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

LUMINATI NETWORKS LTD., *Plaintiff*, v. CODE200, UAB ET AL., *Defendants.*	Case No. 2:19-cv-00396-JRG

CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Before the Court is the opening claim construction brief of Luminati Networks Ltd. ("Plaintiff") (Dkt. No. 86, filed on December 18, 2020),[1] the response of Code200, UAB, Oxysales, UAB, and Metacluster LT, UAB (collectively "Defendants") (Dkt. No. 88, filed on January 4, 2020), and Plaintiff's reply (Dkt. No. 89, filed on January 8, 2021). The Court held a hearing on the issues of claim construction and claim definiteness on January 29, 2021. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

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

Table of Contents

I. BACKGROUND 3

II. LEGAL PRINCIPLES 5

A. Claim Construction 5

B. Departing from the Ordinary Meaning of a Claim Term 8

C. Definiteness Under 35 U.S.C. § 112, ¶ 2 (pre-AIA) / § 112(b) (AIA) 9

III. AGREED CONSTRUCTIONS 10

IV. CONSTRUCTION OF DISPUTED TERMS 11

A. "client device" 11

B. "first server" and "second server" 13

C. "sending . . . the first content identifier to the web server using the selected IP address" 15

D. "a response time when communicating" 19

E. "source address" 23

F. "for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier" 27

G. "receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address" 29

H. "determining, . . . that the received part of, or the whole of, first content, is valid" and "the determining is based on a received HTTP header according to, or based on IETF RFC 2616" 31

I. "periodically communicating" 35

V. CONCLUSION 37

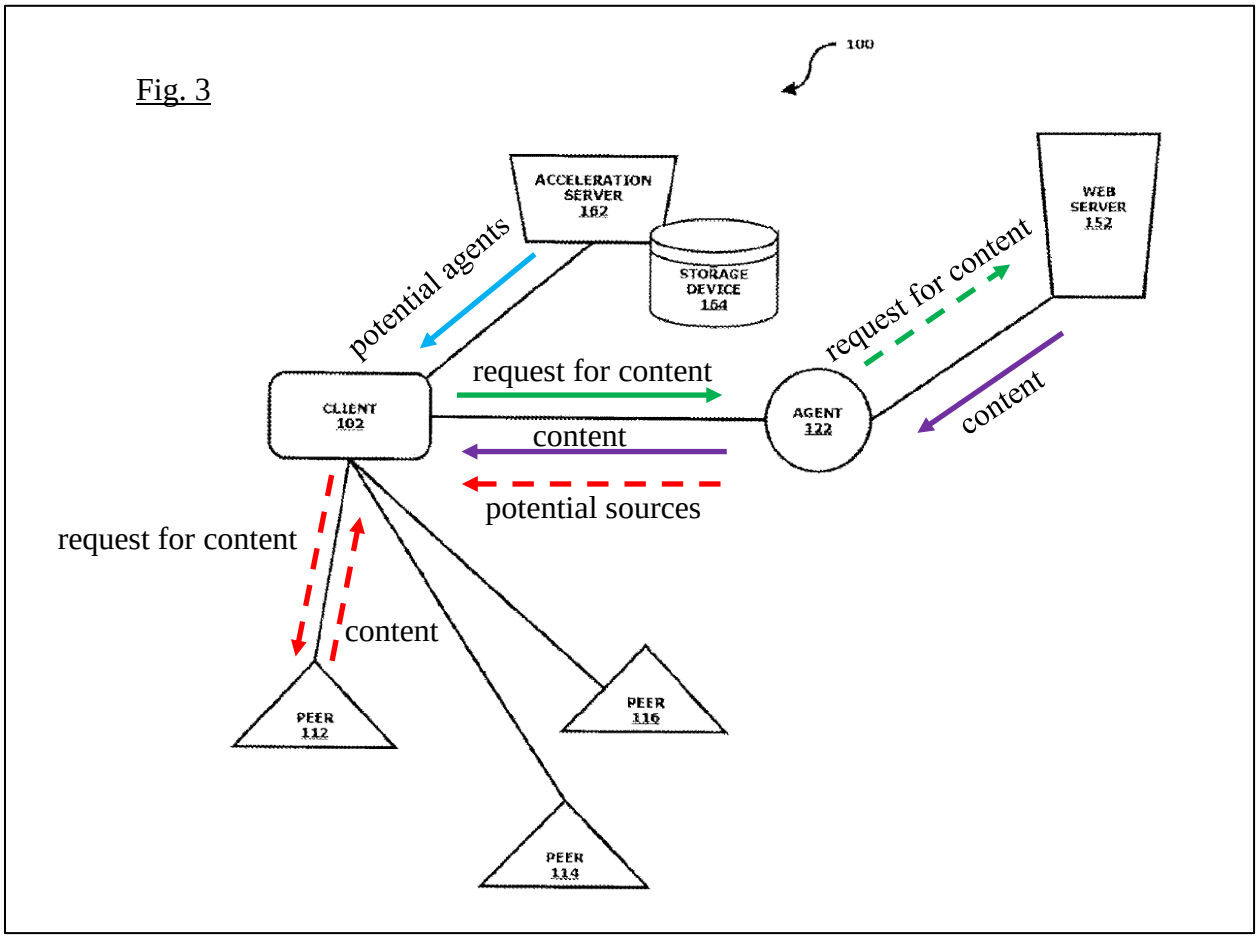
I. BACKGROUND

Plaintiff alleges infringement of two U.S. Patents: No. 10,484,511 (the "'511 Patent") and No. 10,637,968 (the "'968 Patent") (collectively, the "Asserted Patents"). The patents are related through a series of continuation and division applications. They each list an earliest priority claim to an application filed on October 8, 2009. The '511 and '968 Patents share a substantially identical specification, outside of the claim sets. The Court cites the '511 Patent herein with the understanding that the '968 Patent includes the same material.

The Asserted Patents are related to patents recently construed by the Court in Claim Construction Opinion and Order, *Luminati Networks, Ltd. v. Teso LT UAB et al.*, No. 2:19-cv-00395-JRG (E.D. Tex. Dec. 7, 2020), Dkt. No. 191 (the "*Teso* Markman Order"). Specifically, the Court there construed claims in three U.S. Patents: No. 10,257,319 (the "'319 Patent), No. 10,484,510 (the "'510 Patent), and No. 10,469,614 (the "'614 Patent"). The '319 and '510 Patents are related to the Asserted Patents and share a substantially identical specification with the Asserted Patents, outside of the claim sets.

In general, the Asserted Patents are directed to technology for improving communications in a communication network. The technology can be generally understood with reference to Figure 3, reproduced and annotated below. Communication devices in a network may be (inclusively) configured as a client (102), an agent (122), or a peer (112, 114, 116). Clients are configured to request content from a web server (152). Peers are configured to store copies of portions of the requested content in cache. Agents are configured to process the clients' requests for content (solid green arrow) by (1) providing the client with a list of potential alternative sources of the requested content (dashed red arrow) or (2) if there are no suitable alternative sources, providing the client with the requested content which the agent retrieves from the web server (solid magenta arrow).

An acceleration server (162) stores a list of IP addresses of communication devices in the network and provides clients with a list of potential agents for the client request (blue solid arrow). '511 Patent col.4 l.43 – col.5 l.50, col.10 ll.22–46, col.12 ll.57 – col.15 l.11.



The abstracts of the Asserted Patents are identical and provide:

> A system designed for increasing network communication speed for users, while lowering network congestion for content owners and ISPs. The system employs network elements including an acceleration server, clients, agents, and peers, where communication requests generated by applications are intercepted by the client on the same machine. The IP address of the server in the communication request is transmitted to the acceleration server, which provides a list of agents to use for this IP address. The communication request is sent to the agents. One or more of the agents respond with a list of peers that have previously seen some or all of the content which is the response to this request (after checking whether this data is still valid). The client then downloads the data from these peers in parts and in parallel, thereby speeding up the Web transfer, releasing congestion from the Web by fetching the information from multiple sources, and relieving traffic from Web servers by offloading the data transfers from them to nearby peers.

Claim 1 of the ’511 Patent and Claim 1 of the ’968 Patent, the independent claims at issue, recite as follows (with terms in dispute emphasized):

> **’511 Patent Claim 1**. A method for fetching, by a first ***client device***, a first content identified by a first content identifier and stored in a web server, for use with a ***first server*** that stores a group of IP addresses, the method by the first server comprising:
> receiving, from the first client device, the first content identifier;
> selecting, in response to the receiving of the first content identifier from the first client device, an IP address from the group;
> ***sending, in response to the selecting, the first content identifier to the web server using the selected IP address***;
> receiving, in response to the sending, the first content from the web server; and
> sending the received first content to the first client device,
> wherein the first content comprises a web-page, an audio, or a video content, and wherein the first content identifier comprises a Uniform Resource Locator (URL).
>
> **’968 Patent Claim 1**. A method for use with a requesting ***client device*** that comprises an Hypertext Transfer Protocol (HTTP) or Hypertext Transfer Protocol Secure (HTTPS) client, ***for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier***, for use with a ***second server*** distinct from the first web server and identified in the Internet by a second IP address, and for use with a list of IP addresses, the method comprising:
> identifying, by the requesting client device, an HTTP or HTTPS request for the first content;
> selecting, by the requesting client device, an IP address from the list;
> sending, by the requesting client device, to the second server using the second IP address over the Internet in response to the identifying and the selecting, the first content identifier and the selected IP address; and
> ***receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address***, the first content.

II. LEGAL PRINCIPLES

A. Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*,

381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (vacated on other grounds).

"The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). "[I]n all aspects of claim construction, 'the name of the game is the claim.'" *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)). First, a term's context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office ("PTO") and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be "unhelpful as an interpretive resource").

Although extrinsic evidence can also be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are not helpful to a court. *Id*. Extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*. The Supreme Court has explained the role of extrinsic evidence in claim construction:

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

Teva Pharm. USA, Inc. v. Sandoz, Inc., 574 U.S. 318, 331–32 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are "only two exceptions to [the] general rule" that claim terms are construed according to their plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the

specification or during prosecution."[2] *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). The standards for finding lexicography or disavowal are "exacting." *GE Lighting Solutions*, 750 F.3d at 1309.

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision." *Renishaw*, 158 F.3d at 1249.

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

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

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must

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

"inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 911. As it is a challenge to the validity of a patent, the failure of any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017). "[I]ndefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012).

When a term of degree is used in a claim, "the court must determine whether the patent provides some standard for measuring that degree." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (quotation marks omitted). Likewise, when a subjective term is used in a claim, "the court must determine whether the patent's specification supplies some standard for measuring the scope of the [term]." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005). The standard "must provide objective boundaries for those of skill in the art." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014).

III. AGREED CONSTRUCTIONS

The parties have agreed to constructions set forth in their Patent Rule 4-5(d) Joint Claim Construction Chart (Dkt. No. 91). Based on the parties' agreement, the Court hereby adopts the agreed constructions.

IV. CONSTRUCTION OF DISPUTED TERMS

A. "client device"

Disputed Term[3]	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"client device" • '510 Patent Claim 1 • '968 Patent Claim 1	consumer computer alternatively, • communication device that is operating in the role of a client	communication device that is operating in the role of a client

<u>The Parties' Positions</u>

Plaintiff submits: The "client device" of the Asserted Patents is defined to refer to a consumer computer, such as a laptop, desktop, or smartphone (citing '511 Patent col.2 ll.47–49[4]). These devices are also referred to as "communication devices." Such devices are distinct from the "servers" of the patents, which may encompass devices such as server farms and data centers. Dkt. No. 86 at 15–18.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '511 Patent figs.1, 3, col.2 ll.44–46, col.4 ll.43–55, col.4 l.64 – col.5 l.12, col.12 ll.33–56. **Extrinsic evidence**: Rhyne Decl.[5] ¶ 8 (Plaintiff's Ex. C, Dkt. No. 86-3); Freedman Disclosure[6] ¶¶ 21, 23–24 (Plaintiff's Ex. E, Dkt. No. 86-5).

Defendants respond: As the Court held in the *Teso* Markman Order, "the language on which Luminati relies is not sufficient to redefine the meaning of the term to 'consumer computer'"

[3] For all term charts in this order, the claims in which the term is found are listed with the term but: (1) only the highest-level claim in each dependency chain is listed, and (2) only asserted claims identified in the parties' Patent Rule 4-5(d) Joint Claim Construction Chart (Dkt. No. 91) are listed.
[4] Plaintiff cites column 2, lines 44–46 but quotes column 2, lines 47–49.
[5] Declaration of Dr. Vernon Thomas Rhyne III in Support of Plaintiff Luminati Network Ltd.'s Claim Constructions (Nov. 6, 2020).
[6] Patent LR 4-3 Disclosure of Expert Testimony (Nov. 5, 2020).

(quoting *Teso* Markman Order at 11). Further, as the Court previously held, the (common) specification does not mandate that "a client device is specifically not a server." In fact, the Asserted Patents describe that an exemplary communication device comprising a general-purpose assembly of standard computer components may act as the client when performing the role of the client. Further, that the "client device" is defined by its role rather than special equipment comports with the customary meaning of "client" in the art. Dkt. No. 88 at 5–11.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position: **Intrinsic evidence**: '511 Patent col.2 ll.44–49, col.4 ll.3-4, col.4 ll.49–51, col.4 ll.53–55, col.5 ll.54–62, col.6 ll.18–21, col.6 ll.33–35, col.6 ll.63–67, col.9 ll.21–40, col.16 l.22. **Extrinsic evidence**: Freedman Decl.[7] ¶¶ 30–31, 39–45 (Dkt. No. 88-1); R. Fielding et al., Network Working Group, *RFC 2616 Hypertext Transfer Protocol — HTTP/1.1* at § 1.3 (1999) (Defendants' Ex. 2, Dkt. No. 88-3 at 9–11); *Merriam-Webster Online Dictionary*, "consumer"[8].

Plaintiff replies: "The specification distinguishes 'communication devices' from servers . . . which was recognized by this Court . . . in the Teso [Markman Order]." There is a distinction between a client device acting as a server and a server. Dkt. No. 89 at 4–6.

Plaintiff cites further **intrinsic evidence** to support its position: '968 Patent col.4 l.41 – col.5 l.10; '319 Patent col.2 ll.44–46.

[7] Declaration of Dr. Michael Freedman in Support of Defendants' Responsive Claim Construction Brief (Dec. 31, 2020).
[8] https://www.merriam-webster.com/dictionary/consumer. Defendants did not submit a copy of this webpage as an exhibit.

Analysis

There appear to be two issues in dispute. First, whether a client device is necessarily a "consumer computer." Second, whether a client device is necessarily not a server. These issues largely parallel the issues addressed in the *Teso* Markman Order and the Court here reiterates and adopts the reasoning and ruling of that order. *Teso* Markman Order at 10–12. Specifically, the client device is defined by the role of the communication device as a client rather than by the components of the device and regardless of any additional role the device may serve, including as a server.

Accordingly, the Court construes "client device" as follows:

- "client device" means "communication device that is operating in the role of a client."

B. "first server" and "second server"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"first server" • '510 Patent Claim 1	server that is not the client device or the web server	plain and ordinary meaning
"second server" • '968 Patent Claim 1	server that is not the client device or the web server	plain and ordinary meaning

The Parties' Positions

Plaintiff submits: Based on the plain meaning of the claim language, the "first server" and the "second server" are each separate from the recited "web server" and "client device" of the claims. Dkt. No. 86 at 18–20.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '511 Patent col.2 ll.44–46, col.4 ll.43–64. **Extrinsic evidence**: Rhyne Decl. ¶ 8 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: There is no need to specify that the "first server" or "second server" is separate from the web server. Such a construction would either be redundant or improperly change the scope of the claim. In fact, Claim 1 of the '968 Patent recites that the second server is "distinct" from the first server. Dkt. No. 88 at 11–13.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 20–35, 46–51 (Dkt. No. 88-1).

Plaintiff replies: The first and second servers are described and claimed as components separate from the web server. Dkt. No. 89 at 6–8.

Plaintiff cites further **extrinsic evidence** to support its position: *Merriam-Webster Online Dictionary*, "distinct"[9].

Analysis

The issue in dispute appears to be whether one component can simultaneously serve as more than one of: the client device, the first server/second server, and the web server. It cannot.

The "first server" ('511 Patent) and the "second server" ('968 Patent) are distinct from the "client device" and "web server" separately recited in the claims. To begin, they are recited separately in the claims, suggesting that they are distinct components. *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) ("Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention." (quotation and modification marks omitted)). The recited operation of the claims further suggests a distinction among these components. For instance, Claim 1 of the '511 Patent, a "method by the first server comprising" recites "receiving, from the first

[9] https://www.merriam-webster.com/dictionary/distinct. Plaintiff did not submit a copy of this webpage as an exhibit.

client device, the first content identifier," "sending . . . the first content identifier to the web server," "receiving . . . the first content from the web server," and "sending the received first content to the first client device." This plainly is directed to a "first server" acting as an intermediary between the "client device" and "second server." Claim 1 of the '968 Patent similarly indicates the distinction among components. It recites "a second server distinct from the first web server" and "sending, by the requesting client device, to the second server." Again, this is plainly directed to a method treating the first web server, second server, and client device as three distinct components.

Accordingly, the Court construes "first server" and "second server" as follows:

- "first server" means "server that is not the client device or the web server";
- "second server" means "server that is not the client device or the first web server."

C. "sending . . . the first content identifier to the web server using the selected IP address"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"sending . . . the first content identifier to the web server using the selected IP address"[10] • '511 Patent Claim 1	the first server sending the Uniform Resource Locator for the first content to the web server using the selected IP address from the stored group of IP addresses	indefinite

<u>The Parties' Positions</u>

Plaintiff submits: The claim "clearly identifies the first content identifier as 'a Uniform Resource Locator.'" And while the claim broadly requires sending this identifier to the web server "using the selected IP address" without specifying exactly how the sending uses the selected IP

[10] The parties also separately identify "sending … to the web server using the selected IP address," which is a subset of the broader term. Dkt. No. 91-1 at 2.

address, breadth is not indefiniteness. In fact, dependent claims specify further details of the selected IP address: Claim 2 requires that it is associated with a client device, Claim 25 requires that it is a source address. Dkt. No. 86 at 22–24.

In addition to the claims themselves, Plaintiff cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶¶ 15–16 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: The meaning of this term is not reasonably certain because "[i]t would not make sense to a POSA to say that any information is sent 'using' a selected IP address without further detail." There are "multiple, competing potential interpretations" of such, and no way to determine with reasonable certainty what "using" encompasses. Dkt. No. 88 at 14–17.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 52–68 (Dkt. No. 88-1).

Plaintiff replies: Many of Defendants' proposed potential interpretations are "nonsensical and unsupported interpretations that ignore the context of the claims." Ultimately, the meaning of this term is clear, if broad. Dkt. No. 89 at 9–10.

Analysis

The issue in dispute is whether the meaning of this term is reasonably certain. It is. In the context of the Asserted Patents, sending "using" an IP address refers to sending using the address as a sending address or as a receiving address.

Defendants have not established that the meaning of this term is not reasonably certain. Instead, they ostensibly identify several technological ways in which an IP address can be used to send the content identifier and contend that because there are many such ways, the claim scope is fatally uncertain. The Federal Circuit addressed a similar issue in *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360 (Fed. Cir. 2017). There, the Federal Circuit criticized—and reversed—a

district court that: "credit[ed] [the expert's] assertion that 'a practically limitless number of materials' could catalyze SCR of NOx, and . . . treat[ed] that scope as 'indicating that the claims, as written, fail to sufficiently identify the material compositions.'" *Id*. at 1367. The Federal Circuit held that "the inference of indefiniteness simply from the scope finding is legally incorrect: 'breadth is not indefiniteness.'" *Id*. (quoting *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1341 (Fed. Cir. 2005)). Ultimately, *BASF* held that "the claims and specification let the public know that any known SCR and AMOx catalysts can be used as long as they play their claimed role in the claimed architecture." *Id*.

Here, the role played by the IP address used in the sending step, read in light of the entire specification, is reasonably limited to using the IP address as a sending address or a receiving address (including intermediaries). For example, Claims 1 through 4 and 25 of the '511 Patent provide:

> **1**. A method for fetching, by a first client device, a first content identified by a first content identifier and stored in a web server, for use with a first server that stores a group of IP addresses, the method by the first server comprising:
> receiving, from the first client device, the first content identifier;
> selecting, in response to the receiving of the first content identifier from the first client device, an IP address from the group;
> ***sending***, in response to the selecting, ***the first content identifier to the web server <u>using the selected IP address</u>***;
> receiving, in response to the sending, the first content from the web server; and
> sending the received first content to the first client device, wherein the first content comprises a web-page, an audio, or a video content, and wherein the first content identifier comprises a Uniform Resource Locator (URL).
>
> **2**. The method according to claim 1, wherein each of the IP addresses in the group is associated with a respective client device that is identified over the Internet using a respective IP address.
>
> **3**. The method according to claim 2, wherein the ***sending of the first content identifier to the web server comprises sending, by the first server, the first content identifier <u>to the client device addressed by the selected IP address</u>***.
>
> **4**. The method according to claim 3, wherein the ***sending*** of the first content identifier to the web server ***further comprises sending, <u>by the client device</u>***

> ***addressed by the selected IP address*, the first content identifier to the web server**, and receiving, from the web server, the first content.
>
> **5.** The method according to claim 3, wherein the receiving of the first content from the web server comprises receiving the first content from the client device addressed by the selected IP address.
>
> **25.** The method according to claim 1**,** wherein the ***sending*** of the first content identifier to the web server comprises using ***the selected IP address as a source address***.

'511 Patent col.19 ll.16–50, col.20 ll.65–67 (emphasis added). Claims 2 through 5 are directed to using a client device as an intermediary between the first server and the web server. In Claims 3–5, the selected IP address expressly refers to an intermediary client device. In Claim 3, the selected IP address is used as a receiving address (the client device). In Claim 4, the selected IP address is used as a sending address (the client device). In contrast, Claim 25 uses the selected IP address as an address of a "source" rather than of an intermediary. As described in the section on "source address," the Court understands that this refers to an address of a content source (not a sending source). Thus, Claim 25 uses the selected IP address as a receiving address (the web server's address, in the context of the surrounding claim language).

The description of the invention also describes a system in which a content identifier is used to determine the IP address of the content source, the IP addresses of alternative sources, and the IP addresses of intermediaries. This system uses a selected IP address to acquire the content by using the selected IP address as the address of a source of content or as the address of an intermediary that in turn requests the content from a content source. *See generally*, '511 Patent col.12 l.57 – col.15 l.11.

Ultimately, when read in the context of the entire specification, including the complete claim set and the description of the invention, the scope of "sending . . . the first content identifier to the web server using the selected IP address" is reasonably limited to using the address as a sending

address or as a receiving address. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) ("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." (quotation marks omitted)); *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) ("The only meaning that matters in claim construction is the meaning in the context of the patent.").

Accordingly, Defendants have failed to prove Claim 1 of the '511 Patent is indefinite for including this term. The Court construes the term as follows:

- "sending . . . the first content identifier to the web server using the selected IP address" means "sending . . . the first content identifier to the web server using the selected IP address as either the address of the first server or of the web server."

D. "a response time when communicating"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"a response time when communicating" • '511 Patent Claim 17 • '968 Patent Claim 2	plain and ordinary meaning	indefinite

<u>The Parties' Positions</u>

Plaintiff submits: In the context of the surrounding claim language, including claims from which the claims at issue depend, the meaning of this term is plain. Dkt. No. 86 at 25–26.

In addition to the claims themselves, Plaintiff cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶¶19–20 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: The "response time when communicating" may refer to almost anything. For instance, in Claim 17 of the '511 Patent, it is not clear what devices are communicating, what communication generates the response such as to inform a response time, and what device's

response time is at issue. Claim 2 of the ’968 Patent is also deficient. Although it recites “a response time when communicating with the requesting client device,” the claim does not indicate what is communicating with the requesting client device, what device’s response time is at issue, and what triggers the timing of the response. Further, there are multiple ways to measure a response time in the art, and the Asserted Patents provide no guidance as to which way is appropriate. Dkt. No. 88 at 17–20.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 69–77, 101–104 (Dkt. No. 88-1).

Plaintiff replies: While broad, these terms are not indefinite. “If response time is the criterion used to select the IP address, the claim is met.” Dkt. No. 89 at 10–11.

Analysis

The issue in dispute is whether the meanings of these terms are reasonably certain. They are.

The claims themselves provide context informing the meaning of these terms. For instance, Claims 1, 14, and 17 of the ’511 Patent provide:

> **1**. A method for fetching, by a first client device, a first content identified by a first content identifier and stored in a web server, for use with a first server that stores a group of IP addresses, the method by the first server comprising:
> receiving, from the first client device, the first content identifier;
> ***selecting, in response to the receiving of the first content identifier from the first client device, an IP address from the group***;
> sending, in response to the selecting, the first content identifier to the web server using the selected IP address;
> receiving, in response to the sending, the first content from the web server; and
> sending the received first content to the first client device,
> wherein the first content comprises a web-page, an audio, or a video content, and wherein the first content identifier comprises a Uniform Resource Locator (URL).
>
> **14.** The method according to claim 1, for use with ***a criterion stored in the first server, wherein the selecting is according to, or based on, the criterion***.
>
> **17.** The method according to claim 14, ***wherein the criterion is based on, or comprises, a <u>response time</u> when communicating***.

’511 Patent col.19 ll.16–33, col.20 ll.20–22, col.20 ll.29–31 (emphasis added). It is clear that “selecting . . . an IP address from the group” in Claim 1 is based on “a response time when communicating” in Claim 17. Claims 1 through 3 of the ’968 Patent provide:

> **1**. A method for use with a requesting client device that comprises an Hypertext Transfer Protocol (HTTP) or Hypertext Transfer Protocol Secure (HTTPS) client, for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier, for use with a second server distinct from the first web server and identified in the Internet by a second IP address, and for use with a list of IP addresses, the method comprising:
>
> identifying, by the requesting client device, an HTTP or HTTPS request for the first content;
>
> ***selecting, by the requesting client device, an IP address from the list***;
>
> sending, by the requesting client device, to the second server using the second IP address over the Internet in response to the identifying and the selecting, the first content identifier and the selected IP address; and
>
> receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address, the first content.
>
> 2. The method according to claim 1, wherein the ***selecting is further based on a <u>response time</u> when communicating with the requesting client device***.
>
> 3. The method according to claim 2, wherein the selected IP address is associated with a first client device that is the quickest to respond to queries from the requesting client device.

’968 Patent col.19 ll.16–38 (emphasis added). As with Claim 1 of the ’511 Patent, it is clear that “selecting . . . an IP address” in Claim 2 of the ’968 Patent is based at least in part on “a response time when communicating with the requesting client device.” Claim 3 of the ’968 Patent further requires that the selected IP address is that of the (first) client device that is quickest to respond to the requesting client device. In the claims at issue, the communication response time is tied to the selection of an IP address that is used to further the transfer (communication) of content. This suggests that the response time is of that of the IP address (or the device/application associated with the address).

The context provided by the description of the invention further suggests that the response time is that of the IP address. For instance, the Asserted Patents provide the following description of using a response time to select an agent (by IP address) to further a request for content:

> In response to receiving the IP address of the server 152, the acceleration server 162 prepares a list of agents that may be suitable to handle the request from this IP address (block 358). . . .
>
> FIG. 10 is a flowchart continuing the flowchart 380 of FIG. 9 and focused on agent response to the request. As shown by block 382, upon receiving the request from the client 200, each agent that received the request from the client responds to the client 200 with whether it has information regarding the request, which can help the client to download the requested information from peers in the network. Specifically, each agent responds with whether the agent has seen a previous request for this resource that has been fulfilled. In such a case, the agent may then provide the client with the list of peers and checksums of the chunks that each of them have.
>
> As shown by block 384, the client then decides which of the agents in the list to use as its agent for this particular information request. ***To determine which agent in the list to use as its agent for the particular information request, the client may consider multiple factors, such as, for example, factoring the speed of the reply by each agent*** and whether that agent does or does not have the information required. There are multiple ways to implement this agent selection, one practical way being to start a timer of a small window of time, such as, for example, 5 ms, after receiving the first response from the agents, and after the small window, choosing from the list of agents that responded, the agent that has the information about the request, or in the case that none of the agents responded, to choose the first agent from the list received from the acceleration server 162.

'511 Patent col.13 l.19 – col.14 l.9 (emphasis added). The patents further describe that "[t]he acceleration server assigns a list of IP addresses to each communication device functioning as an agent." *Id*. at col.10 ll.32–34. Read together, these passages describe selecting a listed agent (listed by IP address) based on the time it takes the agent to respond to a communication. There is no other discussion of using a communication time in selecting a device (by IP address or otherwise) to further the fetching of content.

Ultimately, when read in the context of the entire specification, including the complete claim set and the description of the invention, the scope of "a response time when communicating" is

reasonably limited to the response time of a communication with an IP address. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) ("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." (quotation marks omitted)); *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) ("The only meaning that matters in claim construction is the meaning in the context of the patent."). That the claims are otherwise broad does not mean they are indefinite. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017) ("breadth is not indefiniteness").

Accordingly, Defendants have not proven any claim is indefinite for using "a response time when communicating." The Court construes this term as follows:

- '511 Patent Claim 17: "a response time when communicating" means "a response time to a communication with an IP address of the group of IP addresses."
- '968 Patent Claim 2: "a response time when communicating" means "a response time to a communication with an IP address of the list of IP addresses."

E. "source address"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"source address" • '511 Patent Claim 25	plain and ordinary meaning	indefinite

<u>The Parties' Positions</u>

Plaintiff submits: The "source address" refers to an "IP address associated with a source." Dkt. No. 86 at 26–27.

In addition to the claims themselves, Plaintiff cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶ 24 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: There are multiple potential interpretations of "source address" and the Asserted Patents provide no guidance as to what the correct interpretation is. For instance, it is not clear whether the source address refers to a source of content, a source of a request for content, or something else altogether. Dkt. No. 88 at 20–22.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 78–84 (Dkt. No. 88-1).

Plaintiff replies: "Defendants again ignore the claim context by arguing (wrongly) that the 'source address' could be the client device or web server itself. As discussed above, such interpretations make no sense in the context of the claims. Regardless, 'breadth is not indefiniteness.'" Dkt. No. 89 at 11.

Analysis

The issue in dispute is whether the meaning of "source address" in the claims is reasonably certain. It is. It refers to a content source.

The claims themselves provide context informing the meaning of these terms. For instance, Claims 1 to 5 and 25 of the '511 Patent provide:

> **1**. A method for fetching, by a first client device, a first content identified by a first content identifier and stored in a web server, for use with a first server that stores a group of IP addresses, the method by the first server comprising:
> receiving, from the first client device, the first content identifier;
> selecting, in response to the receiving of the first content identifier from the first client device, an IP address from the group;
> ***sending, in response to the selecting, the first content identifier to the web server using the selected IP address***;
> receiving, in response to the sending, the first content from the web server; and
> sending the received first content to the first client device,
> wherein the first content comprises a web-page, an audio, or a video content, and wherein the first content identifier comprises a Uniform Resource Locator (URL).
>
> **2**. The method according to claim 1, wherein each of the IP addresses in the group is associated with a respective client device that is identified over the Internet using a respective IP address.

> **3**. The method according to claim 2, wherein the ***sending of the first content identifier to the web server comprises sending, by the first server, the first content identifier <u>to the client device addressed by the selected IP address</u>***.
>
> **4**. The method according to claim 3, wherein the ***sending*** of the first content identifier to the web server ***further comprises sending, <u>by the client device addressed by the selected IP address</u>, the first content identifier to the web server***, and receiving, from the web server, the first content.
>
> **5.** The method according to claim 3, wherein the receiving of the first content from the web server comprises receiving the first content from the client device addressed by the selected IP address.
>
> **25.** The method according to claim 1, wherein the ***sending of the first content identifier to the web server comprises <u>using the selected IP address as a source address</u>***.

'511 Patent col.19 ll.16–33, col.20 ll.65–67 (emphasis added). It is clear that sending the content identifier includes using the selected IP address as a "source address." It is also clear that there is a distinction between using the selected IP address as the address of an intermediary to the requested content, as stated in Claims 3 through 5. This suggests that "source" here refers not to the source of the "sending" but rather to the source of the content.

The rest of the Asserted Patents' specification also suggests that "source" is used to refer to a content source rather than a communication source. There are two contexts in which "source" is used in the patents: (1) to refer to a content source and (2) to refer to a program source (source code). For instance, the abstracts provide:

> A system designed for increasing network communication speed for users, while lowering network congestion for content owners and ISPs. The system employs network elements including an acceleration server, clients, agents, and peers, where communication requests generated by applications are intercepted by the client on the same machine. The IP address of the server in the communication request is transmitted to the acceleration server, which provides a list of agents to use for this IP address. The communication request is sent to the agents. One or more of the agents respond with a list of ***peers that have previously seen some or all of the <u>content</u>*** which is the response to this request (after checking whether this data is still valid). ***The <u>client then downloads the data from these peers</u> in parts and in parallel, thereby speeding up the Web transfer, releasing congestion from the***

> ***Web by fetching the information from multiple sources***, and relieving traffic from Web servers by offloading the data transfers from them to nearby peers.

'511 Patent, at [57] Abstract (emphasis added). Thus, the abstract refers to "sources" of content. The other use of the term "source" is as follows:

> Functionality of the communication device 200 may be provided by a source program, executable program (object code), script, or any other entity containing a set of instructions to be performed. When a source program, then the program needs to be translated via a compiler, assembler, interpreter, or the like, which may or may not be included within the memory 210, so as to operate properly in connection with the operating system 230.

Id. at col.6 ll.50–57. In both uses in the patents, "source" refers to a repository of information; namely, the requested content or the code to configure the communication device. The Court understands Claims 18 and 19 to be directed to providing the application to configure the communication device. *See, e.g., id*. at col.20 ll.32–33 ("18. The method according to claim 1, for use with a software application stored in the first server . . .."), col.20 ll.38–40 ("19. The method according to claim 18, further comprising sending, by the first server to the client device, the first software application."). The natural interpretation of the Claim 25 (which depends from Claim 1, not Claim 18), then, is that it refers to the other context of "source" in the patents.

Ultimately, when read in the context of the entire specification, including the complete claim set and the description of the invention, the scope of "source address" is reasonably limited to the address of the source of content, which in Claim 1 is the web server. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) ("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." (quotation marks omitted)); *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) ("The only meaning that matters in claim construction is the meaning in the context of the patent.").

Accordingly, Defendants have not proven Claim 25 of the ’511 Patent is indefinite for using “source address.” The Court construes this term as follows:

- “source address” means “address of the web server.”

F. “for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier” • ’968 Patent Claim 1	plain and ordinary meaning	indefinite

<u>The Parties’ Positions</u>

Plaintiff submits: The meaning of this term is plain in the context of the surrounding claim language. The web server responds to HTTP/HTTPS requests and stores a first content and the method steps reference the web server’s first content. For instance, the claim requires “identifying . . . an HTTP or HTTPS request for the first content” and “receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address, the first content.” This enables the “first content to be fetched from the web server . . . and returned to the client device.” Dkt. No. 86 at 27–28.

In addition to the claims themselves, Plaintiff cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶¶ 26–27 (Plaintiff’s Ex. C, Dkt. No. 86-3).

Defendants respond: The claim at issue is directed to a method “for use with a web server” but the “web server” is recited only in the preamble and not in the body of the claim. It is not clear

how the web server is used in the method and thus it is not clear how the method is "for use with a web server." Dkt. No. 88 at 22–25.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 85–90 (Dkt. No. 88-1).

Plaintiff replies: The plain language of the claims means that the method is for use with recited components, including the web server, but the steps of the method are performed by the "requesting client device." These steps permit content to be fetched from the web server. Dkt. No. 89 at 11–12.

Analysis

The issue in dispute distills to whether the body is required to state an affirmative role for the "first web server" recited in the preamble for the claim to be definite. It is not.

The "first web server" is an environmental limitation. The Federal Circuit "distinguish[es] between those limitations that describe the environment in which a claim operates from the limitations that must be performed by an accused infringer." *Advanced Software Design Corp. v. Fiserv, Inc.*, 641 F.3d 1368, 1375 (Fed. Cir. 2011). *Advanced Software* held that claims directed to validating a financial instrument having encrypted information in which the method of encryption is defined in the preamble may be infringed without performing the encryption method. But the claims will not be infringed if the instrument that is validated has not been "encrypted . . . in accordance with steps described in the preamble." *Id*. at 1373–75. Thus, the environment in *Advanced Software*, namely, the encrypted information specified in the preamble, was a limitation of the claim but did not create, or require, an affirmative step relating to encrypting the information. Similarly, the "first web server that . . . stores a first content identified by a first content identifier" limitation recited in the preamble here defines, in part, the environment in which the recited steps

must be performed by the requesting client device. The claim does not require an affirmative step by the web server.

Accordingly, Defendants have not proven that Claim 1 of the ’968 Patent is indefinite for including the “first web server . . .” limitation in the preamble. The Court determines that this term has its plain and ordinary meaning without the need for further construction.

G. “receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address” • ’968 Patent Claim 1	plain and ordinary meaning	indefinite

<u>The Parties’ Positions</u>

Plaintiff submits: “[W]hile all claimed steps are performed at the client device, a POSA would understand the recited selected IP address to be used in fetching the first content which is subsequently received by the requesting client device.” Dkt. No. 86 at 29–30.

In addition to the claims themselves, Plaintiff cites the following **extrinsic evidence** to support its position: Rhyne Decl. ¶¶ 30–31 (Plaintiff’s Ex. C, Dkt. No. 86-3).

Defendants respond: “For substantially the same reasons” that the meaning of “sending . . . the first content identifier to the web server using the selected IP address” in Claim 1 of the ’511 Patent is not reasonably certain, the “‘using the selected IP address’ limitation in claim 1 of the ’968 patent, as used in ‘receiving . . . from the second server using the selected IP address, the first content,’ fails to define the claim scope with reasonable certainty.” Dkt. No. 88 at 25–27.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 91–100 (Dkt. No. 88-1).

Plaintiff replies: "Understanding that all the steps are performed 'by the requesting client device,' a POSA would understand the last step of the client device receiving the first content 'in response to the sending, from the second server using the selected IP address' to mean that the selected IP address was used by the second server in fetching the first content from the web server." Dkt. No. 89 at 12.

Analysis

The issue in dispute is whether the meaning of this term is reasonably certain. It is. This issue largely parallels the issue addressed above in the section on the "sending . . . the first content identifier to the web server using the selected IP address" limitation. For the reasons stated there, Defendants have failed to establish that the meaning of this term is not reasonably certain.

Accordingly, Defendants have not proven the Claim 1 of the '968 Patent is indefinite for including "receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address." The Court construes this term as follows:

- "receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address" means "receiving, by the requesting client device, over the Internet in response to the sending from the second server using the selected IP address as either a sending address or a receiving address."

H. "determining, . . . that the received part of, or the whole of, first content, is valid" and "the determining is based on a received HTTP header according to, or based on IETF RFC 2616"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"determining, . . . that the received part of, or the whole of, the first content, is valid" • '968 Patent Claim 8	plain and ordinary meaning	indefinite
"determining is based on a received HTTP header according to, or based on, IETF RFC 2616" • '968 Patent Claim 9	plain and ordinary meaning	indefinite

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

<u>The Parties' Positions</u>

Plaintiff submits: In the *Teso* Markman Order the Court held that terms in related patents that are similar to the terms at issue here are not indefinite. The Court should rule the same here. As described in the Asserted Patents, "the content may be received in parts such as 'chunks'" and thus the "received part of, or whole of" content refers to these parts. Whether content is valid is a function of whether it mirrors the information on the server. And whether the validity of content is determined "based on a received HTTP header according to, or based on, IETF RFC 2616" is plainly understood, if broad. Dkt. No. 86 at 31–33.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '511 Patent fig.12, col.14 ll.24–51, col.14 l.62 – col.15 l.11, col.16 ll.12–46; '968 Patent col.8 ll.31–37, col.14 ll.24–51, col.14 l.62 – col.15 l.11, col.16 ll.12–46. **Extrinsic evidence**: Rhyne Decl. ¶¶ 33, 37 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: The phrase "received part of, or whole of, the first content" in Claim 8 of the '968 Patent lacks antecedent basis and its meaning is therefore uncertain. In the *Teso* Markman Order, the Court held a claim indefinite for including a similar phrase without antecedent basis, namely "the sending the part of, or the whole of, the stored first content." What it means for content to be valid is also uncertain unless "'validity' relates to whether the cached data is still identical to the data stored on the server, which goes to the heart of the disclosed subject matter," as the Court held in the *Teso* Markman Order (quoting *Teso* Markman Order at 18). Finally, what it means to determine validity based on an HTTP header is not reasonably certain as "one could not simply refer to an HTTP header and expect a POSA to know which one of the many HTTP headers defined in RFC 2616 is being identified." Dkt. No. 88 at 27–31.

In addition to the claims themselves, Defendants cite the following intrinsic and extrinsic evidence to support their position: **Intrinsic evidence**: '511 Patent col.9 l.61 – col.10 l.4, col.14 ll.24–26, col.14 ll.35–38; '319 Patent col.9 l.60 – col.10 l.3, col.14 ll.24–26, col.14 ll.35–38. **Extrinsic evidence**: Freedman Decl. ¶¶ 105–12, 115–16 (Dkt. No. 88-1).

Plaintiff replies: The antecedent basis of "the received part of, or the whole of, the first content" is present by implication. And the Court already addressed and rejected Defendants' indefiniteness positions regarding the meaning of valid content and determining validity with a HTTP header in the *Teso* Markman Order. Dkt. No. 89 at 12–13.

Analysis

There are three issues in dispute. First, whether what it means for content to be valid is reasonably certain. It is. Second, whether what it means to determine content validity based on a received HTTP header is reasonably certain. It is. Third, whether the meaning of "the received part of, or the whole of, the first content" is reasonably certain. It is.

The issues of what it means for content to be valid and what it means to determine content validity based on a HTTP header were addressed in the *Teso* Markman Order. *Teso* Markman Order at 17–19. The Court here reiterates and adopts the reasoning and ruling of that order. Specifically, in the context of the Asserted Patents, the validity of content relates to whether it is the same as the original data.[11] For example, the Asserted Patents provide:

> In addition to determining if the selected agent contains an entry for this request in its database, the selected agent may also ***determine if this information is still valid***. Specifically, the selected agent ***determines whether the data that is stored within the memory of the selected agent or the memory of the peers, still mirrors the information that would have been received from the server itself for this request***. A further description of the process utilized by the selected agent to determine if the information is still valid, is described in detail herein.

'511 Patent col.14 ll.32–38 (emphasis added). The patents further explain:

> FIG. 12 is a flowchart 500 illustrating steps taken by an agent, client, or peer to determine whether a certain HTTP request is still valid. Specifically, the following provides an example of how the agent, client, or peer can ***determine whether particular data that is stored within the memory of the agent, or the memory of a peer or client, <u>still mirrors the information that is currently on the Web server</u>***. As shown by block 502, the HTTP request is looked up in the cache database of the agent, client or peer that is checking the validity of the HTTP request. As an example, the HTTP protocol, defined by RFC 2616, outlines specific methods that ***Web servers can define within the HTTP headers signifying the <u>validity of certain data</u>***, such as, but not limited to, by using HTTP header information such as "max age" to indicate how long this data may be cached before becoming invalid, "no cache" to indicate that the data may never be cached, and using other information.
>
> As shown by block 504, these ***<u>standard methods of validation</u>*** are tested on the HTTP request information in question. As shown by block 506, a determination is made whether the requested information that is stored is valid or not. If the requested information is valid, a "VALID" response is returned (block 508). Alternatively, if the requested information is not valid, an HTTP conditional request is sent to the relevant Web server, to determine if the data stored for this request is still valid (block 510). If the data stored for this request is still valid, a "VALID" response is returned (block 508). Alternatively, if the data stored for this request is

[11] The Court does not agree with Defendants' overly narrow characterization of the ruling in the *Teso* Markman Order. Specifically, nothing in the Court's construction limits determining validity to determining "whether cached data is identical to data stored on the server." Rather, the patents support using identical-data proxies, such as "max age" and "no cache," to determine whether data is valid.

> not valid, an "INVALID" response is returned (block 514). It should be noted, that the abovementioned description with regard to FIG. 12 is an explanation of how to check if HTTP information is still valid. There are similar methods of determining validity for any other protocol, which may be utilized, and which those having ordinary skill in the art would appreciate and understand.

Id. at col.16 ll.14–46 (emphasis added). This describes that using a HTTP header to determine whether content is valid is using information from the header to determine the validity, regardless of what type of HTTP header is used. Thus, neither Claim 8 nor Claim 9 of the '968 Patent is indefinite for use of "valid" or "determining is based on a received HTTP header according to, or based on, IETF RFC 2616."

As described in the Asserted Patents, the content is inherently composed of one or more pieces. For instance, the patents provide:

> The present system and method also provides a communication device within a network, wherein the communication device contains: a memory; and a processor configured by the memory to perform the steps of originating a data request for obtaining data from a data server; being assigned to a data server, referred to as an assigned data server; receiving a data request from a separate device within the network, and keeping track of which client communication devices within the network have received responses to data requests from the assigned data server; and storing ***portions*** of data received in response to the originated data request, wherein the ***portions*** of data may be transmitted to communication device upon request by the communication device.

'511 Patent col.3 ll.37–49 (emphasis added). The patents further explain:

> For each URL, the cache database 282 has stored therein the URL HTTP headers returned by the Web Server for this URL, when the last time was that the contents of this URL was loaded directly from the Web Server, when the contents of the URL had last changed on the Web Server, as well as ***a list of <u>chunks</u> that contain the contents of this URL, and the <u>chunks</u> of data themselves***. Chunks in the present description are defined as equally sized pieces of data that together form the whole content of the URL. It should be noted that while the present description provides for chunks being equally sized pieces of data, in accordance with an alternative embodiment of the invention, the chunks may instead be of different size.

Id. at col.8 ll.26–39 (emphasis added). And the patents further provide:

> As shown by FIG. 7, for each URL 288 within the list of URLs 286, the cache database 282 stores: . . . a list of ***chunks 298 that contain the contents of this URL***, and the content of the 60 chunk. . . .
>
> For each such chunk 300, the cache database 282 includes the checksum of the chunk 302, the data of the chunk 304 itself, and a list of peers 306 that most likely have the data for this chunk. As is described in additional detail herein, the data for the chunk may be used by other clients within the communication network 100 when other communication devices of the communication network 100 serve as peers to the clients, from which to download the chunk data.

Id. at col.10 l.52 – col.11 l.11 (emphasis added); *see also id*. at col.15 ll.15–21 ("As shown by block 422, the client receives the response from the agent (including the list of chunks and their corresponding data . . .) and, for each of the five chunks, the client sends a request to each of die peers listed for the chunk to download the chunk."), col.15 ll.35–36 ("As shown by block 428**,** the chosen peer then sends the chunk to the client.").

Accordingly, Defendants have not proven that either Claim 8 or 9 of the '968 Patent is indefinite for use of the terms at issue. The Court determines that "determining is based on a received HTTP header according to, or based on, IETF RFC 2616" has its plain and ordinary meaning without the need for further construction and construes "determining, . . . that the received part of, or the whole of, the first content, is valid" as follows:

- "determining, . . . that the received part of, or the whole of, the first content, is valid" means "determining, . . . that a received part of, or the whole of, the first content, is valid."

I. "periodically communicating"

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
"periodically communicating" • '968 Patent Claim 15	plain and ordinary meaning	indefinite

The Parties' Positions

Plaintiff submits: The Court, in the *Teso* Markman Order, addressed this term for related patents, and held it not indefinite. As there held, the timing of the periodic communication is not critical and does not need to be specified for the meaning of the term to be reasonably certain. Dkt. No. 86 at 34–35.

In addition to the claims themselves, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence**: '319 Patent col.16 ll.52–57. **Extrinsic evidence**: Rhyne Decl. ¶ 39 (Plaintiff's Ex. C, Dkt. No. 86-3).

Defendants respond: Claim 1 of the '968 Patent requires at least two communications between the second server and the requesting client device and Claim 15 (which depends from Claim 1) requires "periodically communicating" between these devices. Specifically, Claim 1 requires that "the requesting client device sends the first content identifier and selected IP address to the second server, and the requesting client device receives from the second server the first content." Given that Claim 15 must be narrower than Claim 1, "periodically communicating" must require more than two communications, but, as held in the *Teso* Markman Order, the description of the invention supports only "occasional communication" but not communication on a regular interval. Thus, the meaning of periodically communicating is not reasonably certain. Dkt. No. 88 at 31–32.

In addition to the claims themselves, Defendants cite the following **extrinsic evidence** to support their position: Freedman Decl. ¶¶ 118–21 (Dkt. No. 88-1).

Plaintiff replies: The *Teso* Markman Order does not exclude communication on regular intervals from the scope of "periodically communicating." And the term encompasses occasionally communicating without being indefinite. Dkt. No. 89 at 13.

Analysis

The issue in dispute is whether the meaning of "periodically communicating" is reasonably certain. It is. This issue was addressed in the *Teso* Markman Order and the Court here reiterates and adopts the reasoning and ruling of that order. *Teso* Markman Order at 19–20. Specifically, the timing of the periodic communication is not critical and thus allows for both regular-interval and irregular-interval periodic communication.

Accordingly, Defendants have not proven any claim is indefinite for using "periodically communicating." The Court construes this term as follows:

- "periodically communicating" means "repeatedly communicating from time to time."

V. CONCLUSION

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

SIGNED this 8th day of February, 2021.

ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE