the content are included in all of the content slices” <ul style="list-style-type: none"> • '866 Patent Claim 19 	plain and ordinary meaning	indefinite under 35 U.S.C. § 112

The Parties’ Positions

Plaintiff submits: The plain meaning of this term is reasonably certain, the totality of the content slices include the totality of the content. Dkt. No. 109 at 34.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** '866 Patent col.168 ll.48–50. **Extrinsic evidence:** Rhyne Decl. ¶ 26 (Plaintiff’s Ex. D, Dkt. No. 109-5).

Defendant responds: It is not clear whether this term refers to an identification of the parts of the content in, e.g., an index, or the content itself. Thus, Claim 19 of the '866 Patent is indefinite. Dkt. No. 115 at 31.

Plaintiff replies: The only expert testimony of record on this issue is that the term refers to content rather than an index. Dkt. No. 119 at 13.

Analysis

The issue in dispute is whether the meaning of this term is reasonably certain. It is. The Court does not find Defendant's interpretation of this term to encompass an index to be a reasonable interpretation of "all of the parts of the content are included in all of the content slices." The claim phrase plainly refers to the content itself rather than an index of content. The Court, however, determines that this term would benefit from some construction to clarify that all of the slices each include all of the content. Claim 15, from which Claim 19 depends, recites "partitioning the content into a plurality of content slices" and "constructing the content from the . . . plurality of content slices" which indicates that all of the content is necessarily found in the collection of slices. Plaintiff's argument that the plain and ordinary meaning of Claim 19 is that all of the content is found in the collection of slices would render Claim 19 entirely redundant of Claim 15. Thus, Claim 19 would fail to "specify a further limitation of the subject matter claimed" in Claim 19, as required under 35 U.S.C. § 112(d). The better interpretation of Claim 19 is that it further limits the subject matter of Claim 15 by specifying that every content slice (all the content slices) includes all of the content. *See* '866 Patent col.71 ll.8–10 ("A method is disclosed for fetching to a first device a content . . . from N multiple locations each storing a copy of a part of, or the entire of, the content."), col.168 ll.48–50 ("The terms 'chunk' and 'slice' are interchangeably used herein to include, but not limited to, a part of, or the entire of, a content.").

Accordingly, Defendant has failed to prove the term “all of the parts of the content are included in all of the content slices” in Claim 19 is indefinite. Instead, the Court construes the term as follows:

- “all of the parts of the content are included in all of the content slices” means “all of the parts of the content are included in each of the content slices.”

T. “part of the content is included in two or more content slices”

Disputed Term	Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“part of the content is included in two or more content slices” • ’866 Patent Claim 22	two or more slices including at least an overlapping part of the content	at least two of the plurality (more than just one) of portions of the fetched Internet content have overlapping content

The Parties’ Positions

Plaintiff submits: Defendant’s proposed construction includes unnecessary and improper rewriting of claim language. For example, it changes “two or more” to “at least two of the plurality (more than just one)” and “content slices” to “portions.” And it improperly refers to overlapping “content” rather than “part of the content.” Dkt. No. 109 at 34–35.

Defendant responds: Its proposal “clarifies that the content slices comprise content that had been fetched over the Internet.” Dkt. No. 115 at 31–32.

Plaintiff replies: Rewriting “content” as “Internet content” is unclear “given that the claimed content exists on the second server, whether or not it will be ‘fetched over the Internet.’” Dkt. No. 119 at 13.

Analysis

The only issue in dispute appears to be whether “content” should be rewritten as “Internet content.” As explained above, such a construction does not clarify claim scope but rather threatens

to confuse. The parties appear to otherwise agree that this term refers to content slices with content parts that overlap.

Accordingly, the Court construes “part of the content is included in two or more content slices” as follows:

- “part of the content is included in two or more content slices” means “two or more of the content slices each include some overlapping part of the content.”

IV. CONCLUSION

The Court adopts the constructions above for the disputed terms of the Asserted Patents. The Court further finds that Claim 108 of the '044 Patent is indefinite. Furthermore, the parties should ensure that all testimony that relates to the terms addressed in this Order is constrained by the Court's reasoning. However, in the presence of the jury, the parties should not expressly or implicitly refer to each other's claim construction positions and should not expressly refer to any portion of this Order that is not an actual construction adopted by the Court. The references to the claim construction process should be limited to informing the jury of the constructions adopted by the Court.

SIGNED this 6th day of December, 2019.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE