

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

LUMINATI NETWORKS LTD.,

Plaintiff,

v.

UAB TESONET and UAB
METACLUSTER LT.

Defendants.

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Case No. 2:18-CV-299-JRG

**CLAIM CONSTRUCTION
MEMORANDUM AND ORDER**

On July 31, 2019, the Court held a hearing to determine the proper construction of disputed claim terms in United States Patents No. 9,241,044 and 9,742,866. Having reviewed the arguments made by the parties in their claim construction briefing (Dkt. Nos. 61, 70, & 82),¹ having considered the intrinsic evidence, and having made subsidiary factual findings about the extrinsic evidence, the Court hereby issues this Claim Construction Memorandum and Order. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc); *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). Further, Plaintiff’s Motion to Strike Expert Declaration and References to the Same in Defendant’s Claim Construction Brief (Dkt. No. 80) is **DENIED** as set forth herein.²

¹ Citations to documents (such as the parties’ briefs and exhibits) in this Claim Construction Memorandum and Order refer to the page numbers of the original documents rather than the page numbers assigned by the Court’s electronic docket unless otherwise indicated.

² After the parties filed their claim construction briefing, the Court granted leave for Plaintiff to add Defendant UAB Metacluster LT (“Metacluster”). (*See* Dkt. No. 92). Metacluster is a corporate entity related to Defendant UAB Teso LT (“Teso”). (*See id.*, at 1.) Metacluster has filed a motion to dismiss. (*See* Dkt. No. 97.) At the July 31, 2019 claim construction hearing, counsel for Metacluster acknowledged that if Metacluster remains a party in the above-captioned case after

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disposition of Metacluster’s motion to dismiss, then Metacluster waives any objection to the Court having construed the claims without receiving separate claim construction briefing from Metacluster.

I. BACKGROUND

Plaintiff has alleged infringement of United States Patents No. 9,241,044 (“the ’044 Patent”) and 9,742,866 (“the ’866 Patent”) (collectively, “the patents-in-suit”).

The ’044 Patent, titled “System and Method for Improving Internet Communication by Using Intermediate Nodes,” issued on January 19, 2016 and bears an earliest priority date of August 28, 2013. The Abstract of the ’044 Patent states:

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 [*sic*] 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.

The ’866 Patent is a divisional of the ’044 Patent, and Plaintiff submits that the patents-in-suit therefore share a common specification. (Dkt. No. 61, at 1.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with preliminary constructions with the aim of focusing the parties’ arguments and facilitating discussion. Those preliminary constructions are noted below within the discussion for each term.

II. LEGAL PRINCIPLES

It is understood that “[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999).

Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

“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.” *Teva*, 135 S. Ct. at 841 (citation omitted). “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.” *Id.* (citing 517 U.S. 370).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent’s claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee’s invention. Otherwise, there would be no need for claims. *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular

embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314–17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions

of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office (“PTO”) understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; see *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that “a patentee’s statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation”).

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through

dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319–24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323–25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The Supreme Court of the United States has “read [35 U.S.C.] § 112, ¶ 2 to require that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910, 134 S. Ct. 2120, 2129 (2014). “A determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus*, 134 S. Ct. 2120. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

III. AGREED TERMS

In the May 1, 2019 Patent Rule 4-3 Joint Claim Construction and Pre-Hearing Statement (Dkt. No. 46, at 1), in briefing (Dkt. No. 61, at 7–8), and in the July 10, 2019 Patent Rule 4-5(d) Joint Claim Construction Chart (Dkt. No. 84, Ex. A, at 5–8 & 11), the parties submitted the following agreed-upon constructions:

<u>Term</u>	<u>Agreed Construction</u>
“using multitasking or multiprocessing” (’044 Patent, Claims 86, 88, 91, 107)	“performing multiple tasks in overlapping time periods using common processing resources”
“the physical geographical location” (’044 Patent, Claim 96)	“location on earth”
“the physical geographical proximity to the second server” (’044 Patent, Claim 97)	“distance from second server based on physical geographical location”

IV. PLAINTIFF’S MOTION TO STRIKE

Plaintiff’s Motion to Strike Expert Declaration and References to the Same in Defendant Defendant’s Claim Construction Brief (Dkt. No. 80) requests that the Court strike the Declaration of Dr. Michael J. Freedman (Dkt. No. 70-1). Plaintiff argues that Defendant did not timely disclose this extrinsic evidence as required by Local Patent Rules 4-2 and 4-3. (Dkt. No. 80.) Plaintiff also argues that “Plaintiff has been prejudiced by having to serve its own expert declaration with minimal information regarding Defendant’s claim construction and indefiniteness positions, having no declaration on which to depose Dr. Freedman, and having to file its own opening claim construction brief without having Dr. Freedman’s declaration or his deposition.” (*Id.*, at 1.) Also

before the Court are Defendant's response (Dkt. No. 86), Plaintiff's reply (Dkt. No. 93), and Defendant's sur-reply (Dkt. No. 96).

The evidence at issue has not affected the Court's claim construction analysis, as set forth herein. Plaintiff's Motion to Strike Expert Declaration and References to the Same in Defendant's Claim Construction Brief (Dkt. No. 80) is therefore **DENIED**.

V. DISPUTED TERMS

A. Preamble of Claim 81 of the '044 Patent

Plaintiff's Proposed Construction	Defendant's Proposed Construction
Not limiting	Limiting

(Dkt. No. 46, Ex. A, at 1; Dkt. No. 61, at 8; Dkt. No. 84, Ex. A, at 1.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: "Limiting."

(1) The Parties' Positions

Plaintiff argues that "[t]he preamble of claim 81 of the '044 patent just introduces the claim, and the body of that claim defines a structurally complete invention." (Dkt. No. 61, at 9.) Plaintiff further argues that "[t]here is no indication that . . . necessary steps or independent meaning is present in the preamble of the claim here." (*Id.*, at 8.) Plaintiff also submits that "[a]n antecedent basis term . . . does not cause the entire preamble to limit the claim." (*Id.*, at 9.)

Defendant responds that this preamble "limits the claims by (i) providing antecedent basis for seven terms that follow the preamble and (ii) providing express definition of the claimed subject matter that—even according to Luminati's own expert—provides important guidance to a person of ordinary skill." (Dkt. No. 70, at 1.)

Plaintiff replies that “the antecedent bases of terms are not applicable because they don’t add structure or definition.” (Dkt. No. 82, at 1.) Plaintiff also argues that “[a]s to ‘first device,’ the lack of its appearance in the body is a result of the device not being required to practice the method.” (*Id.*, at 11.) Further, Plaintiff argues that “[t]he term ‘second server’ is not necessary to complete the invention of claim 81, so it is not limiting.” (*Id.*)

At the July 31, 2019 hearing, the parties presented oral arguments as to this dispute.

(2) Analysis

In general, a preamble limits the invention if it recites essential structure or steps, or if it is “necessary to give life, meaning, and vitality” to the claim. *Pitney Bowes Inc. v. Hewlett-Packard Co.*, 182 F.3d [1298,] 1305 [(Fed. Cir. 1999)]. Conversely, a preamble is not limiting “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002); *see, e.g., Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003) (“When limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.”).

Also, “the purpose or intended use of the invention . . . is of no significance to claim construction” *See Pitney Bowes*, 182 F.3d at 1305. This principle has sometimes been characterized as “the presumption against reading a statement of purpose in the preamble as a claim limitation.” *Marrin v. Griffin*, 599 F.3d 1290, 1294–95 (Fed. Cir. 2010); *see Allen Eng’g Corp. v. Bartell Indus.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002) (“Generally, the preamble does not limit the claims.”); *see also Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 769–71 (Fed. Cir. 2018) (in preamble reciting “[a] computer network for providing an information delivery service for a plurality of participants,” finding “information delivery service” to be non-

limiting because it “merely describe[s] intended uses for what is otherwise a structurally complete invention”).

In some cases, language in the preamble may be merely “descriptive” of the limitations set forth in the body of the claim. *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434 (Fed. Cir. 2000) (“The phrase ‘control apparatus’ in the preamble merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention.”); *see also Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1358 (Fed. Cir. 2012) (“if the body of the claim describes a structurally complete invention, a preamble is not limiting where it ‘merely gives a name’ to the invention, extols its features or benefits, or describes a use for the invention”) (quoting *Catalina*, 289 F.3d at 809).

Here, Claim 81 of the ’044 Patent recites (emphasis added):

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*.

The preamble thus provides antecedent basis for “the first identifier,” “the first server,” “the second identifier,” “the second device,” “the first content identifier,” “the third identifier,” and “the first content” recited in the body of the claim.

Plaintiff has emphasized: “That [a] phrase in the preamble . . . provides a necessary structure for [the] claim . . . does not necessarily convert the entire preamble into a limitation, particularly one that only states the intended use of the invention.” *TomTom Inc. v. Adolph*, 790

F.3d 1315, 1323 (Fed. Cir. 2015); *see also id.* (“It was therefore error for the district court to use an antecedent basis rationale to justify converting this independent part of the preamble into a new claim limitation.”); *Marrin*, 599 F.3d at 1294–95 (“[T]he mere fact that a structural term in the preamble is part of the claim does not mean that the preamble’s statement of purpose or other description is also part of the claim.”).

Yet, these phrases that derive antecedent basis from the preamble are “defined in greater detail in the preamble,” particularly in terms of their relationships with each other. *Proveris Scientific Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1373 (Fed. Cir. 2014) (“The phrase ‘the image data’ clearly derives antecedent basis from the ‘image data’ that is defined in greater detail in the preamble as being ‘representative of at least one sequential set of images of a spray plume.’”) For example, the antecedent basis for “the first identifier” is recited in relation to “a first device, identified in the Internet by a first identifier.”

Also, the “first device” and “second server” appear only in the preamble but are recited in relation to preamble terms that provide antecedent basis for terms that appear in the body of the claim. *See id.* The opinions of Plaintiff’s expert are consistent with this understanding that the preamble sets forth such relationships. (*See* Dkt. No. 61-1, May 1, 2019 Rhyne Decl., at ¶ 8 (“the claim language informs a POSA [(person of ordinary skill in the art)] how the first device relates to the other elements of the claim as the claimed method is performed”).)³

³ Plaintiff’s reply brief asserts: “To the extent Defendant argue[s] that the ‘second server’ may be implicated implicitly but not expressly required by the body of the claim, the Federal Circuit has held that implied activity in the body of a claim does not constitute a claim limitation.” (Dkt. No. 82, at 12 (citing *Uniloc USA Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1309 (Fed. Cir. 2011))). The portion of *Uniloc* cited by Plaintiff states: “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*, 632 F.3d at 1309. Plaintiff has not shown how any discussion regarding “divided infringement” (as Plaintiff puts it, Dkt. No. 82, at 8 & 9), or any

Further, the phrase “fetching over the Internet” refers to preamble terms—particularly “a first content”—that provide antecedent basis for terms in the body of the claim. Because the patentee “cho[se] to use *both* the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.” *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006) (citation and internal quotation marks omitted).⁴

Additionally, the preamble is limiting because it provides features that are underscored as important *in the specification*. “[W]hen reciting additional structure or steps underscored as important by the specification, the preamble may operate as a claim limitation.” *Catalina*, 289 F.3d at 808; *see also id.* (citing *Pitney Bowes*, 182 F.3d at 1309) (“[W]hen the preamble is essential to understand limitations or terms in the claim body, the preamble limits claim scope.”) “[T]he preamble may be construed as limiting when it recites particular structure or steps that are highlighted as important by the specification.” *Proveris Sci. Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1372 (Fed. Cir. 2014) (citing *Catalina*, 289 F.3d at 808). The body of Claim 81 of the ’044 Patent does not set forth the relationships between the various devices, and those relationships are only evident from the preamble. The specification and the technology tutorial provided by the Plaintiff both suggest that the relationships between the devices are important features of the

other analysis set forth in the cited portion of *Uniloc*, bears on any relevant claim construction principle.

⁴ The *Fundamental Innovation* case cited in Plaintiff’s reply brief is distinguishable. *Fundamental Innovation Sys. Int’l LLC v. Samsung Elecs. Co., Ltd., et al.*, No. 2:17-CV-145, Dkt. No. 140, 2018 WL 647734 (E.D. Tex. Jan. 31, 2018). In *Fundamental Innovation*, the preamble language at issue was “providing a source of power to a mobile device.” *See id.*, slip op. at 24–25. The Court found this language not limiting because it was “merely descriptive of the limitations expressly recited in the body of the claim.” *Id.*, slip op. at 25. In the present case, in the preamble phrase “fetching over the Internet a first content,” “fetching over the Internet” is *not* merely descriptive of limitations set forth in the body of the claim.

invention. The specification's Summary of the Invention describes an embodiment that tracks the language of Claim 81, but it also clarifies the device that is performing the recited steps within the body:

A method is disclosed for fetching over the Internet a first content, identified by a first content identification, 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, by using a first server. The method may be comprising the steps of the second device sending the second identifier to the first server; in response to receiving the second identifier, the first server storing the second identifier; *the first device sending a first request to the first server*; in response to receiving the first request, *the first server sending the second identifier to the first device*; *the first device sending a second request to the second device using the second identifier*, *the second request includes the first content identification and the third identifier*; in response to receiving the second request, the second device sending the first content identification to the second server using the third identifier; in response to receiving the first content identification, the second server sending the first content to the second device; and in response to receiving the first content, *the second device sending the first content to the first device*.

'044 Patent at 52:31–51 (emphasis added).

Other portions of the '044 Patent provide similar clarification.'044 Patent Fig 5b; 81:32–41, 85:64–87:30, & Figs. 11a–11b. Plaintiff's technology tutorial highlighted certain problems discussed within the specification that the invention sought to resolve, including: (1) that the data server can block requests based upon the requestor, and (2) that a data server may block a request based on other criteria such as the geographic area that a device is located in. (Dkt. No. 60-1 at 9, 13). Plaintiff points out that, to solve these problems, the disclosed inventions send information to specific devices or servers. (*Id.* at 10–11, 14–17.) At the August 14, 2019 claim construction hearing, Plaintiff again recognized these problems and reiterated that the invention helped solve the problems. (Dkt. No. 112 at 6:19–8:20.) If the claimed inventions merely involved the steps

themselves without specifying what structure performed those steps, then the invention would not solve these problems. Accordingly, the preamble’s recitation that the method is for fetching over the Internet a first content by a first device is highlighted as important by the specification. The Court therefore concludes that the preamble is limiting for this additional reason.

The Court therefore hereby finds that **the preamble of Claim 81 of the ’044 Patent is limiting.**

B. “device”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“a physical device, but not a hypothetical or virtual device” ⁵

(Dkt. No. 46, Ex. A, at 5; Dkt. No. 61, at 10; Dkt. No. 84, Ex. A, at 2–3.) The parties submit that this term appears in Claims 81, 87, 89, 92–101, and 108 of the ’044 Patent and Claims 15 and 25–28 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 5; Dkt. No. 84, Ex. A, at 2–3.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “a physical device.”

At the hearing, the parties agreed to the Court’s preliminary construction. The Court therefore hereby construes **“device”** to mean **“a physical device.”**

C. “identifier”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“IP address that identifies the device or server”

⁵ Defendant previously proposed: “a physical computer.” (Dkt. No. 46, Ex. A, at 5.)

(Dkt. No. 46, Ex. A, at 4; Dkt. No. 61, at 11; Dkt. No. 84, Ex. A, at 3.) The parties submit that this term appears in Claims 81, 82, 87, 89, 98, 101, and 108 of the '044 Patent and Claim 15 of the '866 Patent. (Dkt. No. 46, Ex. A, at 4; Dkt. No. 84, Ex. A, at 3.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning (Expressly reject Defendant’s proposal of ‘IP address’).”

(1) The Parties’ Positions

Plaintiff argues that “Defendant’s proposal falls into the trap of reading an embodiment into the claims, which runs afoul of a basic tenant [*sic*] of claim construction.” (Dkt. No. 61, at 11.) Plaintiff also argues claim differentiation as to dependent Claim 44 of the '044 Patent. (*Id.*, at 11–12.)

Defendant responds that “Luminati’s brief avoids the crux of the problem: the asserted claims expressly require that the device identifiers identify a device ‘*in the Internet.*’” (Dkt. No. 70, at 12.)

Plaintiff replies that “[t]he patentee used the term ‘IP address’ in the patent and if the patentee wanted to limit the claim to IP addresses it would have used that term, but it did not.” (Dkt. No. 82, at 3.) Plaintiff also argues: “Identifying something is not the same as identifying it by its Internet address. Existing in an environment does not mean you have to identify it in a particular way.” (*Id.*)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term.

(2) Analysis

As a threshold matter, Plaintiff cites a finding by this Court that the term “identifier” in a different, unrelated patent did not require construction. *See Aloft Media, LLC v. Microsoft Corp.*,

No. 6:08-CV-50, 2009 WL 803133, at *5 (E.D. Tex. Mar. 24, 2009). This is unpersuasive because “claims of unrelated patents must be construed separately.” *e.Digital Corp. v. Futurewei Techs., Inc.*, 772 F.3d 723, 727 (Fed. Cir. 2014).

Turning to the patents-in-suit, the specification discloses that an identifier “*may be a URL or an IP address*”:

Each of the identifiers herein *may be a URL or an IP address in IPv4 or IPv6 form*. Any one of the servers herein may be a web server using Hyper Text Transfer Protocol (HTTP) that responds to HTTP requests via the Internet, and any request herein may be an HTTP request. Any communication herein may be based on, or according to, TCP/IP protocol or connection, and may be preceded by the step of establishing a connection, such as an ‘Active OPEN’ or a ‘Passive OPEN’. Alternatively or in addition, any communication herein may be based on, or use a VPN or a tunneling protocol. Any content herein may include, consist of, or comprise, part or whole of files, text, numbers, audio, voice, multimedia, video, images, music, or computer program, or may include, consists [*sic*] of, or comprise, a part of, or a whole of, a website page.

’044 Patent at 54:7–22 (emphasis added); *see, e.g., id.* at 51:26–27 (“an identification (such as IP address)”); *id.* at 58:20–21 (“the second identifier that *may be an IP address*”) (emphasis added); *id.* at 63:18–19 (“Each of the identifiers may be an IP address (such as in IPv4 or IPv6 form) or a URL.”); *id.* at 82:44–45 (“the device 31a identification on the Internet 113, such as its IP address”); *id.* at 95:25–96:3 (“an identifier *such as the IP address*”) (emphasis added).

Claim 81 of the ’044 Patent recites devices “identified *in the Internet*” by identifiers (emphasis added):

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.

The parties submit that “identifier” appears in Claims 81, 82, 87, 89, 98, 101, and 108 of the ’044 Patent and Claim 15 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 4.) Claims 82, 87, 89, 98, and 101 of the ’044 Patent depend from Claim 81 and therefore include the “in the Internet” limitations recited in Claim 81. Claim 108 of the ’044 Patent is an independent claim that similarly refers to the Internet with respect to the “first identifier,” “second identifier,” and “third identifier.” Claim 15 of the ’866 Patent similarly refers to a “second identifier” and a “group device identifier” with respect to the Internet.

Defendant proposes “constru[ing] ‘identifier’ only as it modifies devices/servers in the claims (i.e., the ‘first identifier,’ ‘second identifier,’ ‘third identifier,’ ‘fourth identifier,’ and ‘fifth identifier’), not the ‘content identifier,’ which is separately construed by the parties and separately addressed in Luminati’s brief.” (Dkt. No. 70, at 13.) Plaintiff submits that the specification does not limit identifiers to being IP addresses and uses “identifier” differently with reference to, for example, content. *See, e.g.*, ’044 Patent at 40:21–26 (“[a]n identifier and/or sequence number in ping packets”); *id.* at 39:8–25 (similar as to “ICMP echo message”); *id.* at 102:45–59 (“chunk identifier”); *id.* at 111:4–5 (“the identifier of the content that was fetched during this transaction, such as IP address, URL, web-site or web-page”); *id.* at 124:27–31 (“Video data fetched via the Internet are typically identified by a set of characters, including three fields, relating to a URL domain name, a specific video identifier, and offset, relating to the viewing point in the video data itself.”)

The claims here at issue already expressly recite the “in the Internet” limitation proposed by Defendant. Defendant submits that “[n]otwithstanding the patents’ repeated references to IP

addresses as device identifiers, [Defendant] is amenable to a construction that includes more than IP addresses so long as the identifier identifies the device or server ‘in the Internet’ as required by the claims, and does not consist of an ‘internal’ or other identifier that does not identify a device ‘in the Internet.’” (*Id.* (emphasis omitted).)

On balance, the “in the Internet” limitation need not be repeated in a construction as to the terms for which Defendant advances this argument, and doing so would tend to confuse rather than clarify the scope of the claims. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1237 (Fed. Cir. 2016) (“Construing a claim term to include features of that term already recited in the claims would make those expressly recited features redundant.”).

The Court therefore hereby expressly rejects Defendant’s proposed construction. No further construction is necessary, particularly in light of surrounding claim language that provides context as to “in the Internet.”⁶ *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”); *see also Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015); *ActiveVideo Networks, Inc. v. Verizon Commcn’s, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) (“Unlike O2 Micro, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008)

⁶ At the July 31, 2019 hearing, Defendant was amenable to omitting “IP address” from the construction if the “in the Internet” language in the preamble is found limiting. As discussed above, the Court finds that the entire preamble of Claim 81 of the ’044 Patent is limiting.

(“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”).⁷

The Court accordingly hereby construes “**identifier**” to have its **plain and ordinary meaning**.

D. “content”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“files, text, numbers, audio, voice, multimedia, video, images, music, website page, or computer programs or any other sequence of instructions, as well as any other form of information represented as a string of bits or bytes” ⁸

(Dkt. No. 46, Ex. A, at 2; Dkt. No. 61, at 13; Dkt. No. 70, at 11; Dkt. No. 84, Ex. A, at 2.) The parties submit that this term appears in Claims 81, 87, 89, 101, 104, 105, and 108 of the ’044 Patent and Claims 15–19 and 22–24 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 2; Dkt. No. 84, Ex. A, at 2.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “digital data such as files, text, numbers, audio, voice, multimedia, video, images, music, website pages, or computer programs or any other sequence of instructions, as well as any other form of information represented as a string of bits or bytes.”

⁷ See also *Lextron Sys., Inc. v. Microsoft Corp.*, No. C-04-0588, 2005 WL 6220089, at *8 (N.D. Cal. June 1, 2005) (Walker, C.J.) (stating that “‘Internet’ has entered the popular lexicon and needs no construction” and that “there is only one ‘Internet’”).

⁸ Defendant previously proposed: “files, text, numbers, audio, voice, multimedia, video, images, music, web-site page, or computer program.” (Dkt. No. 46, Ex. A, at 2.)

(1) The Parties' Positions

Plaintiff argues that “Defendant seeks to take a term used in its ordinary meaning and limit it to a non-exhaustive list of types of content from the specification.” (Dkt. No. 61, at 13.) Plaintiff also argues claim differentiation as to dependent Claim 58 of the '044 Patent, arguing that the term “content” should not be limited to the listed types of data. (*Id.*, at 13–14.)

Defendant responds that “[t]he correct definition of ‘content’ may be drawn directly from the specification without the need for extrinsic evidence.” (Dkt. No. 70, at 10.)

Plaintiff replies that Defendant’s proposal “improperly imports the specification into the claims,” and “[c]ontent’ is a readily understood term without need of further construction.” (Dkt. No. 83, at 3.)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term. Plaintiff was amenable to construing “content” as referring to “digital data,” but Plaintiff opposed including any list of examples in the construction (alternatively, Plaintiff proposed including additional examples in the list of examples).

(2) Analysis

Plaintiff has suggested that the term “content” can refer to “the information conveyed by a document, for example.” (Dkt. No. 61, at 14.) Plaintiff has submitted an extrinsic definition of “content” as “[t]he information conveyed by the document, other than the structural information, and that is intended for human perception.” (*See* Dkt. No. 61, Ex. D.)

Claim 81 of the '044 Patent, for example, recites (emphasis added):

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.

Claim 81 of the '044 Patent thus provides context for understanding that “content” can be fetched “over the Internet” and received by a device. Claim 15 of the '866 Patent recites (emphasis added):

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.

Claim 15 of the '866 Patent thus provides further context for understanding that “content” can be partitioned into “a plurality of content slices” and sent over the Internet, and “the content” can be reconstructed from “the received plurality of content slices.” A fair reading of these claims is that “content” refers to digital data rather than more generally to “information.” In other words, the term “content” does not refer to data that *represents* information but rather refers to actual digital data.

The specification is consistent with this reading. In particular, the specification discloses examples that refer to content slices in terms of bits:

The content may include files, text, numbers, audio, voice, multimedia, video, images, music, computer programs or any other sequence of instructions, as well as any other form of information represented as a string of bits or bytes. In one example, the content may include, be a part of, or a whole of, a website page.

* * *

The content requested by the client device may be partitioned into multiple parts or ‘slices’. Any number of slices may be used. The slicing may be in a bit, nibble (4-bits), byte (8-bits), word (multiple bytes), character, string, or a file level. The partition may be into equal length parts, or may use different length slicing. The content may be composed of inherent or identifiable parts or segments, and the partition may make use of these parts. The content may be a website content composed of multiple webpages, and each slice may include one (or few) webpages. Further, the partition may be sequential or non-sequential in the content. The partitioning may be non-overlapping or overlapping.

* * *

The content herein may consist of, or comprise, data such as files, text, numbers, audio, voice, multimedia, video, images, music, computer programs or any other sequence of instructions, as well as any other form of information represented as a string of bits, bytes, or characters. In one example, the content may include, be a part of, or a whole of, a URL or a website page.

’044 Patent at 51:54–59, 52:19–30 & 84:12–18; *see id.* at 56:30–44 (“The content may be composed of bits, nibbles, bytes, characters, words, or strings . . .”).

Additional disclosures cited by Plaintiff do not compel otherwise. *See, e.g.*, ’044 Patent at 8:12–29 (“[W]idgets display live, auto-updating content such as the weather forecast, the user’s email inbox, or a news ticker directly on the homescreen.”); *id.* at 12:45–47 (“The file system manages access to both the content of files and the metadata about those files.”); *id.* at 19:49–20:36 (“An information resource is identified by a Uniform Resource Identifier (URI/URL) and may be part of a web page, a web-page [*sic*], an image, a video, or any other piece of content.”); *id.* at 46:30–43 (stating that “video content may be in a digital video format”).

Finally, at the July 31, 2019 hearing, Plaintiff was amenable to construing “content” as referring to digital data. The examples set forth in Defendant’s proposed construction are

encompassed by referring to digital data, and the examples should be omitted to avoid any risk that the list of examples might be perceived by the finder of fact as limiting.

The Court therefore hereby construes **“content”** to mean **“digital data.”**

E. “content identifier”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“an identifier, such as a URL, that identifies the Content”

(Dkt. No. 46, Ex. A, at 1; Dkt. No. 61, at 14; Dkt. No. 84, Ex. A, at 2.) The parties submit that this term appears in Claims 81, 82, 87, 89, 101, and 108 of the ’044 Patent. (Dkt. No. 84, Ex. A, at 2; *see* Dkt. No. 61, at 14.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning (Expressly reject, as unnecessary, Defendant’s proposal of specifying that the ‘content identifier’ identifies the ‘first content’ recited in the claims).”

(1) The Parties’ Positions

Plaintiff submits that “content” and “identifier” are already presented as distinct disputed terms and, moreover, “there is no reason to take an easily understood term and define it by using words that mean roughly the same thing but add one non-limiting example.” (Dkt. No. 61, at 14–15.)

Defendant responds that “the ‘first content identifier’ needs to identify specific content—the ‘first content’—and cannot just be an identifier of any content.” (Dkt. No. 70 at 14.)

Plaintiff replies as to this term together with the term “identifier,” which is addressed above. (Dkt. No. 82, at 3.)

At the July 31, 2019 hearing, the parties rested on their briefing and presented no oral argument as to this disputed term.

(2) Analysis

Claim 81 of the '044 Patent, for example, recites (emphasis added):

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.

Defendant proposes that “content identifier” should be construed to ensure that “the first content identifier” in the body of the claim is understood as identifying the “first content” as recited in the preamble. Because this is already clear on the face of the claim, and because the Court (above) finds that the preamble of Claim 81 of the '044 Patent is limiting, no further construction of “content identifier” is necessary in this regard.

With this understanding, the Court hereby construes “**content identifier**” to have its **plain and ordinary meaning**.

F. “simultaneous” and “concurrently”

<p style="text-align: center;">“simultaneous” (’044 Patent, Claims 85, 86)</p>	
Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“at the same time”

<p style="text-align: center;">“concurrently” ('044 Patent, Claims 88, 90, 91, 107)</p>	
Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“in overlapping time periods”

(Dkt. No. 46, Ex. A, at 3–4; Dkt. No. 61, at 15; Dkt. No. 70, at 25; Dkt. No. 84, Ex. A, at 4.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction, which was the same for both of these terms: “in overlapping time periods.”

(1) The Parties’ Positions

Plaintiff argues that the terms “simultaneous” and “concurrently” are used synonymously in the patents-in-suit and that “the patentee opted to use either ‘simultaneous’ or ‘concurrently’ in dependent claims and did [*sic*, did not] use them both in the same or overlapping claims.” (Dkt. No. 61, at 18.)⁹

Defendant responds that “[Plaintiff] cannot nullify the ‘simultaneous’ limitation by arguing that a partially overlapping occurrence of events means that they are ‘simultaneous.’” (Dkt. No. 70 at 26.)

Plaintiff replies that “[t]he Asserted Patent[s] use these two terms synonymously, both to mean occurring at least in part at the same time and neither requiring the overlap to be entire.” (Dkt. No. 82, at 4.)

⁹ Plaintiff has also submitted a dictionary definition of “simultaneous” as meaning “existing, occurring, or operating at the same time; concurrent.” (Dkt. No. 61, Ex. F.) This definition refers to both “at the same time” and “concurrent” without further elaboration, and this definition does not significantly affect the Court’s analysis.

At the July 31, 2019 hearing, the parties presented oral arguments as to these terms. Plaintiff agreed with the Court's preliminary construction. Defendant maintained that these two terms are not synonymous.

(2) Analysis

As a threshold matter, the parties substantially agree that “concurrently” means “in overlapping time periods,” as Defendant has proposed. (*See* Dkt. No. 61, at 18 (“Luminati does not dispute that the term commonly refers to overlapping time as opposed to sequential operations”).) The specification is consistent with this understanding. *See, e.g.*, '044 Patent at 9:25–33 (“executing many processes concurrently” in a “multitasking OS” whereby “[t]he processor at any instant can only be executing one instruction from one program but several processes can be sustained over a period of time by assigning each process to the processor at intervals while the remainder become temporarily inactive”); *id.* at 24:60–25:4 (similar); *id.* at 52:57–58 (“concurrently (using multitasking or multiprocessing)”).

The parties dispute whether the patents-in-suit use “simultaneous” and “concurrently” as synonyms. In general, “[w]hen different words or phrases are used in separate claims, a difference in meaning is presumed.” *Nystrom v. TREX Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005). Claim 85 of the '044 Patent, for example, depends from Claim 82, which in turn depends from Claim 81. Claims 82 and 85 of the '044 Patent recite “simultaneous” (emphasis added):

82. The method according to claim 81 further comprising the step of:
 (f) sending the first content identifier to the second server using the third identifier.

* * *

85. The method according to claim 82 wherein step (f) is *simultaneous* with steps (d)–(e).

Claim 88 of the '044 Patent, for example, depends from Claim 87, which in turn depends from Claim 81. Claims 87 and 88 of the '044 Patent recite “concurrently” (emphasis added):

87. The method according to claim 81 for use with a third device identified in the Internet by a fourth identifier, further comprising the steps of:

- (f) receiving the fourth identifier from the first server;
- (g) sending a third request to the third device using the fourth identifier, the third request includes the first content identifier and the third identifier; and
- (h) receiving the first content from the third device.

88. The method according to claim 87 wherein steps (f) to (h) are executed *concurrently* with steps (d)–(e) using multitasking or multiprocessing.

Thus, the terms “simultaneous” and “concurrently” are used in separate claims rather than in the same claim. Any inference that the different terms have different meanings is therefore of reduced weight. *See, e.g., Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“[T]he use of [different] terms in close proximity in the *same claim* gives rise to an inference that a different meaning should be assigned to each.”) (emphasis added). In the present case, “[d]ifferent terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading of the terms or phrases is proper.” *Nystrom*, 424 F.3d at 1143.

Defendant has contrasted the recital of “simultaneous” in Claims 85 and 86 with the recitals of “preceding” and “following” in Claims 83 and 84. These claims recite (emphasis added):

83. The method according to claim 82 wherein step (f) is *preceding* step (d).

84. The method according to claim 82 wherein step (f) is *following* step (e).

85. The method according to claim 82 wherein step (f) is *simultaneous* with steps (d)–(e).

86. The method according to claim 85 wherein step (f) is *simultaneous* with steps (d)–(e) using multitasking or multiprocessing.

Also, Defendant has noted that the specification contrasts “simultaneously” with “at different times.” ’044 Patent at 106:1–3 (“Multiple roles may be implemented at different times, or simultaneously using multiprocessing or multitasking.”); *see id.* at 122:29–31 (“a network element may be capable of assuming two or more roles, either at different times or simultaneously”) & 122:37–38 (similar).

Defendant has not shown how these contrasts purportedly demonstrate that “simultaneous,” in the context of the claims here at issue, necessarily requires coextensive time periods rather than overlapping time periods. The specification refers to “simultaneous[] execut[ion]” of “two methods . . . executed in parallel, and *one of them is completed before the other*”:

Alternatively or in addition, the client device #1 341 may select to use both methods (Both), and such to *simultaneously execute* both the tunnels-using client device flowchart (such as the flowchart 60 in FIG. 6) as part of the ‘Tunnel Flowchart’ step 331i, and the peers/agents-using client device flowchart (such as the flowchart 230 in FIG. 23 and the flowchart 230a in FIG. 23a) as part of the ‘Peer Flowchart’ step 331h. *The two methods are executed in parallel, and one of them is completed before the other.* In the case using of tunnels is faster than using peer/agent devices, the content will be fetched in full using this method, and the ‘Tunnel Flowchart’ step 331i will be completed first. In such a case, in a ‘Stop Peer’ step 331k the peer/agent using method executed as part of the ‘Peer Flowchart’ step 331h is not needed anymore (since the content was fetched in full) and is stopped, in order to save processing power and bandwidth. Similarly, [i]n the case the using peers/agents is faster than using tunnel devices, the content will be fetched in full using this method, and the ‘Peer Flowchart’ step 331h will be completed first. In such a case, in a ‘Stop Tunnel’ step 331j the tunnels-using method executed as part of the ‘Tunnel Flowchart’ step 331i is not needed anymore (since the content was fetched in full) and is stopped, in order to save processing power and bandwidth.

Id. at 124:3–25 (emphasis added). The patentee thus used “simultaneous” to refer to operations overlapping rather than necessarily being coextensive in time.

The parties have also discussed the following disclosure, which uses both “concurrently” and “simultaneous”:

In a case where either a peers-using scheme (system or method) or a tunnels-using scheme may be used, the scheme to be used may be selected based on an evaluating the time to completely receive the information using the scheme. The evaluation may be based on data from previous interactions with peer devices and tunnel devices associated with, or in the vicinity of, the available peer devices and tunnel devices. Once the desired scheme is chosen, a timer is set for the expected time to complete the transaction, and if that time plus a margin has passed, both schemes may be selected to operate *concurrently*. In such a case of *simultaneous* activation of both schemes, upon receiving the first piece of data by one of the schemes, and if the other scheme is still active, that other scheme is terminated. Alternatively or in addition, upon receiving the last piece by one of the schemes, if the other scheme is still active, it is terminated.

'044 Patent at 73:1–16 (emphasis added). Defendant argues that what is described as “simultaneous” is “activation,” not operation. (Dkt. No. 70, at 27.) Plaintiff replies that “[t]he ‘simultaneous activation’ is . . . an activation period, not an activation event at a singular point in time” (Dkt. No. 82, at 4 n.1.) Plaintiff’s reading of this disclosure is persuasive. Further, the reference to “*such a case of simultaneous activation*” refers back to what is operating “concurrently.” '044 Patent at 73:10–12 (emphasis added). On balance, the specification demonstrates that the patentee used “simultaneous” and “concurrently” as having the same meaning.

Additional disclosures in the specification are consistent with this understanding. *See, e.g., id.* at 5:48–67 (“The advantages of using persistent connections involve lower CPU and memory usage (because fewer connections are open simultaneously)”); *id.* at 6:34–62 (“avoid conflicts when programs try to access the same resource or device simultaneously”); *id.* at 35:63–67 (“a shared memory which is a memory that may be simultaneously accessed by multiple programs with an intent to provide communication among them or avoid redundant copies, such as where one process creates an area in RAM which other processes can access”); *id.* at 74:53–62 (“where two or more steps are not explicitly described as being sequentially executed, these steps may be executed in any order, or may be simultaneously performed”); *id.* at 105:44–106:6 (“In one

example, a device may be assigned to have multiple roles, such as functioning as both a client and an agent, as both an agent and a peer, as both a client and a peer, or as an agent, a client, and a peer. Multiple roles may be implemented at different times, or simultaneously using multiprocessing or multitasking.”); *id.* at 122:26–38 (“a network element may be capable of assuming two or more roles, either at different times or simultaneously”).

Finally, Defendant argues that whereas the claims that recite “simultaneous” refer to the devices set forth in independent Claim 81 of the ’044 Patent, the claims that recite “concurrently” depend from claims that add additional devices, such as the “third device” recited in Claim 87. (Dkt. No. 70, at 26–27.) Defendant has not persuasively shown how the presence of an additional device in the claimed method gives rise to any necessary distinction between “simultaneous” and “concurrently.”

The Court therefore rejects Defendant’s proposed construction for “simultaneous,” and the Court finds that the patentee used “simultaneous” and “concurrently” to have the same meaning.

The Court accordingly hereby construes **“simultaneous”** and **“concurrently”** to mean **“in overlapping time periods.”**

G. “past activities”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Past actions or performance; not indefinite	Indefinite; Alternatively, plain and ordinary meaning

(Dkt. No. 46, Ex. A, at 6; Dkt. No. 61, at 19; Dkt. No. 84, Ex. A, at 8.) The parties submit that this term appears in Claim 99 of the ’044 Patent. (Dkt. No. 46, Ex. A, at 6; Dkt. No. 84, Ex. A, at 8.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning (Not indefinite).”

(1) The Parties' Positions

Plaintiff argues that Defendant cannot meet its burden to show indefiniteness, and Plaintiff submits that its proposed construction is the “plain English” meaning of this disputed term. (Dkt. No. 61, at 19; *see id.*, at 29.) Plaintiff is also amenable to construing this term to have its “plain and ordinary meaning” as alternatively proposed by Defendant. (*Id.*, at 20.)

Defendant responds that this term is indefinite because “[i]f one were asked to base any decision on ‘past activities,’ the request would be unintelligible absent further information. (Dkt. No. 70, at 24.)

Plaintiff replies that “[w]hile the term can clearly include lack of activity, such as when a device lacks traffic, that does not mean the term is indefinite.” (Dkt. No. 82, at 5.)

At the July 31, 2019 hearing, the parties presented oral arguments as to these terms. Plaintiff was amenable to the Court’s preliminary construction.

(2) Analysis

Claim 99 of the ’044 Patent recites (emphasis added):

99. The method according to claim 89 wherein the second device is selected based on *past activities*.

Defendant’s argument that “[t]his term is extraordinarily broad and provides no guidance whatsoever regarding the scope of the claim” (Dkt. No. 70, at 23–24) is unavailing because “breadth is not indefiniteness.” *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017) (quoting *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1341 (Fed. Cir. 2005)).

Further, the specification provides context for understanding the meaning of “past activities”:

The second device may be selected based on the second identifier, the second identifier may be an IP address, and the second device may be selected based on its IP address. Alternatively or in addition, the second device may be selected based on comparing the second identifier to the third identifier. Alternatively or in addition, the second device may be selected based on *past activities, such as based on the timing of an event*. The event may be a last or previous communication between the second device and the first device, the last communication between the second device and the first server, or the last communication between the second device and the second server.

'044 Patent at 53:60–54:4 (emphasis added); *see id.* at 91:27–44 (“In one example, the timing of an event or activity of tunnel device affects its selection.”; “Alternatively, a ‘fairness’ rule will be applied in order to uniformly use all available channels, where a tunnel device will be selected if it was not used the most time.”); *see also id.* at 96:57–58 (“selection may be based on a past performance of the tunnel devices”); *id.* at Fig. 5a (“Sign-In Date / Time”).

Defendant has cited the subsequent disclosure of “based on past activities, *or* based on the timing of an event.” *Id.* at 58:25–26 (emphasis added); *see id.* at 58:24–30 (“the second device may be selected based on past activities, or based on the timing of an event, wherein the event may be the last communication between the second device and the first device, may be the last communication between the second device and the first server, or may be the last communication between the second device and the second server”); *see also id.* at 59:24–26 (“the second device may be selected based on the second identifier, based on past activities, or based on the timing of an event”); *id.* at 63:8–11 (similar).

On balance, this apparent distinction between “past activities” and “the timing of an event” does not give rise to any lack of reasonable certainty. Defendant has failed to meet its burden to demonstrate indefiniteness. Finally, Defendant has argued that “based on past activities” cannot refer to a lack of activity, but the specification contemplates this. *See* '044 Patent at 91:41–44

(“Alternatively, a ‘fairness’ rule will be applied in order to uniformly use all available channels, where a tunnel device will be selected if it was not used the most time.”).

The Court therefore hereby rejects Defendant’s indefiniteness argument. Because Plaintiff is amenable to Defendant’s alternative proposal that this term should be given its plain and ordinary meaning (Dkt. No. 61, at 20), no further construction is necessary.

The Court therefore hereby construes **“past activities”** to have its **plain and ordinary meaning**.

H. “the timing of an event”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning / not indefinite	“time of sign in of a tunnel device, time of last usage of a tunnel device, or time of accumulated use of a tunnel device”

(Dkt. No. 46, Ex. A, at 6; Dkt. No. 61, at 20; Dkt. No. 70, at 24; Dkt. No. 84, Ex. A, at 8–9.) The parties submit that this term appears in Claim 100 of the ’044 Patent. (Dkt. No. 46, Ex. A, at 6; Dkt. No. 84, Ex. A, at 8–9.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning.”

(1) The Parties’ Positions

Plaintiff argues: “Defendant is again reading embodiments into the claims when the claims intentionally use language that captures more than Defendant’s proposal. The proposal is further problematic in importing the term ‘tunnel’ that is not a claim term and whose appearance shows embodiments are being read into the claim resulting in an unclear proposed construction.” (Dkt. No. 61, at 20.)

Defendant responds that “[t]he reference to ‘an event’ is vague, because ‘an event’ could conceivably apply to everything in the world that has happened to date.” (Dkt. No. 70, at 24.) Defendant submits that it “attempts to construe this term in accordance with support from the specification to preserve validity.” (*Id.*)

Plaintiff replies that “there is nothing in the specification or the claim language itself to limit ‘timing of an event’ to the three specific tunnel device events proposed by Defendant.” (Dkt. No. 82, at 5.) Plaintiff also argues that “Defendant’s argument that claim 100’s limitation ‘wherein the second device is selected based on the timing of an event’ may be understood to refer to an event that ‘could conceivably apply to everything in the world that has happened to date’ is nonsensical.” (*Id.*, at 9.)

At the July 31, 2019 hearing, the parties rested on their briefing and presented no oral argument as to this disputed term.

(2) Analysis

The parties submit that this disputed term appears in Claim 100 of the ’044 Patent, which depends from Claim 89, which in turn depends from independent Claim 81. Claims 89 and 100 of the ’044 Patent recite (emphasis added):

89. The method according to claim 81 for use with a group consisting of a plurality of devices, each device in the group is associated with a respective identifier for being identified in the Internet, further comprising the steps of:

- (f) receiving the identifiers of the group devices from the first server;
- (g) sending a third request to the group device using their associated identifiers, the third request includes the first content identifier and the third identifier; and
- (h) receiving the first content from the group devices.

* * *

100. The method according to claim 89 wherein the second device is selected based on *the timing of an event*.

The claim itself thus does not include the specific limitations set forth in Defendant's proposed construction. Defendant has cited the following disclosure in the specification:

Timing:

In one example, the timing of an event or activity of a tunnel device affects its selection. The timing of a tunnel device signing up with the acceleration server 32 may be used for the selection criterion. The first available tunnel device that signed in may be first selected, then the second in line. In the example of the table 40 shown in FIG. 5a, the tunnel device associated with the first row 42a will be first to be selected, having the earliest sign-in time (23/1, 7:32), while the following tunnel device to sign in (shown in the row 42b) will be selected next. Alternatively or in addition, the latest signed-in tunnel device will be the first to be selected.

Alternatively or in addition, the time of the last usage as the tunnel device may be used as a criterion. For example, a tunnel device that was most recently used will have the highest priority to be reselected. Alternatively, a 'fairness' rule will be applied in order to uniformly use all available channels, where a tunnel device will be selected if it was not used the most time.

'044 Patent at 91:26–44 (emphasis added).

Defendant has failed to show that these specific features of a particular "example" are limiting as to the claimed invention as a whole. *See Phillips*, 415 F.3d at 1323 ("although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments").

Though the term "event" may be broad on its face, "breadth is not indefiniteness." *BASF*, 875 F.3d at 1367 (quoting *SmithKline Beecham*, 403 F.3d at 1341). Understanding of this breadth is confirmed by the wide array of examples set forth in the specification. *See* '044 Patent at 91:26–44 (reproduced above); *see also id.* at 53:65–54:4 ("[t]he event may be a last or previous communication"); *id.* at Fig. 5a ("Sign-In Date / Time"); *id.* at 96:57–62 ("past performance"); *id.* at 96:63–98:15 (discussing "transactions log table").

The Court therefore hereby expressly rejects Defendant's proposed construction. No further construction is necessary, particularly in light of surrounding claim language that provides

context. *See U.S. Surgical*, 103 F.3d at 1568; *see also Summit 6*, 802 F.3d at 1291; *ActiveVideo*, 694 F.3d at 1326; *Finjan*, 626 F.3d at 1207; *O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes **“the timing of an event”** to have its **plain and ordinary meaning**.

I. “group device identifier”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“IP address of a device in the group”

(Dkt. No. 46, Ex. A, at 7; Dkt. No. 61, at 21; Dkt. No. 70, at 23; Dkt. No. 84, Ex. A, at 13.) The parties submit that this term appears in Claim 15 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 7; Dkt. No. 84, Ex. A, at 13.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning (Expressly reject Defendant’s proposal of ‘IP address’).”

(1) The Parties’ Positions

Plaintiff argues that this term presents the same issues as the term “identifier,” which has been presented as a distinct disputed term addressed above. (Dkt. No. 61, at 21.) Plaintiff urges that “[t]he patent clearly states the identifier can be more than an IP address,” and Plaintiff also argues claim differentiation as to dependent Claim 44. (*Id.*)

Defendant responds by referring to its arguments as to the term “identifier,” which is addressed separately above. (Dkt. No. 70, at 23.)

Plaintiff replies as to this term together with the term “identifier,” which is addressed above. (Dkt. No. 82, at 3.)

At the July 31, 2019 hearing, the parties rested on their briefing and presented no oral argument as to this disputed term.

(2) Analysis

Claim 15 of the '866 Patent recites “a group of multiple devices, each identified in the Internet by an associated group device identifier” and “sending over the Internet a first request to the selected device using the group device identifier of the selected device.” The parties agree that this term presents the same dispute as the term “identifier,” addressed above.

The Court therefore hereby expressly rejects Defendant’s proposed construction. No further construction is necessary, particularly in light of surrounding claim language that provides context as to “in the Internet.” *See U.S. Surgical*, 103 F.3d at 1568; *see also Summit 6*, 802 F.3d at 1291; *ActiveVideo*, 694 F.3d at 1326; *Finjan*, 626 F.3d at 1207; *O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes **“group device identifier”** to have its **plain and ordinary meaning**.

J. “content slice”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“a part of the content, created by partitioning the content and useable with other partitioned parts to reconstruct the content”

(Dkt. No. 46, Ex. A, at 8; Dkt. No. 61, at 21; Dkt. No. 70 at 14; Dkt. No. 84, Ex. A, at 12.) The parties submit that this term appears in Claims 15, 19–22, and 25–28 of the '866 Patent and claims that depend therefrom. (Dkt. No. 84, Ex. A, at 12; *see* Dkt. No. 46, Ex. A, at 8; *see also* Dkt. No. 61, at 21.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “part of the content, created by partitioning the content and usable with other content slices to reconstruct the content.”

(1) The Parties’ Positions

Plaintiff argues that “a person of ordinary skill in the art would not understand the partitioning step to involve a change in the content, which is already divisible,” and “Defendant’s proposed construction also appears to improperly exclude content that is already composed of subparts.” (Dkt. No. 61, at 21–22.)

Defendant responds: “The issue, then, is whether ‘partitioning’ a content must be understood as resulting in ‘content slices’ such that the content may also be constructed from those ‘content slices.’ The language and steps of Claim 15 require this.” (Dkt. No. 70, at 14.) Defendant argues that “if ‘content slice’ can reasonably mean either ‘the content within an area’ or ‘an area of content’ or if it can mean different things in the first step of the method (‘partitioning the content into a plurality of content slices’) and in the next-to-last step (‘constructing the content from the received plurality of content slices’), then the method is indefinite.” (*Id.*, at 15.)

Plaintiff replies: “There is also no requirement that the above described files or programs be in a particular order, nor that the ‘device doing the partitioning . . . already possess the content in advance of the partitioning,’ because as described in the specification, such content may already be divisible into recognizable subunits such as the ‘file or program level.’” (Dkt. No. 82, at 3–4 (quoting Dkt. No. 70, at 17).)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term. Defendant agreed with the Court’s preliminary construction. Plaintiff argued that “part” of the

content could be some or all of the content. Defendant was amenable to replacing “part” with “some or all.”

(2) Analysis

This disputed term appears in independent Claim 15 of the '866 Patent, which recites (emphasis added):

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.

Defendant has expressed concern that Plaintiff might interpret “content slices” differently in different portions of this claim. (*See* Dkt. No. 70, at 15.) No such argument is apparent in Plaintiff’s briefing. Plaintiff acknowledges that “[a] person of ordinary skill in the art would understand a content slice to be a *part of a content*, such as for example a webpage *within a content* composed of multiple webpages or a file *within a content* composed of multiple files.” (Dkt. No. 61, at 23 (emphasis added).) Because “claim terms are normally used consistently throughout the patent,” *Phillips*, 415 F.3d at 1314, no explicit construction is necessary in this regard.

Plaintiff has expressed concern that Defendant's proposed construction, by requiring "a *part* of the content," would preclude a "content slice" from containing all of the content.¹⁰ The specification discloses that a "content slice" may be an entire webpage and "[a]ll the components of the first content may be included in all the content parts":

The content requested by the client device may be partitioned into multiple parts or 'slices'. Any number of slices may be used. The slicing may be in a bit, nibble (4-bits), byte (8-bits), word (multiple bytes), character, string, or a file level. The partition may be into equal length parts, or may use different length slicing. The content may be composed of inherent or identifiable parts or segments, and the partition may make use of these parts. The content may be a website content composed of multiple webpages, and each slice may include one (or few) webpages. Further, the partition may be sequential or non-sequential in the content. The partitioning may be non-overlapping or overlapping.

* * *

All the components of the first content may be included in all of the content parts. The method may further comprise the step of the first device reconstructing the first content from the received multiple content parts. Part of, or all of, the content parts may be having the same size, that may be 8 KB, 16 KB, 32 KB, or 64 KB. Two or more content parts may be identical and may contain the same data.

'866 Patent at 53:36–48 & 63:56–63. Further, the specification refers to "content *slices*" even when "[a]ll the *parts* of the content may be included in *all* of the content slices," and "[t]he terms 'chunk' and 'slice' are interchangeably used herein to include, but not limited to, a part of, *or the entire of*, a content." *Id.* at 57:67–58:1 & 168:48–50 (emphasis added); *see id.* at 57:60–58:24; *see also id.* at 69:25–26 ("Two of, or all of, the slices may be the same.").

At the July 31, 2019 hearing, Defendant was amenable to replacing "a part of the content" with "some or all of the content."

¹⁰ Plaintiff also expresses concern that "[Defendant's] proposed construction also appears to improperly exclude content that is already composed of subparts" (Dkt. No. 61, at 22; *see* '866 Patent at 94:23–26 ("In one example, the content itself is made of inherent or identifiable parts or segments, and the partition may make use of these parts")), but Plaintiff has not shown how this is so.

As to the remainder of Defendant’s proposal, Defendant points out that Plaintiff does not challenge that the preamble of this claim is limiting. (*See* Dkt. No. 70, at 17 n.13.) The Court therefore notes that the phrase “each content slice containing at least part of the content” is a limitation of the “content slice” throughout the claim.¹¹ Defendant’s proposal of “useable with other partitioned parts to reconstruct the content” is therefore supported by the claim language and the specification, such as cited above, except that to avoid confusion the word “parts” should be replaced with “content slices.”¹²

Defendant asserts that “[i]f *all* of the content may be included in each of *multiple* slices of the content, then that would not be a ‘plain and ordinary’ meaning of ‘partitioning’ or of ‘content slices,’ but of *duplicating*.” (Dkt. No. 70, at 18–19.) Based on the above-reproduced disclosures in the specification, the Court hereby expressly rejects Defendant’s argument. *See* ’866 Patent at 53:39–48, 57:67–58:1, 63:56–63 & 168:48–50.

The Court therefore hereby construes **“content slice”** to mean **“some or all of the content, created by partitioning the content and useable with other content slices to reconstruct the content.”**¹³

¹¹ This understanding is also consistent with disclosures regarding “chunks,” which are made up of bytes and which can be used to reconstruct original content. *See, e.g.*, ’866 Patent at 104:54–62 (“In one example, the content is a website or a webpage, or may be identified as a URL, and consists of, or comprises, non-overlapping and equally-sized parts, referred to as chunks. For example, multiple chunks may be combined to reconstruct the original content, such as website or content. A chunk size may be 16 KB (Kilo-Bytes), and in the case the content to be partitioned is not an exact multiple of 16 KB, the ‘last’ chunk will padded [sic] and filled with ‘space’ characters (or any other no content data).”); *id.* at 105:4–15.

¹² Including the phrase “content slices” does not give rise to any confusion or improper circularity in the construction. The term “content slice” is construed below as being “some or all of the content,” and the additional language in the construction merely explains how multiple content slices must be usable together.

¹³ Although this construction incorporates other claim language, this language will assist the finder of fact in understanding the meaning of “content slice.” *See 01 Communique Lab., Inc. v.*

K. “content slice identifier”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“an identifier of a content slice that is associated with one and only one content slice, such as a combined content URL and slice number, a content slice CRC, or a content slice hash code”

(Dkt. No. 46, Ex. A, at 9; Dkt. No. 61, at 22.) The parties submit that this term appears in Claim 15 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 9; Dkt. No. 84, Ex. A, at 12.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning.”

At the hearing, the parties agreed to the Court’s preliminary construction. The Court therefore hereby construes **“content slice identifier”** to have its **plain and ordinary meaning**.

L. “partitioning the content”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“splitting the content in parts, such that the original content can be reconstructed from the parts”

(Dkt. No. 46, Ex. A, at 7; Dkt. No. 61, at 22; Dkt. No. 84, Ex. A, at 13–14.) The parties submit that this term appears in Claims 15–18, 23, and 24 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 7; Dkt. No. 84, Ex. A, at 13–14.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “splitting the content into content slices (the resulting content slices may be overlapping or non-overlapping) (not indefinite).”

LogMeIn, Inc., 687 F.3d 1292, 1296 (2012) (“01 Communique has not cited, and we have not discovered, any authority for the proposition that construction of a particular claim term may not incorporate claim language circumscribing the meaning of the term.”).

(1) The Parties' Positions

Plaintiff argues that “[p]artitioning merely involves the division of requested content into partitions corresponding with its parts.” (Dkt. No. 61, at 23.) Plaintiff also argues that “Defendant’s proposed construction appears to impose a requirement that the content be altered even when it is already comprised of subparts,” and “[t]here is no reconstruction requirement.” (*Id.*)¹⁴

Defendant responds as to this term together with the term “content slice,” which is addressed separately above. (Dkt. No. 70, at 14–19.)

Plaintiff replies that “[a] POSA would understand partitioning to merely be the division of content into partitions corresponding with its parts.” (Dkt. No. 82, at 10.)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term.

(2) Analysis

This disputed term appears in independent Claim 15 of the ’866 Patent, which recites (emphasis added):

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,

¹⁴ Plaintiff also submits an extrinsic definition of the noun “partition” as meaning “one of the parts or sections of a whole” (Dkt. No. 61, at 24 (citing Ex. H)), but this evidence does not significantly affect the Court’s analysis as to “partitioning.”

and wherein each of the devices in the group is a client device.

Defendant's proposal of "such that the original content can be reconstructed from the parts" is rejected as pertaining to the term "content slice," which is addressed separately above. *See, e.g.*, '866 Patent at 53:36–48, 63:56–63 & 69:25–26. As discussed regarding that term, above, the slices that result from "partitioning" may be overlapping or non-overlapping.

Defendant expresses concern that "[b]y way of analogy, Luminati seeks a construction that could encompass 'partitioning' a book into 'content slices' based on the book's table of contents by itself: the book (the content) is 'partitioned' into a 'content slice' corresponding to chapter 1 or chapter 2, and so forth, but without regard to the *underlying text* of the book itself (the full 'content')." (Dkt. No. 70, at 16; *see id.*, at 16 n.12 (citing '866 Patent at 69:6–7 ("partitioning scheme"))). No such interpretation is apparent in Plaintiff's briefing. (*See* Dkt. No. 61, at 21–24; *see also* Dkt. No. 82, at 10.) Also, Defendant's concerns in this regard are addressed by the Court's construction of "content slice" (addressed above) and "constructing the content" (addressed below).

Finally, the opinions of Defendant's expert as to purported indefiniteness of "partitioning the content" are unpersuasive. (*See* Dkt. No. 70-1, June 25, 2019 Freedman Decl., at ¶¶ 20–22.)

Although the Court thus rejects portions of Defendant's proposal, "some construction of the disputed claim language will assist the jury to understand the claims." *TQP Dev., LLC v. Merrill Lynch & Co., Inc.*, No. 2:08-CV-471, 2012 WL 1940849, at *2 (E.D. Tex. May 29, 2012) (Bryson, J., sitting by designation). The specification refers to "partitioning the content into a plurality of content slices, each content slice containing at least part of the content." '866 Patent at 58:15–17. Plaintiff argues that "[a] POSA would understand partitioning to merely be the division of content into partitions corresponding with its parts." (Dkt. No. 82, at 10; *see* Dkt. No. 61, at 23

(“Partitioning merely involves the division of requested content into partitions corresponding with its parts.”).) Defendant’s proposal of “splitting” is consistent with the specification, which refers to “splitting of a message or a content into slices.” ’866 Patent at 32:9–14.

The Court therefore hereby construes **“partitioning the content”** to mean **“splitting the content into content slices (the resulting content slices may be overlapping or non-overlapping).”**

M. “constructing the content”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“assembling or combining a set of partitioned parts into the original content”

(Dkt. No. 46, Ex. A, at 10; Dkt. No. 61, at 24; Dkt. No. 84, Ex. A, at 14.) The parties submit that this term appears in Claim 15 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 10; Dkt. No. 84, Ex. A, at 14.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “assembling or combining content slices so as to reconstruct the original content (not indefinite).”

(1) The Parties’ Positions

Plaintiff argues: “The construction can be the receipt and presentation of slices that themselves have a complete content. For example, a person of ordinary skill in the art would understand a content slice to be a part of a content, such as for example a webpage within a content composed of multiple webpages or a file within a content composed of multiple files.” (Dkt. No. 61, at 24.)

Defendant responds that “[f]or ‘constructing,’ there is no substantial issue in dispute beyond those raised as to ‘partitioning’ and ‘content slices.’” (Dkt. No. 70, at 19.)

Plaintiff replies that “‘constructing the content’ is merely the putting together of the content from the slices.” (Dkt. No. 82, at 10.)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term.

(2) Analysis

Claim 15 of the ’866 Patent recites (emphasis added):

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.

Plaintiff argues that “[t]he construction can be the receipt and presentation of slices that themselves have a complete content.” (Dkt. No. 61, at 24; *see* ’866 Patent at 53:44–46 (“The content may be a website content composed of multiple webpages, and each slice may include one (or few) webpages.”); *see also id.* at 63:54–56 (similar).) Plaintiff’s interpretation is inconsistent with the claim language, set forth above, which recites not merely constructing “content” but rather constructing “*the content*,” which refers back to the particular “content” that was partitioned.

The specification discloses “assembl[ing] the chunks to render a reconstructed content (*in part or in full*)” *Id.* at 111:59–60 (emphasis added). The claim, however, requires “constructing *the content*,” wherein “the content” refers back to the limitation of “partitioning the

content into a plurality of content slices.”¹⁵ To the extent Plaintiff is interpreting “constructing *the content*” as referring to less than all of the content that was partitioned in the “step of partitioning the content into a plurality of content slices,” the Court hereby expressly rejects any such interpretation.

Also, the claim expressly requires using a “plurality of content slices,” not just one, for “constructing the content.” Plaintiff submits an extrinsic definition of “construct” as meaning “to make or form by combining or arranging parts or elements” (Dkt. No. 61, at 24–25 (citing Ex. I)), but this evidence does not significantly affect the Court’s analysis. In particular, Plaintiff has not adequately supported its suggestion that “constructing” should be interpreted as including merely selecting or “arranging.” (*Id.*, Ex. I.)

Finally, the opinions of Defendant’s expert as to purported indefiniteness of “constructing the content” are unpersuasive. (*See* Dkt. No. 70-1, June 25, 2019 Freedman Decl., at ¶¶ 20–22.)

The Court therefore hereby construes **“constructing the content”** to mean **“assembling or combining content slices so as to reconstruct the original content.”**

N. “client device”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“a device signed in as a client, and which uses tunnel, agent, or peer devices serving as intermediate devices to fetch content in the method” ¹⁶

¹⁵ (*See also* Dkt. No. 61-1, May 1, 2019 Rhyne Decl., at ¶ 17 (“[I]n my opinion a POSA would understand the term ‘constructing the content’ to be consistent with the plain and ordinary meaning of reconstructing the original content from the ‘chunks’ of content that had been received.”).)

¹⁶ Defendant previously proposed: “a Device that typically receives information resources, services, and/or applications from servers.” (Dkt. No. 46, Ex. A, at 10.)

(Dkt. No. 46, Ex. A, at 10; Dkt. No. 61, at 25; Dkt. No. 70, at 20; Dkt. No. 84, Ex. A, at 8.) The parties submit that this term appears in Claim 15 of the '866 Patent. (Dkt. No. 46, Ex. A, at 10; Dkt. No. 84, Ex. A, at 13.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “a device that is operating in the role of a client by requesting services, functionalities, or resources from other devices.”

(1) The Parties' Positions

Plaintiff argues that “Defendant’s proposal runs into trouble by construing the term by referencing what Defendant believes a client ‘typically’ does, which improperly introduces ambiguity into the meaning of a term that already has a clear meaning and is not restricted to the ‘typical’ case.” (Dkt. No. 61, at 25.)

Defendant responds by revising its proposed construction and by arguing that “‘client device’ is a *role* a device plays in a method.” (Dkt. No. 70, at 20.)

Plaintiff replies that “Defendant asks the Court to improperly construe the claims so as to require all the devices in the group to be receiving content slices, rather than just being capable of receiving content slices.” (Dkt. No. 82, at 2.)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term. Defendant agreed with the Court’s preliminary construction, in particular as to “operating in the role of a client.” Plaintiff responded by arguing that, during performance of the claimed method, a particular device could sometimes operate as client and sometimes operate as something else. Plaintiff urged that a “client device” should be defined by its structure or “physicality” rather than by its operation.

(2) Analysis

Claim 15 of the '866 Patent recites (emphasis added):

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*.

Plaintiff has submitted a technical definition of “client” as meaning “[a] computer system or process that requests a service of another computer system or process.” (Dkt. No. 61, Ex. K, RFC 1392, *Internet Users’ Glossary* 10 (Jan. 1993); *see id.*, Ex. J.) The specification explains that being a “client” is a “role” assumed by a device:

Any network element in the system may be a dedicated device that assumes only a single *role*, and thus being only a client (using tunnels), a tunnel, a client (using agents/peers), an agent, or a peer device. Alternatively or in addition, a network element may be capable of assuming two or more *roles*, either at different times or simultaneously, from the *list of roles including a client* (using tunnels), a tunnel, a client (using agents/peers), an agent, or a peer device. Alternatively or in addition, a device may be capable of assuming all of the above roles.

'866 Patent at 125:33–42 (emphasis added). The specification also discloses that “[d]evices that are not denoted herein as servers such as client devices . . . , tunnel devices . . . , agent devices . . . , or peer devices . . . , may typically function as a client in the meaning of client/server architecture, commonly *initiating requests for receiving services, functionalities, and resources, from other devices* (servers or clients).” '866 Patent at 119:34–42 (emphasis added).

Defendant notes that Figure 23 illustrates that a device will “Sign-in as Client.” *Id.* at Fig. 23 (231b). This is disclosed as a specific feature of a particular disclosed embodiment, and Defendant has not shown any basis in the claim language for including this limitation in the construction of “client device.” *See Phillips*, 415 F.3d at 1323.

Further, whereas Figure 5b of the ’866 Patent illustrates interactions between “Acceleration Server,” “Client Device,” “Tunnel Device,” and “Data Server,” this illustration does not warrant limiting the seemingly generic term “client device” to require using “tunnel, agent, or peer devices serving as intermediate devices to fetch content in the method.” *See* ’866 Patent at Fig. 5b; *see also id.* at Fig. 10 & 78:39–41 (“FIG. 10 illustrates schematically a simplified flowchart of a method relating to a client device using multiple tunnel devices.”); *Phillips*, 415 F.3d at 1323. Instead, this type of interaction is addressed by other language in Claim 15 of the ’866 Patent, and the claim does not explicitly refer to a “tunnel, agent, or peer” device.

The Court therefore hereby construes **“client device”** to mean **“a device that is operating in the role of a client by requesting services, functionalities, or resources from other devices.”**

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

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
“two or more slices including at least an overlapping part of the content”	Plain and ordinary meaning

(Dkt. No. 46, Ex. A, at 11; Dkt. No. 61, at 25; Dkt. No. 84, Ex. A, at 16.) The parties submit that this term appears in Claim 22 of the ’866 Patent. (Dkt. No. 46, Ex. A, at 11; Dkt. No. 84, Ex. A, at 16.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Plain and ordinary meaning.”

At the hearing, the parties agreed to the Court's preliminary construction. The Court therefore hereby construes **"part of the content is included in two or more content slices"** to have its **plain and ordinary meaning**.

P. "by a first device," "from a second server," "via a second device," and "using a first server" in Claim 81 of the '044 Patent

Plaintiff's Proposed Construction	Defendant's Proposed Construction
Not indefinite	Indefinite

(Dkt. No. 46, Ex. A, at 13; Dkt. No. 61, at 28; Dkt. No. 84, Ex. A, at 1; Dkt. No. 84, Ex. A, at 1.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: "Plain and ordinary meaning (apart from the constructions of any constituent terms that are addressed separately by the Court) (Not indefinite)."

(1) The Parties' Positions

Plaintiff argues that "[t]he preamble of claim 81 identifies each of the first and second devices, and first and second servers, as well as the role they play in the fetching of content." (Dkt. No. 61, at 28.)

Defendant responds that "[t]he problem is that the patentee, in an apparent attempt to achieve broad and malleable claim coverage, never identified the devices or servers involved with each of the 'sending' or 'receiving' steps of claim elements (a)-(e) or specified how the devices relate for purposes of those steps." (Dkt. No. 70, at 4-5.)

Plaintiff replies that "while independent claim 81 is broader in scope than the embodiment in Figure 5b, that does not mean that a POSA would not understand the scope of the claim with reasonable certainty." (Dkt. No. 82, at 6.) Plaintiff notes that "Defendant propose[s] claim constructions for the first and second 'device' and agrees that a 'server' should be construed according to its plain and ordinary meaning." (*Id.*) Plaintiff argues that "the plain language of the

preamble states that the first content is fetched ‘from a second server . . . via a second device,’ so a POSA would understand that the second device requests and receives the first content from the second server.” (Dkt. No. 82, at 8.) Plaintiff also argues that the “sending” and “receiving” steps in Claim 81 are not limited to being performed by the “first device.” (*Id.*) Finally, Plaintiff notes that steps (a)–(c) expressly use the “first server.” (*Id.*, at 8–9.)

At the July 31, 2019 hearing, the parties presented oral arguments as to this term.

(2) Analysis

As a threshold matter, Plaintiff has asserted that “[o]nly claims ‘not amenable to construction’ or ‘insolubly ambiguous’ are indefinite,” and “[i]f the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds.” (Dkt. No. 61, at 27 (quoting *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1353 (Fed. Cir. 2003); *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001)).)

The Supreme Court of the United States expressly abrogated this legal standard in *Nautilus*. See 572 U.S. at 901, 910, 912 n.9, 913. Instead, “[35 U.S.C.] § 112, ¶ 2 . . . require[s] that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with *reasonable certainty*.” *Id.* at 910 (emphasis added).

Claim 81 of the ’044 Patent recites (emphasis added):

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.

As to “by a first device,” Defendant argues that although “the first content must be fetched ‘by a first device,’” “the ‘first device’ is never recited again in the claim.” (Dkt. No. 70, at 8.) 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. *Nautilus*, 572 U.S. at 910.

Plaintiff argued at the July 31, 2019 hearing that the “first device” could ask another device to perform the claimed functions. Plaintiff submitted, for example, that requests could be relayed through another device or could be performed by a commercial service on behalf of the “first device.” Plaintiff’s arguments as to these implementation-specific details perhaps may relate to factual disputes regarding infringement but do not present any legal question for claim construction. *See PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) (“[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.”); *see also Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1318–19 (Fed. Cir. 2016) (citing *PPG*).

As to “using a first server,” Defendant argues that “[t]he reader of the claim . . . knows that the first server must be ‘us[ed]’ in the fetching of content but is provided no indication of how the first server must be used to satisfy the claim.” (Dkt. No. 70, at 9 (emphasis omitted).) Steps (a), (b), and (c) in the body of the claim recite sending to the first server and receiving from the first

server. The claim scope is thus “reasonabl[y] certain[]” as to how the “first server” must be “us[ed].” *Nautilus*, 572 U.S. at 910.

As to “via a second device,” Defendant argues that “[t]he second device’s sending of a request and receiving of content from the second server are not claimed.” (Dkt. No. 70, at 9 (emphasis omitted).) As to “from a second server,” Defendant argues that “[t]here is no definition in the claim as to how to obtain data from the ‘second server’ in order to satisfy the claim.” (Dkt. No. 70, at 7.) However, the Court concludes that both of these terms are readily understandable in the context of the claim as a whole. The body of the claim recites “receiving the first content from the second device.” The preamble recites fetching “first content” “*from a second server* identified in the Internet by a third identifier *via a second device*.” The step of “receiving the first content from the second device” thus requires that the content must be from the second server.

The preceding reading of the respective claim language is consistent with, for example, Figure 5b of the ’044 Patent. *See* ’044 Patent at Fig. 5b; *see also id.* at 52:31–51, 81:32–41, 86:61–87:30 & Figs. 11a–11b; *see also* discussion at Part V.A. at 13–14. The claim scope is thus “reasonabl[y] certain[]” as to how the “second device” and the “second server” must be “us[ed].” *Nautilus*, 572 U.S. at 910.¹⁷ The claim scope is also reasonably certain as to how the “first device” and “first server” must be used.

Defendant’s overarching concern appears to be that “[a] court, a litigant, or a POSA could spend days reviewing Claim 81, along with the written description, without having any degree of

¹⁷ Defendant has expressed confusion as to whether the content could be retrieved from a “cache or memory from a previous encounter” with the second server rather than actually from the second server. (Dkt. No. 70, at 8.) Claim 81 of the ’044 Patent requires “fetching over the Internet a first content . . . from a second server.” Beyond this, Defendant’s concerns as to these implementation-specific details regarding caching may give rise to factual disputes regarding infringement but do not present any legal question for claim construction. *See PPG*, 156 F.3d at 1355; *see also Eon*, 815 F.3d at 1318–19.

certainty—much less reasonable certainty—about how the steps are performed.” In light of the specific findings of reasonable certainty set forth above, any remaining concern expressed by Defendant relates not to indefiniteness but rather, perhaps, to enablement or written description. (*See, e.g.*, Dkt. No. 70, at 7 (“There is no definition in the claim as to how to obtain data from the ‘second server’ in order to satisfy the claim.”).) Thus, Defendant has failed to demonstrate indefiniteness as to Claim 81 of the ’044 Patent. Finally, the opinions of Defendant’s expert as to purported indefiniteness are unpersuasive. (*See* Dkt. No. 70-1, June 25, 2019 Freedman Decl., at ¶¶ 13–18.)

The Court therefore hereby expressly rejects Defendant’s indefiniteness arguments as to “by a first device,” “from a second server,” “via a second device,” and “using a first server” in Claim 81 of the ’044 Patent. Defendant has not submitted any alternative proposed constructions for these terms (other than as set forth for constituent terms that are addressed separately above).

The Court accordingly hereby construes **“by a first device,” “from a second server,” “via a second device,”** and **“using a first server”** to have their **plain and ordinary meaning** (apart from the constructions of any constituent terms that are addressed separately by the Court).

Q. Preamble of Claim 108 of the ’044 Patent

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Not limiting	Limiting

(Dkt. No. 70, at 28; Dkt. No. 84, Ex. A, at 11.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “Limiting.”

(1) The Parties’ Positions

Defendant argues:

Claim 108's preamble is limiting for the same reasons as explained above for Claim 81. It includes the same important limitations regarding the relationship between the recited devices and servers. Further, the preamble of Claim 108 also provides antecedent basis for the terms noted for Claim 81, with one difference: while "the second device" is not recited in Claim 108, "the first device" is recited and has antecedent basis provided in the preamble.

(Dkt. No. 70, at 28.)

Plaintiff replies: "The core of the dispute here is that a preamble is generally not limiting, and when it is limiting it may be limiting *only to the extent necessary* to define a structurally complete invention. *See TomTom*, 790 F.3d at 1323. Arguments regarding claim 81 apply here as well." (Dkt. No. 82, at 10.)

At the July 31, 2019 hearing, the parties did not present any separate oral arguments as to this dispute, but the parties' arguments as to the preamble of Claim 81 of the '044 Patent are applicable to the preamble of Claim 108 of the '044 Patent.

(2) Analysis

Legal principles regarding preambles are set forth above in the analysis of the preamble of Claim 81 of the '044 Patent. The preamble of Claim 108 is identical to the preamble of Claim 81, and a similar analysis applies. Claim 108 of the '044 Patent recites (emphasis added):

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*.

The preamble thus provides antecedent basis for “the first device,” “the first identifier,” “the first server,” “the second identifier,” “the first content identifier,” “the third identifier,” and “the first content” recited in the body of the claim.

These phrases that derive antecedent basis from the preamble are “defined in greater detail in the preamble,” particularly in terms of their relationships with each other. *Proveris*, 739 F.3d at 1373. Further, the phrase “fetching over the Internet” refers to preamble terms—particularly “a first content”—that provide antecedent basis for terms in the body of the claim. Because the patentee “cho[se] to use *both* the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.” *Bicon*, 441 F.3d at 952 (citation and internal quotation marks omitted).

The Court therefore hereby finds that **the preamble of Claim 108 of the ’044 Patent is limiting.**

R. “by a first device,” “from a second server,” “via a second device,” and “using a first server” in Claim 108 of the ’044 Patent

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Not indefinite	Indefinite

(Dkt. No. 70, at 28; Dkt. No. 84, Ex. A, at 1 & 11.) At the July 31, 2019 hearing, the Court provided the parties with no preliminary construction as to this dispute.

(1) The Parties’ Positions

Defendant argues that “[t]hese terms are indefinite just as the identical terms are indefinite in Claim 81, for the reasons explained above.” (Dkt. No. 70, at 28.)

Plaintiff likewise replies by referring to its arguments as to Claim 81 of the ’044 Patent. (Dkt. No. 82, at 12.)

(2) Analysis

Claim 108 of the '044 Patent recites (emphasis added):

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.

As to “using a first server,” step (a) of Claim 108 explicitly recites “sending the second identifier to the first server.” As to “by a first device,” the claim explicitly recites “receiving a second request from the first device” and “sending the first content to the first device.” As to “from a second server,” Claim 108 expressly recites “sending the first content identifier to the second server” and “receiving the first content from the second server.” The claim scope is thus “reasonabl[y] certain[]” as to how the “first server,” “first device,” and “second server” must be used. *Nautilus*, 572 U.S. at 910.

As to the preamble limitation of “via a second device,” however, the body of the claim does not refer to the “second device.” Further, 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.*

The Court accordingly hereby finds that **Claim 108 of the '044 Patent is indefinite.**

S. “sending a first request”

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	“sending by the first device of a request for the identifier of the second device”

(Dkt. No. 70, at 30; Dkt. No. 84, Ex. A, at 3.) Defendant submits that this term appears in Claim 81 of the ’044 Patent. (Dkt. No. 70, at 29; Dkt. No. 84, Ex. A, at 3.)

Shortly before the start of the July 31, 2019 hearing, the Court provided the parties with the following preliminary construction: “sending, by the first device, a request for an identifier of the second device.”

(1) The Parties’ Positions

Defendant argues: “Unlike step (d), which recites what the second request must include, there are no details regarding the ‘first request’ except that an unnamed component sends a request to the first server. This term needs to be construed; otherwise, it could presumably cover any type of ‘request.’” (Dkt. No. 70, at 29.)

Plaintiff replies: “Defendant wants to add limitations as to what sends, what receives, and even adding items to be included in the request that are not in the claim. None of this is supported by the claim language and Defendant’s only ‘support’ is to cite the specification, thereby again attempting to read the specification into the claim.” (Dkt. No. 82, at 12.)

(2) Analysis

Claim 81 of the ’044 Patent recites (emphasis added):

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.

As discussed above, the preamble of this claim is limiting (including as to the “second device” being identified by a “second identifier”), and the step of “sending a first request to the first server” is performed by the “first device.”

Plaintiff opposes limiting the “first request” to being a request for the identifier of the second device. (*See* Dkt. No. 82, at 12.) Yet, Plaintiff would appear to allow the “first request” in Claim 81 to have no connection to the other steps recited in the claim. Although “not an inflexible rule,” “interpretations that render some portion of the claim language superfluous are disfavored.” *SimpleAir, Inc. v. Sony Ericsson Mobile Commc’ns AB*, 820 F.3d 419, 429 (Fed. Cir. 2016). The context provided by the claim as a whole, particularly when read in light of the specification, supports Defendant’s proposal. The specification discloses:

In order to make the communication between a client device and a tunnel device faster and more efficient, a pre-connection phase is defined, where a preparation for communication such as a TCP connection is established, allowing for quick data transfer afterwards. The pre-connection phase starts at a ‘Start Pre-Connection’ state 53b in the chart 50, followed by the ‘Request List’ message 56c (corresponding to the ‘Request Tunnels List’ step 62 in the flowchart 60), being part of the Pre-connection client flowchart 64, where *the client 31a requests the list of the available tunnels that may be used, from the acceleration server 32*. The tunnel device #1 33a at this point is idling in an ‘IDLE’ step 72c shown in the flowchart 70, being part of the Pre-connection tunnel flowchart 72. In response to the client device 31a request, the acceleration server 32 prepares in a step ‘Prepare List’ 52b the list of current available tunnels, and sends the list as a ‘Send List’ message 56d to the client device 31a, which in turn receives the list as part of a ‘Receive Tunnels List’ step 62b.

’044 Patent at 82:64–83:8 (emphasis added).

Finally, to whatever extent Defendant’s proposal of the request being “for the identifier of the second device” might be interpreted as limiting which device can select the appropriate

identifier(s), no such limitation is apparent. For example, the specification discloses that the acceleration server can select tunnel devices and, in response to a request, send identifiers for the selected tunnel devices. *See, e.g.*, '044 Patent at 82:64–83:1 & 89:15–29.

The Court therefore hereby construes **“sending a first request”** to mean **“sending, by the first device, a request for an identifier of the second device.”**

VI. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit, and in reaching conclusions the Court has considered extrinsic evidence. The Court's constructions thus include subsidiary findings of fact based upon the extrinsic evidence presented by the parties in these claim construction proceedings. *See Teva*, 135 S. Ct. at 841.

The Court also finds, as set forth above, that **Claim 108 of the '044 Patent is indefinite.**

The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

Plaintiff's Motion to Strike Expert Declaration and References to the Same in Defendant's Claim Construction Brief (Dkt. No. 80) is hereby **DENIED** as set forth above.

SIGNED this 20th day of August, 2019.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE