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

CA, INC. and AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED,	§ § § §	
Plaintiffs,	§ §	
v.	§ §	Case No. 2:21-CV-00080-JRG-RSP
	§ §	
NETFLIX, INC.,	§ §	
Defendant.	§ §	

<u>MEMORANDUM OPINION AND ORDER</u>

On November 2, 2021, the Court held a hearing to determine the proper construction of

the disputed claim terms in in U.S. Patent No. 7,103,794 ("the '794 Patent"), U.S. Patent No.

8,646,014 ("the '014 Patent"), U.S. Patent No. 8,656,419 ("the '419 Patent"), U.S. Patent No.

9,402,098 ("the '098 Patent"), and U.S. Patent No. 10,911,938 ("the '938 Patent"). Having

reviewed the arguments made by the Parties at the hearing and in their claim construction briefing

(Dkt. Nos. 105, 112, 116) [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); *see also Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

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

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I.   BACKGROUND

Plaintiffs CA, Inc. and Avago Technologies International Sales Pte. Limited (collectively,

"Plaintiff") alleges Defendant Netflix, Inc. infringes the Asserted Patents. Shortly before the start

of the November 2, 2021 hearing, the Court provided the Parties with preliminary constructions

with the aim of focusing the Parties' arguments and facilitating discussion.

The '794 Patent, titled "Network Object Cache Engine," issued on September 5, 2006, and

was filed on June 8, 1998. The '794 Patent generally relates to devices for caching objects

transmitted using a computer network. '794 Patent at 1:6–7. The Abstract of the '794 Patent states:

> The invention provides a method and system for caching information objects
> transmitted using a computer network. A cache engine determines directly when
> and where to store those objects in a memory (such as RAM) and mass storage
> (such as one or more disk drives), so as to optimally write those objects to mass
> storage and later read them from mass storage, without having to maintain them
> persistently. The cache engine actively allocates those objects to memory or to disk,
> determines where on disk to store those objects, retrieves those objects in response
> to their network identifiers (such as their URLs), and determines which objects to
> remove from the cache so as to maintain sufficient operating space. The cache
> engine collects information to be written to disk in write episodes, so as to
> maximize efficiency when writing information to disk and so as to maximize
> efficiency when later reading that information from disk. The cache engine
> performs write episodes so as to atomically commit changes to disk during each
> write episode, so the cache engine does not fail in response to loss of power or
> storage, or other intermediate failure of portions of the cache. The cache engine
> also stores key system objects on each one of a plurality of disks, so as to maintain
> the cache holographic in the sense that loss of any subset of the disks merely
> decreases the amount of available cache. The cache engine also collects information
> to be deleted from disk in delete episodes, so as to maximize efficiency when
> deleting information from disk and so as to maximize efficiency when later writing
> to those areas having former deleted information. The cache engine responds to the
> addition or deletion of disks as the expansion or contraction of the amount of
> available cache.

Claim 1 of the '794 Patent is an illustrative claim and recites the following elements

(disputed terms in italics):

> 1. A method, including steps of:
>   *receiving a set of network objects in response to a first request to*
>   *a server from a client*; and

>> maintaining said network objects in a cache memory in a cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;
>>
>> wherein said step of maintaining includes steps of recording said network objects in said cache memory and retrieving said network objects from said cache memory, so as to *substantially minimizes* a time required for retrieving said network objects from said mass storage.

The '014 Patent, titled "Multistream Video Communication with Staggered Access Points," issued on February 4, 2014, and was filed on May 24, 2013. The '014 Patent generally relates to a system and method that provides reduced latency in a video signal processing system. '014 Patent at 1:63–65. The Abstract of the '014 Patent states:

> A system and method that provide reduced latency in a video signal processing system. Various aspects of the present invention may comprise transmitting a first video information stream representative of a unit of video information. For example, the transmitted first video information stream may correspond to a video channel. A second video information stream representative of the unit of video information may be transmitted simultaneously with the first video information stream. The second video information stream may also, for example, correspond to the video channel. Various aspects of the present invention may comprise receiving a plurality of simultaneously transmitted video information streams. A video information stream of the plurality of received video information streams may be identified that, when processed, is expected to result in the lowest latency in presenting the unit of video information to the user. The identified video information stream may then be so processed.

Claim 1 of the '014 Patent is an illustrative claim and recites the following elements (disputed term in italics):

> 1. A method in a video receiving system for receiving video information, the method comprising:
>
> receiving, by a receiver, a request by a user for a unit of video information;
>
> receiving, by the receiver, a plurality of video information streams, each of which represents the requested unit of video information;
>
> identifying, by the receiver, which of the plurality of video information streams, *when processed*, is expected to result in a lower latency in presenting the unit of video information; and

> processing, by the receiver, the identified video information
> stream to present the unit of video information.

The '419 Patent, titled "Dynamic Distributed Evaluator," issued on February 18, 2014, and

was filed on July 2, 2009. The '419 Patent generally relates to distributed computing, and more

specifically to a dynamic distributed evaluator. '419 Patent at 1:5–7. The Abstract of the '419

Patent states:

> According to one embodiment a first node of a network communicates with a
> second node of the network. The first node tells the second node to perform an
> operation and how to perform the operation using computer code. Additionally, the
> first node tells the second node what to do with the result of the operation.

Claim 1 of the '419 Patent is an illustrative claim and recites the following elements

(disputed terms in italics):

> 1. An apparatus, comprising a first node of a network, the first
>   node comprising:
> an interface operable to:
> communicate with a second node of the network; and one or more
>   *processors operable to*:
> tell a plurality of nodes to perform an operation comprising a
>   procedure of an application, the plurality of nodes
>   comprising a second node and one or more additional
>   nodes;
> instruct the plurality of nodes how to perform the operation using
>   computer code; and
> tell the plurality of nodes what to do with a result of the operation,
>   and
> wherein the one or more *processors* does not know which one of
>   the plurality of nodes will perform the operation.

The '098 Patent, titled "Fast Channel Change," issued on July 26, 2016, and was filed on

February 25, 2014. The '098 Patent generally relates to a system and method that provides reduced

latency in a video signal processing system. '098 Patent at 1:42–44. The Abstract of the '098

Patent states:

> A request for a unit of video information is received from a remote video receiver.
> An initial transmission rate for the unit of video information is determined based at
> least in part on a decoder model and a typical steady-state transmission rate for the

unit of video information. The initial transmission rate is faster than the typical steady-state transmission rate. For a first time period after receiving the request, a first portion of the unit of video information is transmitted to the remote video receiver at the initial transmission rate. The first time period, the initial transmission rate, or both are determined so as not to overflow an input buffer that is based at least in part on the decoder model. For a second time period after the first time period, a second portion of the unit of video information is transmitted to the remote video receiver at the typical steady-state transmission rate.

Claim 1 of the '098 Patent is an illustrative claim and recites the following elements

(disputed terms in italics):

> 1.A method, including steps of:
> *receiving a set of network objects in response to a first request to a server from a client*; and
> maintaining said network objects in a cache memory in a cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;
> wherein said step of maintaining includes steps of recording said network objects in said cache memory and retrieving said network objects from said cache memory, so as to *substantially minimizes* a time required for retrieving said network objects from said mass storage.

The '938 Patent, titled "Method and System for a Networked Self-Configuring Communication Device Utilizing User Preference Information," issued on February 2, 2021, and was filed on March 30, 2020. The '938 Patent generally relates to a method and system for a networked self-configuring communication device utilizing user preference information. '938 Patent at 1:59–61. The Abstract of the '938 Patent states:

A first electronic device may enable generation, updating, and/or storage of user configuration information. The user configuration information may comprise information pertaining to device configuration and/or operational preferences specific to the device user and/or various use settings, connectivity, and/or use of available resources. The generation, updating, and/or storage of the user configuration information may be performed manually and/or automatically, and may be performed directly within the first electronic device and/or via networked devices, which may communicatively coupled to the first electronic device. A second electronic device may be enabled to be communicatively coupled to the first electronic device and/or the networked devices. The second electronic device may then be enabled to download existing user configuration information from the first

electronic device and/or the networked device, and the downloaded user configuration may be utilized to configure the second electronic device.

Claim 1 of the '938 Patent is an illustrative claim and recites the following elements (disputed terms in italics):

> 1. A system comprising:
> a plurality of *computing devices* connected via one or more networks, wherein the system is configured to receive login information corresponding to a first user; identify the first user based on the login information; retrieve user configuration information corresponding to the first user;
> control provision of a media content streaming service to a first *computing device* of the plurality of *computing devices* based on the user configuration information corresponding to the first user;
> update the user configuration information corresponding to the first user based on the provision of the media content streaming service to the first *computing device*;
> receive login information corresponding to the first user from a second *computing device* of the plurality of *computing devices*;
> identify the first user based on the login information received from the second *computing device*;
> retrieve the updated user configuration information corresponding to the first user; and
> control provision of the media content streaming service to the second *computing device* based on the updated user configuration information corresponding to the first user.

II.   APPLICABLE LAW

A. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d

1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (quotation marks omitted) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") *cert. granted, judgment vacated,* 135 S. Ct. 1846 (2015).

"The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). "[I]n all aspects of claim construction, 'the name of the game is the claim.'" *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)) *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). First, a term's context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive;

it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id*.

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[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*

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

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

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

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,

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[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).

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

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

D. Means-Plus-Function Limitations

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

description of the patent to find the structure that corresponds to the means recited in the [limitations]." *Id*.

Construing a means-plus-function limitation involves multiple steps. "The first step in construing [a means-plus-function] limitation is a determination of the function of the means-plus-function limitation." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). Once a court has determined the limitation's function, "the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Id.* A "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Id.* Moreover, the focus of the "corresponding structure" inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is "clearly linked or associated with the [recited] function." *Id*.

III.   THE PARTIES' STIPULATED TERMS

The Parties agreed to the construction of the following term in their P.R. 4-5(d) Joint Claim Construction Charts.

Claim Term/Phrase	Agreed Construction
"a process" ('419 Patent, Claim 7)	"a process"
". . . upon expiration of a timer," ('419 Patent, Claim 15)	". . . upon expiration of a timer." [3]
"access points" ('014 Patent, Claims 3, 10)	"points at which decoding (or further processing) of a video stream may conveniently begin"

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[3] At the claim construction Hearing, the Parties informed the Court that the Joint Claim Construction Chart for this term included a typographical error. The above construction, which uses "of," is the construction the Parties intended to include in the Joint Claim Construction Charts.

Dkt. No. 118 at 1. In view of the Parties' agreement on the proper construction of the identified

terms, the Court hereby **ADOPTS** the Parties' agreed constructions.

IV.   CONSTRUCTION OF DISPUTED TERMS

The Parties' dispute the meaning and scope of twelve terms or phrases in the Asserted

Patents. Each dispute is addressed below.

A. "receiving a set of network objects in response to a first request to a server from a client"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"receiving a set of network objects in response to a first request to a server from a client"	Plain and ordinary meaning. No construction necessary.	"receiving a set of network objects at the cache engine in response to a first request to a server from a client" and Ordering required (the "receiving a set of network objects. . ." step must be performed before other asserted claim steps)

1.   The Parties' Positions

The Parties dispute two issues.[4] First, whether the "receiving a set of network objects"

limitation in Claims 1, 9, and 17 occurs "at the cache engine," as Defendant proposes. Second, the

Parties dispute whether the "receiving a set of network objects" step must occur before the step of

"maintaining said network objects in a cache memory in a cache engine," as Defendant proposes.

Regarding the first issue, Plaintiff contends that the specification details several ways that a cache

engine can operate, including reactively or proactively. Plaintiff argues that Defendant's

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[4] The Parties' arguments for this disputed phrase can be found in Plaintiff's Opening Claim
Construction Brief (Dkt. No. 105 at 9-12) (citing '794 Patent at 5:20–52); Defendant's Responsive
Claim Construction Brief (Dkt. No. 112 at 17-22) (citing '794 Patent at 3:42–51, 5:26–42; Dkt.
No. 112-3 at 6, 8, 10, 11); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 4-6)
(citing '794 Patent at 5:29–31, 5:40–42; Dkt. No. 112-3 at 6).

construction reads a preferred embodiment out of the claims. Plaintiff further argues that the claims do not require that the "receiving" must always be done "at the cache engine."

Regarding the second issue, Plaintiff argues that nothing in the claim language requires that a cache engine must hold off storing network objects in cache until a client device requests them. Plaintiff further contends that the specification teaches that a cache engine that operates proactively stores and maintains network objects before they are requested by a client. According to Plaintiff, there is no basis for imposing an order-of-steps limitation on the claim.

Responding to the arguments related to the first issue, Defendant argues that the language of the parallel system and memory claims confirms that the "receiving" occurs "at the cache engine." Defendant also argues that each time the word "receive" appears in the specification, it is used to refer to "receiv[ing]" that is occurring at the cache engine. Defendant further contends that the "proactive" caching functionality was disclaimed during prosecution. Finally, Defendant contends that Plaintiff's argument is inconsistent with corresponding dependent claims.

Responding to the arguments related to the second issue, Defendant asserts that the claim language here requires that the "receiving" occurs before the "maintaining," because the "receiving" step recites "a set of network objects," which provides the antecedent basis for "said network objects" in the "maintaining" step. Defendant also argues that the logic of the claim language also requires "receiving a set of network objects" before "maintaining said network objects in a cache memory in a cache engine." Defendant further argues that the specification further confirms that "receiving" occurs before "maintaining." Defendant also contends that dependent Claim 4 is consistent with "receiving a set of network objects" before "maintaining said network objects."

Replying to the first issue, Plaintiff contends that the specification discloses proactive

caching where only the client receives the network objects in response to its request. Plaintiff also argues that there was no disclaimer because the applicant clarified that the invention focuses on how the cache engine maintains network objects, not simply how it receives them. According to Plaintiff, there is no basis for limiting the claims to methods in which the receiving step is performed only by the cache engine.

Replying to the second issue, Plaintiff argues that the claim does not state that the cache engine receives the objects in response to the client request. According to Plaintiff, a cache engine may receive network objects before a client request if they were already cached and then maintain them until a client request is made. Plaintiff argues in that case the maintaining step would occur before the receiving step.

2. Analysis

The phrase "receiving a set of network objects in response to a first request to a server from a client" appears in Claims 1, 9, and 17 of the '794 Patent. The Court finds that the phrase is used consistently in the claims and is intended to have the same general meaning in each claim. Regarding the first issue of whether the "receiving a set of network objects" occurs "at the cache engine," the Court finds that Defendant's constructions would improperly read out disclosed embodiments. The specification discloses several ways that a cache engine can operate, including reactively or proactively. Specifically, the specification states the following:

> The cache engine 100 provides the client devices 111 with relatively quicker access to network objects 114 otherwise available directly from the server devices 111. Typically the client devices 111 request those network objects 114 from the cache engine 100, which either transmits them to the client devices 111 from the cache 102 or obtains them from the server devices 111 and then transmits them to the client devices 111.
> The cache engine 100 can exercise more intelligence and proactivity than simply waiting for documents to be requested by the client devices 111:
> > The cache engine 100 can be configured preloaded with selected network objects 114 which are expected to be requested by the client devices

111. For example, certain network objects 114 are known to be commonly requested by client devices 111 throughout the network 110 known as the internet; these network objects 114 can be preloaded in the cache engine 100 upon manufacture. These network objects 114 could include home pages for well-known companies (such as Netscape) and well-known search engines (such as Digital's "Alta Vista").

The cache engine 100 can periodically request network objects 114 responsive to a set of statistics regarding commonly requested network objects 114. For example, information regarding commonly requested network objects 114 can be maintained on a server device 111; the cache engine 100 can request this information from the server device 111 and periodically request those network objects 114 for storage in the cache 102. In a preferred embodiment, the cache engine 100 can perform this operation periodically when client devices 111 are not actively using the cache engine 100, such as relatively unloaded times in the late night or early morning.

'794 Patent at 5:18–52. As indicated above, when a cache engine operates reactively, a client requests content (network objects) from the server and the request is diverted to the cache engine. If the cache engine had previously received a request for the same network objects and maintained them in cache, it transmits them to the client, where they are received. If the cache engine had not previously received a request for the objects, it obtains the objects from a server and transmits them to the client, where they are received.

The specification further discloses a second scenario in which the cache engine "can exercise more intelligence and proactivity than simply waiting for documents to be requested by the client devices." *Id.* For example, the specification states that a cache engine can "be configured preloaded with selected network objects . . . which are expected to be requested by the client devices." Such objects could include network objects that are known to be commonly requested by clients, such as home pages for well-known companies or search engines. *Id.* A cache engine can also "periodically request network objects . . . responsive to a set of statistics regarding commonly requested network objects." *Id*. For instance, information regarding commonly requested content can be maintained on a server, and a cache engine can request such content for

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storage in its memory. *Id.* "In a preferred embodiment, the cache engine . . . can perform this operation periodically when client devices . . . are not actively using the cache engine . . ., such as relatively unloaded times in the late night or early morning." *Id.*

Defendant's construction reads this embodiment and other embodiments where a cache engine operates proactively out of the claims. The claims recite, "receiving a set of network *objects in response to a first request to a server from a client*." (emphasis added). The claims do not specify what device must receive the objects. When a cache engine operates reactively, a client device requests network objects and both the cache engine and the client device receive them. In other words, the cache engine receives them from a server, and the client device receives them from the cache engine.

However, when a cache engine operates proactively, receiving a set of network objects in response to a first request to a server from a client is not limited to occurring "at the cache engine." The specification explains, the cache engine can come preloaded with commonly requested objects or it can proactively request such objects from a server. In either case, the cache engine already has the objects before they have been requested by a client. Simply stated, when a cache engine operates proactively, only the client device receives the requested objects in response to its request. Defendant's construction would improperly read this embodiment out of the claims. *See Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1308 (Fed. Cir. 2003) ("[I]t is axiomatic that a claim construction that excludes a preferred embodiment . . . 'is rarely, if ever correct and would require highly persuasive evidentiary support.'") (quoting *Vitronics*, 90 F.3d at 1583).

Defendant argues that the patentee disclaimed the "proactive caching." According to Defendant, the applicant distinguished prior art disclosures of "preloading" and "pre-fetching" as

falling outside the scope of "caching" as claimed in the '794 Patent. Defendant contends that reading the claims to cover preloading and prefetching violates the fundamental tenet that construction of a claim should "exclude any interpretation that was disclaimed during prosecution." *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

The Court finds that there was not a "clear and unambiguous disclaimer." *See Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1373 (Fed. Cir. 2005) ("A disclaimer must be clear and unambiguous."). Instead, the patentee described prior-art systems that improved the response time of a database system by predicting, and then pre-fetching information that a particular user may want to access. The patentee then explained that this alone was not the innovative feature of his invention, which concerns how information is *cached*, not necessarily how it is acquired.

Indeed, the patentee argued that "prefetching objects is different from caching objects." Dkt. No. 112-3 at 10. Likewise, the patentee argued that "[a] caching technique exploits the probability of multiple requests to the same page, but a pre-fetching technique exploits the use of knowledge of a client's requests to multiple pages. Therefore, the prior art references that discuss pre-fetching do not anticipate the present invention's claims concerning caching." *Id.* at 12. Importantly, the patentee argued that "[t]he present invention takes advantage of the fact that it is possible to accurately predict the information that the user will eventually request by using adaptive prediction schemes. However, preloading information is the same as pre-fetching information, which is different from caching information." *Id.* at 3.

All of these statements indicate that the patentee clarified that the purported invention focuses on how the cache engine maintains network objects, not simply how it receives them. Thus, the patentee confirmed that he was not disclaiming proactive caching, but instead was building upon the prior art. Accordingly, Defendant has not provided a persuasive reason for

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limiting the claims to methods in which the receiving step is performed only by the cache engine.

Defendant also contends that the language of the parallel system and memory claims confirms that the "receiving" occurs "at the cache engine." Defendant asserts that each time the word "receive" appears in the specification, it is used to refer to "receiv[ing]" that is occurring at the cache engine. The Court is not persuaded by Defendant's argument and disagrees that this warrants limiting the claims to one embodiment.

Regarding the second issue of the order of the method steps, the claimed method comprises two primary steps: "receiving a set of network objects in response to a first request to a server from a client" and "maintaining said network objects in a cache memory in a cache engine." "[A]lthough a method claim necessarily recites the steps of the method in a particular order, as a general rule the claim is not limited to performance of the steps in the order recited, unless the claim explicitly or implicitly requires a specific order." *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1345 (Fed. Cir. 2008). Courts apply a two-part test to determine whether a particular order of steps is required: "First, we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written," and "[i]f not, we next look to the rest of the specification to determine whether it directly or implicitly requires such a narrow construction." *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369–70 (Fed. Cir. 2003) (citation omitted).

Defendant argues that the receiving step must come before the maintaining step because (i) a cache engine cannot maintain network objects before they are requested by the client; and (ii) the "receiving" must be "at the cache engine." As discussed above, nothing in the claim language requires that a cache engine must hold off storing network objects in cache until a client device requests them. Indeed, the specification does not directly or implicitly require this limitation. On

the contrary, the specification discloses that a cache engine that operates proactively stores and maintains network objects before they are requested by a client.

However, the claim language requires that a "receiving" step must occur before a "maintaining" step, because the "receiving" step recites "a set of network objects," which provides the antecedent basis for "said network objects" in the "maintaining" step. Thus, a logical reading of the claim language requires a "receiving a set of network objects" before a "maintaining said network objects in a cache memory in a cache engine."

That said, the claim recites "receiving a set of network objects in response to a . . . request . . . from a client." The claim does not state that the *cache engine* receives the objects in response to the client request. As discussed above, in reactive caching, both the cache engine and the client receive network objects in response to a client request. In proactive caching, only the client receives them in response to the request. Although the cache engine must at some point receive the network objects to maintain them, it does not have to receive them "*in response to a request from a client,*" as recited in the claims. For example, a client could first request and receive an object and then the object could be maintained. Accordingly, the Court agrees that a receiving step must occur before a maintaining step based on a logical reading of the claims. However, to the extent that Defendant argues that this means the receiving step must be "at the cache," the Court rejects that argument. The only requirement is that a receiving step occurs before a maintaining step.

3. Court's Construction

For the reasons set forth above, the phrase **"receiving a set of network objects in response to a first request to a server from a client"** is given its **plain and ordinary meaning**.

B. "maximizing" , "minimiz[es/ing]" , "substantially [minimizes]"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"maximizing"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary.	Indefinite
"minimiz[es/ing]"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary.	Indefinite
"substantially [minimizes]"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary.	Indefinite

1. The Parties' Positions

The Parties dispute whether a person of ordinary skill in the art would be able to discern an objective standard for determining: (1) whether retrieval times from mass storage have been "minimiz[ed]" (either "substantially" as in Claim 1, or standing alone as in Claim 9); or (2) whether rates for writing, erasing, or retrieving data to/from mass storage have been "maximiz[ed]" (Claim 9).[5] Regarding the term "minimize," Plaintiff argues that a goal of the '794 Patent is to reduce the delay involved in retrieving information transmitted through a network. According to Plaintiff, a person of ordinary skill in the art would understand that Claims 1 and 9 use the term "minimize" according to its plain-and-ordinary meaning—i.e., "reduce." Plaintiff contends that the file history and the specification support this understanding.

Plaintiff also argues that the specification discloses several examples of techniques that reduce the time required to retrieve network objects from a cache engine's mass storage. Plaintiff contends that a person of ordinary skill would understand that these examples would achieve the

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[5] The Parties' arguments for these disputed terms can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 12-21) (citing '794 Patent at 1:58–62, 2:19–23, 2:30–34, 6:1–12, 6:39–61, 8:9–15, 9:33–39, 10:17–29, 10:37–40, 12:35–60, 15:66–16:20; Dkt. No. 105-7 at ¶¶ 26, 30, 34-36, 44–47, 54, 57, 60-61, 63; Dkt. No. 105-8 at 5; Dkt. No. 105-9 at 4; Dkt. No. 105-10 at ¶¶ 159, 160–63); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 10-17) (citing Dkt. No. 112-1 at ¶¶ 32-85; Dkt. No. 112-2 at ¶¶ 85, 153); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 6-8) (citing '794 Patent at 2:19–23, 2:30–34, 6:1–12, 6:39–61, 8:9–15, 9:33–39, 10:17–29, 12:35–60, 15:66–16:1; Dkt. No. 105-7 at ¶¶ 35-36, 44-47, 54, 57, 60, 61, 63).

patent's goal of reducing the delay involved in retrieving information transmitted through a network. Plaintiff further argues that "minimizing" is not a subjective term of degree, because any such reduction would achieve the patent's goal of reducing the delay involved in retrieving information transmitted through a network. Plaintiff also asserts that Defendant's IPR expert agrees.

Regarding the term "maximize," Plaintiff argues that the term "maximizing" is used according to its plain-and-ordinary meaning—i.e., "increasing." Plaintiff further argues that the specification discloses techniques directed to maximizing (i.e., increasing) rates at which network objects can be written to, erased (i.e., deleted) from, or retrieved (i.e., read) from mass storage. Plaintiff also argues that Defendant's IPR expert agrees that in the context of the patent, "maximizing" a rate means increasing the rate.

Regarding the term "substantially," Plaintiff argues that the '794 Patent provides a standard for measuring this term of degree. According to Plaintiff, a person of ordinary skill in the art would understand that the difference in access, or read times for retrieving a network object from memory versus retrieving it from a mass storage would be multiple orders of magnitude. Plaintiff contends that a person of ordinary skill in the art would understand that the specification implies that reducing the number of disk reads would substantially minimize the time required to retrieve network objects from mass storage. Plaintiff also argues that the patent discloses embodiments that reduce the network delay when servicing a request. Plaintiff asserts that these disclosures teach that substantially minimizing the time required to retrieve network objects from a cache engine's mass storage is when the time required is reduced by an amount that is at least on the order of a time for one disk access.

Responding to the arguments for the terms "minimizing" and "maximizing," Defendant

argues that Plaintiff fails to provide any objective baseline or standard for measuring whether "minimiz[es/ing]" or "maximizing" has been achieved. Defendant further argues that a person of ordinary skill in the art would have needed objective standards for determining how much of a reduction or increase, compared to the baseline, would constitute "minimiz[es/ing] a time required for retrieving" or "maximizing" the specified "rate[s]." Defendant contends that a person of ordinary skill in the art would not have been able to discern from the intrinsic evidence any objective standards for deciding either the relative (i.e., benchmark) or degree questions with reasonable certainty.

Defendant further contends that even if the Court were to adopt Plaintiff's construction that "minimiz[es/ing]" means "reduce" and "maximizing" means "increase," a person of ordinary skill in the art would not be able to identify any standard or baseline against which to compare a "reduc[tion]" or "increase." Defendant also asserts that the "non-limiting examples" in the specification "do not on their own expressly define the bounds—the limits—of the claim." *IQASR LLC v. Wendt Corp.*, 825 F. App'x 900, 906 (Fed. Cir. 2020). Finally, Defendant argues that Plaintiff misconstrues the testimony of its IPR expert.

Regarding the term "substantially," Defendant argues that nothing in the intrinsic evidence supplies an objective standard to permit a person of ordinary skill in the art to determine, with reasonable certainty, whether or not the claimed "minimiz[ation]" has been "substantially" achieved. Defendant further contends that there was no generally accepted understanding of what "substantially" meant in connection with "minimiz[ing] a time required for retrieving" network objects from mass storage as of the filing of the '794 Patent. Defendant also argues that construing "substantially" as broadly covering "multiple orders of magnitude" only makes plain its indefiniteness. Defendant further contends that nothing in the aspirational language of the stated

goals of the invention hints at an objective standard. Defendant argues that the term should be found to be indefinite because nothing in the intrinsic or extrinsic record provides an objective standard for "substantially."

Replying to the arguments for the terms "minimizing" and "maximizing," Plaintiff argues that the relevant baseline is the time it takes to retrieve network objects from mass storage. Plaintiff contends that a person of ordinary skill in the art would understand that employing the disclosed techniques would minimize the time it takes to retrieve network objects from mass storage. Plaintiff further contends that the same objective standard applies to the "maximizing" terms.

Regarding the term "substantially," Plaintiff argues that a person of ordinary skill in the art, reading the claim in view of the specification, would understand that the time required for retrieving network objects is substantially minimized when it is reduced by an amount that is at least on the order of a read access to the mass storage on the cache engine. Plaintiff further argues that the specification discloses other techniques that reduce the time required to access data by amounts on the order of a read access to the mass storage, all of which provide a standard for determining whether a time to retrieve network objects from mass storage has been substantially reduced.

2. Analysis

The term "maximizing" appears in Claim 9 of the '794 Patent. The term "minimiz[es/ing]" appears in Claims 1 and 9 of the '794 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The term "substantially [minimizes]" appears in Claim 1 of the '794 Patent. The Court further finds that the claims are indefinite because they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus,* 572 U.S. at 901.

Here, the claim language and specification fail to provide an objective standard for measuring "minimiz[es/ing]," and "maximizing" in Claims 1 and 9. It is not enough that "a court can ascribe some meaning to a patent's claims." *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370–71 (Fed. Cir. 2014) (quoting *Nautilus*, 572 U.S. at 911). Instead, "[t]he claims, . . . must provide objective boundaries for those of skill in the art." *Id.* at 1371. "[W]hen there is no objective standard by which to determine the scope of the word of degree, the word of degree renders the claims indefinite." *KLA-Tencor Corp. v. Xitronix Corp.*, No. A-08-CA-723-SS, 2011 U.S. Dist. LEXIS 9436, at *7 (W.D. Tex. Jan. 31, 2011).

The term "minimiz[es/ing]," modifies "a time required for retrieving said network objects from said mass storage" in Claims 1 and 9. The term "maximizing," modifies various "rate[s]" for writing, retrieving, and erasing in Claim 9. The Court agrees with Defendant that a person of ordinary skill in the art would have been unable to discern an objective standard for deciding, with reasonable certainty, whether "a time required for retrieving" has been "minimiz[ed]," or whether the recited "rate[s]" have been "maximiz[ed]." As background, Defendant's expert submits the following in his declaration:

49. First, a POSITA would have needed objective standards for identifying a baseline that the recited "time required for retrieving said network objects from said mass storage" is to be measured against. To put it differently, a POSITA would have asked, and would have needed an objective standard for answering: " 'minimizes' compared to or with respect to what?" In my opinion, this question, and an objective standard for answering it, would have been critical to a POSITA because "minimizes" is a relative term, such that different baselines could easily lead a POSITA to different conclusions about whether the same "time required for retrieving said network objects from said mass storage" has been "minimize[d]" or not. Indeed, because there is theoretically no upper quantitative bound on "a time required for retrieving said network objects from said mass storage," any "time required for retrieving said network objects from said mass storage" could theoretically be considered a "minimiz[ation]" when compared to some arbitrarily greater "time required for retrieving said network objects from said mass storage." A POSITA would not have known, for purposes of understanding what falls within or without the scope of the claim, whether to compare a particular "time required

for retrieving said network objects from said mass storage" to, say, prior art techniques for "retrieving . . . network objects from mass storage," and, if so, which prior art technique(s). A POSITA would not have known whether the point of comparison should be the best prior art technique(s) available, some statistical "average" or prior art techniques, or any and all prior art technique(s). This quandary would have been particularly acute given that claim 1 is not directed to any particular technique for "minimi[zing]" but instead purports to describe a result to be achieved. Moreover, a POSITA would also not have known whether the point of comparison should instead be a hypothetical "time required for retrieving said network objects from said mass storage" in which the claimed steps of "recording" and "retrieving" are not used, and if so, how to construct such a hypothetical.

      50. Second, because "minimize" is a term of degree, a POSITA would have needed objective standards for identifying how much of a reduction, compared to the baseline, would be needed in order for a "time required for retrieving said network objects from said mass storage" to be considered "minimize[d]." For example, a POSITA would have at least needed to know whether a "time required for retrieving said network objects from said mass storage" could be considered "minimize[d]" if still further reduction in the "time required for retrieving said network objects from said mass storage" were possible.

Dkt. No. 112-1 at ¶¶ 49-50. The specification's failure to provide an objective standard to measure against is critical because different baselines could lead to different conclusions about whether a resulting "time required for retrieving" has been "minimize[d]" or a resulting "rate" has been "maximiz[ed]." Without a baseline, any "time required for retrieving" could be considered "minimiz[ed]" when compared to an arbitrarily greater one, because there is no upper bound on the amount of time required to retrieve information from mass storage. Likewise, any "rate" for writing/erasing/retrieving could in theory be considered a "maximiz[ation]" when compared to some arbitrarily lesser "rate," because there is no lower bound on the rate for writing, erasing, or retrieving from mass storage.

Because "minimiz[es/ing]" and "maximizing" are also terms of degree, a person of ordinary skill in the art would have needed objective standards for determining how much of a reduction or increase, compared to the baseline, would constitute "minimiz[es/ing] a time required for retrieving" or "maximizing" the specified "rate[s]." *See, e.g.*, *Advanced Display Techs. of Tex., LLC v. AU Optronics Corp.*, No. 6:11-CV-011 PATENT, 2012 U.S. Dist. LEXIS 96837, at *40

(E.D. Tex. July 12, 2012) ("ADT's proposed construction itself provides no such guidance by using such unbounded and imprecise terms as 'minimizing' and 'increasing.' ADT essentially argues for a construction of an unbounded term of degree using other terms of degree."). A person of ordinary skill in the art would not have been able to discern from the intrinsic evidence an objective standards for deciding either the relative (*i.e.*, benchmark) or degree questions with reasonable certainty.

The prosecution history also fails to provide a clear standard. In the April 12 Office Action, the examiner discussed two concepts: "[minimizing] . . . a time it takes to locate the object in said cache memory" and "reducing the overall time between the client and server," finding the former to be "an essential step for" achieving Bhide's disclosure of the latter. Dkt. No. 105-8 at 5. To overcome Bhide, the applicant argued that Bhide's disclosure of "reducing the overall time between the client and server" and the '794 Patent's claimed "minimizing" were different, because reducing latency between the client and server "is not understood to be concerned with minimizing a time required for a network cache to retrieve an object form a cache memory." Dkt. No. 105-9 at 4.

Plaintiff contends that "minimize" means "reduce," and that "maximize" means "increase." Specifically, Plaintiff argues that the applicant and examiner used the term "minimizing" and "reducing" interchangeably during prosecution. Plaintiff further argues that the specification discloses several techniques that reduce the time required to retrieve network objects from a cache engine's mass storage. For example, Plaintiff asserts that the specification teaches that the cache engine can hold commonly requested network objects in memory (*e.g.*, RAM), and use that memory as a cache for mass storage (*e.g.*, a disk drive). '794 Patent at 8:9–15, 10:17–29.

According to Plaintiff, each of these examples is a technique for reducing the time it takes

to retrieve a requested network object from mass storage. Therefore, Plaintiff argues that
"minimizing" is not a subjective term of degree because any such reduction would achieve the
patent's goal of reducing the delay involved in retrieving information transmitted through a
network.

Regarding the three "maximizing" steps in Claim 9, Plaintiff contends that the specification
discloses techniques directed to maximizing (i.e., increasing) rates at which network objects can
be written to, erased (i.e., deleted) from, or retrieved (i.e., read) from mass storage, which are the
rates identified in Claim 9 to be "maximized." Plaintiff argues that a person of ordinary skill would
understand that "maximizing" has its plain-and-ordinary meaning, which is "increasing."

The Court agrees with Defendant that the "non-limiting examples" in the specification "do
not on their own expressly define the bounds—the limits—of the claim." *IQASR*, 825 F. App'x at
906. The question is not whether the specification enables a person of ordinary skill in the art to
practice the invention, but whether a person of ordinary skill can discern the boundaries of the
claims with reasonable certainty. Plaintiff argues that the relevant baseline is the time it takes to
retrieve network objects from mass storage. Specifically, Plaintiff's expert submits the following
in his declaration:

> 25. A POSITA in 1998 would have been aware of the relative differences
> in access times for retrieving information from the main memory of a computer,
> from mass storage (e.g., a disk drive), or from a network. As explained in further
> detail below, these access times could differ from each other by several orders of
> magnitude, which a POSITA would have considered when designing systems
> where performance was important.
>
> 26. Based on my experience, accessing data from main memory around the
> time of the priority date for the '794 Patent could be achieved in times that were on
> the order of 10 nanoseconds (ns), whereas accessing data from mass storage could
> be achieved in times that were on the order of 10 milliseconds (ms). *See also, e.g.,*
> B. Salzberg, "Access Methods," *ACM Computing Surveys,* Vol. 28, No. 1, March
> 1996 ("Salzberg") at "Introduction" ("The fastest magnetic disks today have an
> average access time of ten milliseconds whereas CPU operations are measured in
> nanoseconds, making the access of one disk page at least a million times slower

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than adding two integers in the CPU.") That is, access times for mass storage were
about 6 orders of magnitude greater than access times for main memory.

Dkt. No. 105-7 at ¶¶ 25-26. This is a non-limiting example, and the specification's disclosure of

various techniques does not relieve the patentee from informing, "with reasonable certainty, those

skilled in the art about the scope of the invention." *Nautilus,* 572 U.S. at 901.

Regarding the term "substantially," the Court finds that the dispute is moot because the

term "substantially" modifies the term "minimizes," which the Court has determined is indefinite.

Accordingly, the Court finds that the intrinsic and extrinsic record fails to provides an objective

standard for the terms "minimiz[es/ing]" and "maximizing."

3. Court's Construction

For the reasons set forth above, the terms **"minimiz[es/ing]"** and **"maximizing"** are

indefinite for failing to inform, with reasonable certainty, those skilled in the art about the scope

of the invention.

C. "when processed"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"when processed"	Plain and ordinary meaning. No construction necessary.	"when decoded or converted into a display driver signal"

1. The Parties' Positions

The Parties dispute whether the scope of "processing" includes activities other than

decoding or converting video information into a display driver signal.[6] Plaintiff argues that the

specification clearly states that processing is not limited to decoding video-information streams

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[6] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim
Construction Brief (Dkt. No. 105 at 22-23) (citing '014 Patent at 7:52–63, 16:15–24, 17:21–28,
17:30–33); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 23-25) (citing '014
Patent at 1:63–65, 2:56–61, 4:17–22, 7:52–59, 17:21–25, 19:56–61); and Plaintiff's Reply Claim
Construction Brief (Dkt. No. 116 at 8-9) (citing '014 Patent at 2:59–60, 4:17–22, 16:12–21).

and converting them to display driver signals. Plaintiff also argues that the patentee stated that the scope of the invention should not be limited by characteristics of particular processing activities. According to Plaintiff, there is no basis for limiting the scope of the claim to processing that involves only decoding or converting into a display driver signal

Defendant responds that its construction comes directly from the specification and is consistent with the claim language. According to Defendant, the claimed invention is specifically directed to a "video signal processing system," in which "processing" includes generating a display driver signal. Defendant also argues that there is inherent ambiguity in the plain and ordinary meaning of "processing," which it contends is a highly generic term that has multiple meanings. Defendant further argues that adopting its construction would resolve the question of whether the scope of processing includes activities other than decoding or converting a video stream.

Plaintiff replies that processing is not limited to processing by decoding and converting video information into a display driver signal. According to Plaintiff, the specification clearly states that "processing" does not even require decoding or converting video information.

2. Analysis

The term "when processed" appears in Claim 1 of the '014 Patent. The Court finds that the term "when processed" is a term that would be easily understood by a lay juror and should be given its plain and ordinary meaning. 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." *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)). Neither exception applies here. The patentee did not

redefine "process," nor disavow the full scope of the term. Instead, the specification states that

processing is not limited to decoding video-information streams and converting them to display

driver signals. For example, the specification discloses the following:

> The receiver 130 may process the identified video information stream to present
> the unit of video information (e.g., to a user). The receiver 130 may, for example
> and without limitation, decode the identified video information stream. The
> receiver 130 may, for example, convert the identified video information stream to
> a display driver signal, which the receiver 130 may utilize to drive a display device
> that is coupled to the receiver 130. The receiver 130 may also, for example, perform
> conditional access processing related to the identified video information stream. In
> general, the receiver 130 may process the identified video information stream to
> present the unit of video information. *Accordingly, the scope of various aspects of*
> *the present invention should not be limited by characteristics of particular*
> *processing activities performed with video information to present such information*
> *to a user.*

'014 Patent at 7:52–67 (emphasis added).

> Exemplary step 650 may, for example and without limitation, comprise decoding
> the video information stream identified at step 640. Step 650 may, for example,
> comprise converting the identified video information stream to a display driver
> signal, which may be utilized to drive a display device. Step 650 may also, for
> example, comprise performing conditional access processing related to the
> identified video information stream. In general, step 650 may comprise processing
> the identified video information stream to present the unit of video information.
> *Accordingly, the scope of various aspects of the present invention should not be*
> *limited by characteristics of particular processing activities performed with video*
> *information to present such information.*

Id. at 17:21–33 (emphasis added).

> For example and without limitation, the processor module 737 may comprise one
> or more video decoders 738 that decode the identified video information stream.
> The processor module 737 may, for example, convert the identified video
> information stream to a display driver signal, which may be utilized to drive a
> display device. The processor module 737 may also, for example, perform
> conditional access processing related to the identified video information stream. In
> general, the processor module 737 may process the identified video information
> stream to present the unit of video information. *Accordingly, the scope of various*
> *aspects of the present invention should not be limited by characteristics of*
> *particular processing activities performed with video information to present such*

information or by characteristics of particular video processing apparatus.

Id. at 19:56–20:3 (emphasis added). As indicated, the specification discloses that processing *may* generate a video display driver signal and is not limited to processing by decoding and converting video information into a *display driver signal*. In short, there is no basis for limiting the scope of the claim to processing that involves only decoding or converting into a display driver signal. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) ("[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."). Accordingly, the Court rejects Defendant's construction. Having resolved the Parties' dispute, no further construction is necessary. *United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

Defendant argues that there is inherent ambiguity in the plain and ordinary meaning of "processing," because it is "a highly generic term that has multiple meanings." Defendant is essentially arguing that the scope of the claim is too broad unless its construction is adopted. The Court is not persuaded by Defendant's argument and finds that Defendant has failed to provide a reason to limit the claims as it contends. *Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1309 (Fed. Cir. 2003) ("The general rule, of course, is that claims of a patent are not limited to a preferred embodiment, unless by their own language."). Indeed, the intrinsic evidence indicates that a person of ordinary skill in the art would understand that the term should not be limited as Defendant contends.

3. Court's Construction

For the reasons set forth above, the term **"when processed"** is given its **plain and**

ordinary meaning.

D. "processors operable to" and "processors . . . further operable to"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"processors operable to" and "processors . . . further operable to"	Plain and ordinary meaning. The term is not governed by 35 U.S.C. § 112, ¶ 6, nor is it indefinite. No construction necessary.	This term is subject to construction under § 112, paragraph 6. See '419 Patent at 3:20-23. Recited functions: -"tell a plurality of nodes to perform an operation comprising a procedure of an application, the plurality of nodes comprising a second node and one or more additional nodes" -"instruct the plurality of nodes how to perform the operation using computer code" -"tell the plurality of nodes what to do with a result of the operation" -perform the above functions, "wherein the one or more processors does not know which one of the plurality of nodes will perform the operation" -"instruct the third node to use the result of the operation performed by the second node to perform an additional operation by the third node" -"instruct the third node to return the result of the additional operation performed by the third node to the second node" -"initiate an application comprising a plurality of operations, each operation of the plurality of operations comprising a procedure of the application" -"tell a plurality of nodes to perform a first operation, the plurality of nodes comprising the second node, third node, and one or more additional nodes" -"instruct the plurality of nodes how to perform the first operation using computer code" -"tell the plurality of nodes what to do with a result of the first operation" -perform the prior three functions, "wherein the one or more processors does not know which one of the plurality of nodes will perform the first operation" -"instruct the third node to return the result of the second operation performed by the third node to the second node" Because the specification does not, however, identify corresponding structure for implementing these functions, these claims (and their dependents) are indefinite.

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1. The Parties' Positions

The Parties dispute whether the terms "processors operable to" and "processors . . . further operable to" are subject to 35 U.S.C. § 112, ¶ 6, and if so, whether there is a sufficient recitation of structure.[7] Plaintiff argues that Defendant contends that "processor" is a nonce word that invokes § 112 ¶ 6, based on a misunderstanding of the rule stated in *Aristocrat Techs. Austl. PTY Ltd. v. Int'l Game Tech.*, 521 F.3d 1328 (Fed. Cir. 2008). Plaintiff contends that *Aristocrat* did not hold that claims reciting general purpose computers or microprocessors that perform functions are means-plus-function claims. Plaintiff further contends that this Court has consistently and repeatedly found that persons of ordinary skill in the art would understand that "processor" refers to structure. Plaintiff also argues that the claims describe the objectives and operations of the claimed processors by reciting how they operate within the claimed inventions.

Defendant responds that the terms "processors operable to" and "processors . . . further operable to" fail to denote sufficient structure for performing their claimed functions and should therefore be accorded means-plus-function treatment under § 112, ¶ 6. According to Defendant, the claim language and specification describe "processors" in purely functional language, and expands the definition of "processor" beyond any traditional, structural meaning. Defendant further contends that neither the claim nor the specification explains the location of the processors, describes the physical connection between the processors and other components, explains the communication between the processors and any other claimed features, or details how the processors are configured. Defendant also argues that reciting objectives that the processors are "operable to" perform is no different than reciting their functions.

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[7] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 24-28); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 25-28) (citing '419 Patent at 3:15–23; Dkt. No. 112-4 at ¶¶ 34, 42-44); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 9-10).

Defendant further argues that the '419 Patent does not disclose an algorithm for how the "first node" of Claim 1 instructs other nodes in a network to perform operations "wherein the one or more processors does not know which one of the plurality of nodes will perform the operation." According to Defendant, this means that the claims reciting the disputed terms and their dependents are indefinite.

Plaintiff replies that Defendant ignores the multiple cases cited in its opening brief holding that the term "processor" connotes structure, and fails to explain why the Court should apply the *Aristocrat* standard to a claim that recites a well-known structure. Plaintiff contends that Defendant has not overcome its burden of showing that the terms are governed by § 112, ¶ 6.

2. Analysis

The terms "processors operable to" and "processors . . . further operable to" appears in Claims 1, 11, 17, 18, and 20 of the '419 Patent. The Court finds that the terms are used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the terms do not recite the word "means." "[T]he failure to use the word 'means' . . . creates a rebuttable presumption . . . that § 112, para. 6 does not apply." *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (citations and internal quotation marks omitted). "When a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Id.* at 1349 (citations and internal quotation marks omitted).

Therefore, the Court's analysis proceeds in two steps. First, the Court must determine whether the phrases are in means-plus-function form pursuant to 35 U.S.C. § 112, ¶ 6. *See Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1097 (Fed. Cir. 2014). If the Court determines that

the phrases recite a means-plus-function limitation, then the Court proceeds to the next step and attempts "to construe the disputed claim term by identifying the corresponding structure, material, or acts described in the specification to which the term will be limited." *Id.* (internal quotation marks and citation omitted).

Starting with the first step, Defendant argues that the claim language describes "processors" in purely functional language. Defendant further contends that the specification expands the definition of "processor" beyond any traditional, structural meaning. Defendant also argues that neither the claim nor the specification explains the location of the processors, describes the physical connection between the processors and other components, explains the communication between the processors and any other claimed features, or details how the processors are configured. Finally, Defendant argues that the specification fails to adequately disclose corresponding structure for performing the recited functions.

The Court disagrees and finds that Defendant has conflated the steps in the § 112, ¶ 6, analysis. *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1299 (Fed. Cir. 2014) ("Requiring traditional physical structure in software limitations lacking the term means would result in all of these limitations being construed as means-plus-function limitations and subsequently being found indefinite."); *Zeroclick, LLC v. Apple Inc.*, 891 F.3d 1003, 1007-09 (Fed. Cir. 2018) (holding that the district court erred by effectively treating "program" and "user interface code" as nonce words and concluding in turn that the claims recited means-plus-function limitations.).

Courts in this district, as well as other districts, have concluded that in many instances, "processor," like "circuit" or "logic," may connote sufficiently definite structure, and is not a "nonce" or "functional" word that is automatically subject to the limitations of § 112, ¶ 6.[8] In other

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[8] *See, e.g.*, *Clear Imaging Research, LLC v. Samsung Elecs. Co.*, No. 2:19-cv-00326-JRG, 2020

words, whether recitation of "processor" performing a function is governed by § 112, ¶ 6 depends

on whether the stated objectives and operation of the logic connote sufficiently definite structure.

See, e.g., Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1319-21 (Fed. Cir. 2004)

(finding that "circuit [for performing a function]" was sufficiently definite structure because the

claim recited the "objectives and operations" of the circuit.)

Here, the claims describe the objectives and operations of the system, which includes a

first node, a second node, one or more additional nodes, and one or more processors. The one or

more processors tell a plurality of nodes to perform an operation that includes a procedure of an

application. The one or more processors further instruct the plurality of nodes how to perform the

operation using computer code. In addition, the one or more processors further tell the plurality of

nodes what to do with a result of the operation.

The claims further describe the structural interaction of the one or more processors, the

first node, the second node, and the one or more additional nodes by reciting that they are part of

a network, and communicate with one another via the network. Thus, a person of ordinary skill in

the art would understand that the claim language recites sufficient structure, and that terms

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U.S. Dist. LEXIS 202507, at *23 (E.D. Tex. Oct. 30, 2020) ("[T]he term 'processor' is accorded
its customary meaning of a class of structures on which software can run.") (citing *IEEE 100 The
Authoritative Dictionary of IEEE Standards Terms 872* (7th ed. 2000) (defining "processor" as
hardware that "accepts a program as input, prepares it for execution, and executes the process so
defined with data to produce results" and as a "device that interprets and executes instructions,
consisting of at least an instruction control unit and an arithmetic unit"8)); *SEVEN Networks, LLC
v. Apple Inc.*, No. 2:19-CV-115-JRG, 2020 U.S. Dist. LEXIS 55476, at *145 (E.D. Tex. Mar. 31,
2020) ("[T]he term 'processor' refers to a well-known structure."); *SyncPoint Imaging, LLC v.
Nintendo of Am. Inc.*, No. 2:15-cv-00247-JRG-RSP, 2016 U.S. Dist. LEXIS 677, at *59 (E.D. Tex.
Jan. 5, 2016) ("'[P]rocessor' connotes structure."); *Smartflash LLC v. Apple Inc.*, 77 F. Supp. 3d
535 (E.D. Tex. 2014) ("'[P]rocessor' is a structure-connoting term. . . . [A] processor can be
purchased, can perform certain functions even without specific instructions, and has a design for
interpreting and executing instructions. Thus, the term 'processor,' even on its own, recites at least
some structure.").

"processors operable to" and "processors . . . further operable to" are not used as a generic term or

black box recitations of structure or abstractions. *Zeroclick,* 891 F.3d at 1007-09 ("a person of

ordinary skill in the art could reasonably discern *from the claim language* that the words

'*program*,' . . . and '*user interface code*,' . . . are used not as generic terms or black box recitations

of structure or abstractions, but rather as specific references to conventional graphical user

interface programs or code, existing in prior art at the time of the inventions.") (emphasis added).

The specification further supports this understanding of the claim terms. The specification

includes a diagram depicting how processor 42 is intended to be incorporated into node 20. This

diagram depicts a processor in a manner identical to the depiction of other structural components

employed by the invention, such as a memory and an interface.

FIG. 2
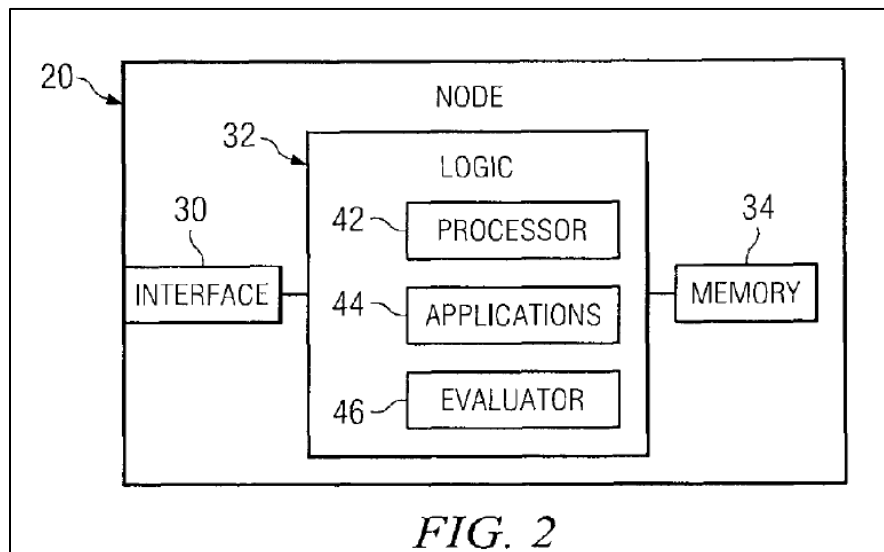
'419 Patent at Figure 2. Indeed, the specification describes the "processor," "interface," and

"memory" in structural terms. *Id.* at 2:61–62, 3:63–4:5. Specifically, the specification states the

following about the processor:

> Logic 32 may include hardware (such as a processor 40), software (such as
> applications 42 and evaluator 46), and/or other logic. Logic 32 may be encoded in
> one or more tangible media and may perform operations when executed by a
> computer. Certain logic 32, such as a processor 40, may manage the method of

> performing of a component. Examples of a processor 40 include one or more computers, one or more microprocessors, one or more hardware or software applications, and/or other logic.

Id. at 3:15–23. Similar to the court's conclusion in *VR Optics, LLC v. Peloton Interactive, Inc.*, the placement of "processor" alongside and in the same format as these other structural terms highlights that the patent is using the term processor to connote a known structure rather than as a nonce substitute for the word "means." 345 F. Supp. 3d 394, 410 (S.D.N.Y. 2018).

Thus, Defendant's argument here is more in the nature of enablement or disclosure of corresponding structure where it has already been determined that a term is a means-plus-function limitation, and not the threshold question whether § 112, ¶ 6 applies in the first place. *Aristocrat*, 521 F.3d at 1336 (in evaluating a claim that was a means-plus-function limitation, stating that "[w]hether the disclosure would enable one of ordinary skill in the art to make and use the invention is not at issue here"; "[e]nablement of a device requires only the disclosure of sufficient information so that a person of ordinary skill in the art could make and use the device" while "[a] section 112 paragraph 6 disclosure . . . serves the very different purpose of limiting the scope of the claim to the particular structure disclosed, together with equivalents"). Requiring the patent to describe precisely how the claimed functions are achieved or how a person of ordinary skill in the art could make and use the invention goes beyond the threshold trigger for the application of § 112, ¶ 6.

It is true that when a limitation is a means-plus-function limitation, and the corresponding structure is software, there must be an algorithm for the software or else the means-plus-function limitation will be considered indefinite unless the function can be performed by a general purpose computer. *See Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013) (holding that the corresponding disclosure for a computer-implemented means-plus-function claim is an algorithm). But that authority is not on point because that definiteness analysis is

triggered only where the limitation is a means-plus-function limitation.

In summary, although the presumption against § 112, ¶ 6 is no longer "strong," it is still a presumption that Defendant must affirmatively overcome. In the context of the intrinsic record for the '419 Patent, the Court finds that Defendant has not shown that "processors operable to" and "processors . . . further operable to" should be subject to § 112, ¶ 6. Accordingly, the Court rejects Defendant's argument that these terms are means-plus-function term governed by § 112, ¶ 6, and finds that no further construction is required.

3. Court's Construction

For the reasons set forth above, the terms **"processors operable to"** and **"processors . . . further operable to"** are given their **plain and ordinary meaning**.

E. "transmission rate"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"transmission rate"	Plain and ordinary meaning, which in the context of the '098 patent is a "rate at which data is transmitted."	"a rate at which data is transmitted from a server to a receiver"

1. The Parties' Positions

The Parties dispute whether the term "transmission rate" should be limited to a system in which only a server can transmit the information, as Defendant proposes.[9] Plaintiff argues that the term should be given its plain-and-ordinary meaning, which in the context of the patent is "rate at which data is transmitted." Plaintiff contends that Defendant imports a "from-a-server" limitation into the claims that is not required by the disclosed embodiments, much less by the claims.

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[9] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 29-30) (citing '098 Patent at 10:10–20, 14:58–67, 17:15–28); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 28-30) (citing Dkt. No. 112-5 at 5, 6, 7; Dkt. No. 112-6 at 15, 17; Dkt. No. 112-7 at 8; Dkt. No. 112-8); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 10-11) (citing '098 Patent at 5:60–66, 17:25–28).

According to Plaintiff, if the receiver can receive video information over an RF channel and the invention is not limited to a particular communication system or protocol, the claim cannot be limited to a system in which only a server can transmit the information.

Defendant responds that the inventor himself submitted a declaration stating "the 'initial transmission rate' in Claim 8 is the rate that the server (the 'video transmission system' in Claim 8) sends out the data." Defendant contends that in distinguishing the prior art, the inventor claimed that the initial transmission rate of the '098 Patent relates to activity occurring at the server, and the prior art relates to activity occurring at the decoder. Defendant argues that this made clear that the initial transmission rate is not the rate as measured at the decoder, thereby disclaiming that claim scope. Defendant also contends that the applicant used this same narrowed definition of "transmission rate" to distinguish another disclosure in the prior art regarding bit rates. Defendant argues that where the inventor himself stressed these distinctions as "fundamental," the Court should hold the narrower claim scope as binding.

Plaintiff replies that the "transmission rate" term at issue here appears in Claim 1, not Claim 8. Plaintiff argues that Claim 8, which is not asserted in this case, is directed to transmitting video information at an "initial transmission rate, where program clock reference (PCR) information for the [video information] is modified using the initial transmission rate." According to Plaintiff, the inventor's statements about the nature of the PCR technology in Claim 8 say nothing about the scope of broader Claim 1. Plaintiff argues that the method of Claim 1, which does not have a PCR-information limitation, is broad enough to cover other transmissions. Plaintiff contends that the inventor's statement regarding how video information is transmitted by the method of Claim 8 is not a clear and unambiguous disclaimer of the full scope of the method of Claim 1.

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2.   Analysis

The term "transmission rate" appears in Claims 1 and 7 of the '098 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. Defendant contends that the patentee argued during prosecution that "transmission rate" is "a rate at which data is transmitted from a server to a receiver." Specifically, the USPTO rejected Claim 8 under 35 U.S.C. § 103 based on a prior-art reference—Longfei—that disclosed the use of delays to correct for "jitters" and "noises" that arise downstream or mid-stream after a video playback has initiated.

In response to this rejection, the applicant submitted a response supported by a declaration from the named inventor. Dkt. No. 112-6; Dkt. No. 112-5. The applicant argued that "[t]he 'initial transmission rate' at which the server sends out the data in Claim 8 is fundamentally different from 'delays,' 'variable delays,' or 'jitters' of Longfei." Dkt. No. 112-5 at ¶ 14. Defendant argues that this distinction makes clears that the initial transmission rate is not the rate as measured at the decoder. The Court disagrees that this is a "clear and unambiguous" disclaimer that requires reading a "from a server to a receiver" limitation into the claims. *See Seachange*, 413 F.3d at 1372–73.

Claim 8 is directed to transmitting video information at an "initial transmission rate, where program clock reference (PCR) information for the [video information] is modified using the initial transmission rate." In contrast, Claim 1 does not include a limitation requiring PCR information. PCR information is used in MPEG transport streams to enable a decoder to present synchronized content, such as audio tracks and associated video. The specification discloses modifying PCR information as follows:

> Note that in transmitting the first portion of the unit of video information, step 140 may, for example and without limitation, comprise managing time reference

information related to the first portion of the unit of information. For example, step 140 may create, insert or modify timing information related to the first portion of the unit of video information. Such timing information may, for example, be based on the first transmission rate. In an exemplary scenario comprising an MPEG Transport stream, step 140 may comprise modifying Program Clock Reference (PCR) information in accordance with the first transmission rate. Such modified timing information may, for example, aid receiving and/or reconstructing transmitted video information at the receiving end.

'098 Patent at 5:54–67. As indicated, the specification states that the managing time reference information (e.g., Program Clock Reference (PCR)) may "be based on the first transmission rate," and may be modified in accordance with it. *Id.* This is included in Claim 8, which is directed to transmitting video information at an "initial transmission rate, where program clock reference (PCR) information for the [video information] is modified using the initial transmission rate." In contrast, Claim 1 does not include a limitation requiring PCR information. Accordingly, the method of Claim 1, which does not have a PCR-information limitation, is broad enough to cover other transmissions.

Indeed, the specification explicitly states that "the scope of various aspects of the invention should not be limited by characteristics of a particular video transmission system." *Id.* at 1:18–20; 17:25–28. Similarly, the specification states that "exemplary receiver 440 may receive the first portion of the unit of video information in any of a large variety of manners." *Id.* at 17:15–17. For example, the receiver may receive the video information through a television network, a computer network, or a telecommunication network. *Id.* at 17:17–22. The receiver may also receive it "over various communication media (e.g., wired, RF, optical, etc.) using various video communication protocols." *Id.* at 17:22–25. "Accordingly, the scope of various aspects of the present invention should not be limited by characteristics of a particular video communication network, media or protocol." *Id.* at 17:25–28. Thus, the intrinsic evidence indicates that the claims should not be limited to a system in which only a server can transmit the information. Accordingly, the statement

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regarding the nature of the PCR technology in Claim 8 is not a "clear and unambiguous" disclaimer of the full scope of the method of Claim 1. *See Seachange*, 413 F.3d at 1372–73.

However, the Court finds that the patentee clearly and unambiguously indicated that the claimed "transmission rate" is "fundamentally different" from a "bit rate." Moreover, the patentee explicitly defined "bit rate" as "number of bits per time unit for a video output." The USPTO found that Longfei's disclosure of "bit rates" satisfies the claim language's limitation of "initial transmission rate." Dkt. No. 112-7 at 8. In response to the rejection, the applicant argued that "[c]learly, the 'bit rates' in Longfei is fundamentally different from 'the transmission rate' in Claim 8." Dkt. No .112-6 at 17; *see also* Dkt. No. 112-5 at 7-8. As explained by the inventor, Mr. Macinnis, "[t]he 'bit rates' in Longfei refers to the data rate for a video output. In other words, the 'bit rates' refers to how many bits per time unit for a video output." Dkt. No. 112-5 at 7.

Because the inventor himself stressed these distinctions as "fundamental," the narrower claim scope is binding. *See RFID Tracker Ltd. v. Wal-Mart Stores Inc.*, 545 F. Supp. 2d 571, 580 (E.D. Tex. 2008) (finding prosecution history disclaimer where "[t]he applicant further stressed that this distinction was 'fundamental'"). Accordingly, "transmission rate" is "fundamentally different" from a "bit rate," which the patentee defined as "number of bits per time unit for a video output." To the extent that Plaintiff argues differently, the Court rejects that argument.

3. Court's Construction

For the reasons set forth above, the Court construes the term **"transmission rate"** to mean **"rate at which data is transmitted."**

F. "first time period" and "second time period"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"first time period"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary	Indefinite

"second time period"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary	Indefinite

1. The Parties' Positions

The Parties dispute whether the terms "first time period" and "second time period" are indefinite, because the intrinsic evidence "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilis*, 572 U.S. at 901.[10] Plaintiff argues that the claims do not specify what constitutes a "first time period" or a "second time period," and that any period of time would infringe.

Defendant responds that the intrinsic record does not define or limit the scope of these time periods. Defendant argues that its expert, Dr. Crovella, explained that at the time of the purported invention of the '098 Patent there was no generally accepted understanding of what "first time period" or "second time period" meant. Defendant also argues that the intrinsic evidence further obscures these terms by offering varying embodiments that are ambiguous or contradictory. According to Defendant, there is no meaningful standard by which to determine when a "first time period" or "second time period" begins and ends, and their duration.

Plaintiff replies that the claims do not limit the time periods to specific durations. According to Plaintiff, the claims require transmitting video information at certain transmission rates ("initial transmission rate" and "second transmission rate") for a time, and then transmitting the video information at another rate (a "first steady-state rate") for another time. According to Plaintiff, the terms are not indefinite.

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[10] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 30); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 30-33) (citing '098 Patent at Abstract, 1:31–33, 1:53–62; Dkt. No. 112-1 at ¶¶ 94-96, 103, 111-113, 115); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 11-12).

2.   Analysis

The term "first time period" appears in Claims 1 and 7 of the '098 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The term "second time period" appears in Claim 1 of the '098 Patent. The Court further finds that the terms are not indefinite. Defendant argues that the intrinsic record does not define or limit the scope of these time periods, such as when each period begins and its duration. According to Defendant's expert, Dr. Crovella, there was no generally accepted understanding of what "first time period" or "second time period" meant. Dkt. No. 112-1 at ¶¶ 95, 112. Defendant further argues that the intrinsic evidence further obscures these terms, by offering varying embodiments that are themselves ambiguous or, at times, contradictory. *Id.* at ¶¶ 94, 96, 111, 113. Defendant also contends that it is unclear who determines said "first time period" or "second time period." *Id.* at ¶¶ 103, 115. The Court disagrees.

The claims do not limit the time periods to specific durations. Instead, the claims require transmitting video information at certain transmission rates (i.e., "initial transmission rate" and "second transmission rate") for a first time period, and then transmitting the video information at another rate (a "first steady-state rate" with "the initial transmission rate being higher than the first steady-state transmission rate") for a second time period. In light of the claim language, any period of time would fall within the scope of the claims given the respective transmission rates. Therefore, there is no confusion about what times could be within the bounds of these claims because a change in the recited transmission rates bounds the respective time period. This indicates that the scope of the claims are broad, but "[m]erely claiming broadly" does not "prevent the public from understanding the scope of the patent." *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1352 (Fed. Cir. 2009). Indeed, "the inference of indefiniteness simply from the

scope finding is legally incorrect: 'breadth is not indefiniteness.'" *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017) .

Finally, the cases cited by Defendant on this issue are inapposite. In *Evicam Int'l, Inc. v. Enf't Video, LLC*, Civil Action No. 4:16-CV-105, 2016 U.S. Dist. LEXIS 151720 (E.D. Tex. Nov. 2, 2016), the claim recited "*extended* periods of time," *id.* at *53 (emphasis added), and in *Power Integrations, Inc. v. On Semiconductor Corp.*, No. 16-cv-06371-BLF, 2018 U.S. Dist. LEXIS 184224 (N.D. Cal. Oct. 26, 2018), the term at issue was "less than a *maximum* period of time." *Id.* at 39 (emphasis added). Thus, unlike the claims in the '098 Patent, the terms in those cases failed to provide an objective criteria or objective boundary for determining the duration of the time periods.

3. Court's Construction

For the reasons set forth above, the terms **"first time period"** and **"second time period"** are given their **plain and ordinary meaning**.

G. "computing device" / "computing devices"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"computing device" / "computing devices"	Plain and ordinary meaning. The term is not governed by 35 U.S.C. § 112, ¶ 6, nor is it indefinite. No construction is necessary.	This term is subject to construction under § 112, paragraph 6. Recited functions: -"receiv[e/ing] login information corresponding to a first user" -"identify[ing] the first user based on the login information" -"retriev[e/ing] user configuration information corresponding to the first user" "control[ling] provision of a media content streaming service" -"updat[e/ing] the user -configuration information corresponding to the first user based on the provision of the media content streaming service" -"receiv[e/ing] login information corresponding to the first user" -"identify[ing] the first user based on the login information" -"retriev[e/ing] the updated user configuration information corresponding to the first user" -"control[ling] provision of the media content streaming service" Corresponding structures for performing recited functions: personal electronic devices and local networked devices as disclosed in the '938 specification at 4:10–15, 5:1–5, 5:28–31, 5:42–43. Alternatively: indefinite

1. The Parties' Positions

The Parties dispute whether the term "computing device" is subject to 35 U.S.C. § 112, ¶

6 and if so, whether there is a sufficient recitation of structure. [11] Plaintiff argues that there is no

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[11] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 31-33) (citing Dkt. No. 105-15 at ¶¶ 30, 32); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 33-37) (citing '938 Patent at 4:10–15, 4:40–44, 15:16–50, 8:10–14; Dkt. No. 112-9 at ¶¶ 21-28, 30, 30 n.1, 33; Dkt. No. 112-11 at ¶¶ 59-63; Dkt. No. 112-12); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 12).

dispute that the term "computing device" connotes structure to a person of ordinary skill in the art.

Defendant responds that all independent claims of the '938 Patent recite the generic, nonce term "computing devices" without any corresponding structure, and are subject to means-plus-function construction under 35 U.S.C. § 112, ¶ 6. Defendant argues that "computing devices" is defined in the claims purely by its functions. According to Defendant, "devices" is generic, and the qualifier "computing" fails to add any specificity. Defendant also contends that the claims fail to describe how the computing devices interact with other components, and the surrounding claim language therefore confers no additional structure. Defendant further contends that its expert's description of "computing devices" underscores the term's lack of any definite structure.

Defendant next argues that the specification discloses a limited set of structures that comprise "computing devices." Specifically, Defendant argues that the specification discloses that the "personal electronic devices" that perform the function of identifying the user based on login information include "a portable handheld communication device, such as a Smartphone, a cellphone, a PDA, [or] a multimedia device. . . ." Defendant contends that the prosecution history also supports limiting the structure to user devices. According to Defendant, Plaintiff conceded the "peer to peer" sharing nature of the claims, and argued that prior art did not disclose "user configuration information" as required by the claims.

Plaintiff replies that Defendant ignores the many cases holding that when terms like "processor," "general purpose computer," or "central processing unit" are recited in a claim, they connote sufficiently definite structure. Plaintiff argues that Defendant fails to recognize the Federal Circuit's ruling in *Samsung Elecs. Am., Inc. v. Prisua Eng'g Corp.*, 948 F.3d 1342 (Fed. Cir. 2020). Plaintiff asserts that all of the cases Defendant cites predate *Prisua*. According to Plaintiff, "computing device," like "processor," "general purpose computer," and "central processing unit"

refers to structure.

2. Analysis

The term "computing device[s]" appears in Claims 1–14, 16–18, 20–30 of the '938 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. The Court further finds that the term "computing device" is not a "means-plus-function" limitation subject to § 112, ¶ 6. As discussed above, there is a rebuttable presumption that § 112, ¶ 6, does not apply to that limitation, because the reference to the computing device does not contain the words "means for." *Williamson*, 792 F.3d at 1348. That presumption can be overcome, but only "if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* at 1349.

Whether the term "computing device" invokes Section 112(f) "depends on whether persons skilled in the art would understand the claim language to refer to structure, assessed in light of the presumption that flows from the drafter's choice not to employ the word 'means.'" *Prisua*, 948 F.3d at 1354. As used in the claims of the '938 Patent, the term "computing device" clearly serves "as a stand-in for a 'general purpose computer' or a 'central processing unit,' each of which would be understood as a reference to structure in this case, not simply any device that can perform a particular function." *Id.* Moreover, the claims describe the objectives and operations of the system. *See also, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319–21 (Fed. Cir. 2004) ("circuit [for performing a function]" found to be sufficiently definite structure because the claim recited the "objectives and operations" of the circuit); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1295, 1301 (Fed. Cir. 2014) ("heuristic [for performing a function]" found to be sufficiently definite structure because the patent described the operation and objectives of the heuristic).

Specifically, the claimed system is configured to receive login information corresponding to a first user and identify the first user based on the login information. The system is further configured to retrieve user configuration information corresponding to the first user. The system includes a plurality of computing devices, which comprises a first computing device and a second computing device. The system further controls provision of a media content streaming service to the first computing device based on the user configuration information corresponding to the first user. The system is also configured to update the user configuration information corresponding to the first user based on the provision of the media content streaming service to the first computing device.

The system then receives login information corresponding to the first user from the second computing device, and identifies the first user based on the login information received from the second computing device. The system also retrieves the updated user configuration information corresponding to the first user; and controls provision of the media content streaming service to the second computing device based on the updated user configuration information corresponding to the first user.

The claims further describe the structural interaction of the plurality of computing devices by reciting that they are connected via one or more networks. Thus, a person of ordinary skill in the art would understand that the claim language recites sufficiently definite structure, and that the term "computing device" is not used as a generic term or black box recitations of structure or abstractions. *Free Stream Media Corp. v. Alphonso Inc.*, No. 2:15-CV-1725-RWS, 2017 U.S. Dist. LEXIS 46921, at *59 (E.D. Tex. Mar. 29, 2017) ("[T]he claims themselves connote sufficiently definite structure by describing how the 'relevancy-matching server' operates within the claimed invention to achieve its objectives.").

The specification further supports this understanding of the claim terms. The specification states that the recited "computing device" may include "a portable handheld communication device, such as a Smartphone, a cellphone, a PDA, a multimedia device, which may be communicatively coupled to plurality of available networks, resources, and/or other communication devices which may exist locally and/or remotely." '938 Patent at 4:10–15. Accordingly, the intrinsic evidence indicates that "computing device," like "processor," "general purpose computer," and "central processing unit" refers to structure.

Defendant contends that "computing device" invokes § 112, ¶ 6 because it encompasses many structures. A term, however, does not become non-structural simply because it is broad. *See Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1119 (Fed. Cir. 2017) (finding "wireless device means" not a means-plus-function term, noting that "it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function") (quoting *TecSec, Inc. v. Int'l Bus. Machs. Corp.*, 731 F.3d 1336, 1347 (Fed. Cir. 2013)).

In summary, although the presumption against § 112, ¶ 6 is no longer "strong," it is still a presumption that Defendant must affirmatively overcome. In the context of the intrinsic record for the '938 Patent, the Court finds that Defendant has not shown that "computing device" should be subject to § 112, ¶ 6. Accordingly, the Court rejects Defendant's argument that the term "computing device" is a means-plus-function term governed by § 112, ¶ 6 and finds that no further construction is required.

3.   Court's Construction

For the reasons set forth above, the term **"computing device[s]"** is given its **plain and ordinary meaning**.

H. "the login information received from the first computing device"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"the login information received from the first computing device"	"the login information corresponding to the first user, wherein the login information was received from the first computing device"	Indefinite

1.   The Parties' Positions

The Parties dispute whether the phrase "the login information received from the first computing device" lacks antecedent basis, and is therefore indefinite, as Defendant proposes.[12] Claim 1 recites a system that includes first and second computing devices. Plaintiff contends that a person of ordinary skill in the art would understand that when the system provides media content to the first computing device, it does so because the user logged in from that device. According to Plaintiff, the antecedent basis for "the login information received from the first computing device" recited in Claim 5 is therefore present at least by implication. Plaintiff argues that a person of ordinary skill in the art would understand that "the login information received from the first computing device" means "the login information corresponding to the first user, wherein the login information was received from the first computing device." Plaintiff further argues that Defendant's expert in the pending IPR, Dr. Stephen Gray, states that the system recited in Claim 1 includes receiving login information from the first computing device.

Defendant argues that the specification contemplates the use of Bluetooth technology, which Defendant contends would permit a user to stream content on her Bluetooth-connected speakers, even though she had logged into her laptop computer (a different device). Defendant

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[12] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 33-34) (citing Dkt. No. 105-14 at ¶¶ 54, 269); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 37-38) (citing '938 Patent at 2:45–52, 5:6–12; 6:17–26); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 12-13).

further contends that its IPR expert has not taken a contrary position. According to Defendant, Dr. Gray does not address whether the outer boundaries of a claim term may be discerned with reasonable certainty. Defendant argues that Dr. Gray opines regarding prior art that reads on the claims, regardless of the claims' outer bounds.

Plaintiff replies that a person of ordinary skill in the art would understand that "the login information received from the first computing device" is "login information corresponding to the first user, wherein the login information was received from the first computing device." Plaintiff argues that Defendant's hypothetical shows that Claim 5 narrows the scope of Claim 1 to instances in which the user must provide login information from the first computing device. According to Plaintiff, Claim 1 may cover situations where a user logs onto the system from one computing device and the system provides media content to another, "first," computing device. Plaintiff contends that the user must log onto the system from the first computing device in Claim 5. Plaintiff argues that this understanding means that Claim 5 is not indefinite.

2.   Analysis

The phrase "the login information received from the first computing device" appears in Claims 5 and 21 of the '938 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same general meaning in each claim. Defendant contends that this term is indefinite for lack of antecedent basis because Claim 1 does not explicitly state that the system receives login information from the first computing device. Specifically, Defendant argues that the specification contemplates the use of Bluetooth technology, which permits a user to stream content on her Bluetooth-connected speakers, even though she had logged into her laptop computer (a different device). *See, e.g.*, '938 Patent at 2:45–52 ("For example, Bluetooth technology may be utilized to connect a laptop computer or a handheld wireless terminal to a

peripheral device, such as … headphone[s]"), *see also*, *id.* at 5:6–12, 6:17–26. According to

Defendant, this means that the claim language is not limited to the system providing media content

to the first computing device when the user logs in from that device. In other words, Defendant

contends there is no antecedent basis for "the login information received from the first computing

device" recited in dependent Claim 5, because the user in Defendant's hypothetical did not log on

from the "first device." Thus, Defendant argues that the claim is indefinite. The Court disagrees.

Claim definiteness is analyzed "not in a vacuum, but always in light of the teachings of the

prior art and of the particular application disclosure as it would be interpreted by one possessing

the ordinary level of skill in the pertinent art." *In re Moore*, 58 C.C.P.A. 1042, 1047, 439 F.2d

1232, 1235 (C.C.P.A. 1971). The definiteness inquiry "focuses on whether those skilled in the art

would understand the scope of the claim when the claim is read in light of the rest of the

specification." *Union Pac. Res. Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir.

2001). Although the courts can rewrite claims to correct material errors, the issue here is not

correction of error, but understanding of what the claim covers. When the meaning of the claim

would reasonably be understood by persons of ordinary skill when read in light of the

specification, the claim is not subject to invalidity upon departure from the protocol of antecedent

basis.

The requirement of antecedent basis is a rule of patent drafting, administered during patent

examination. The Manual of Patent Examining Procedure states that "obviously, however, the

failure to provide explicit antecedent basis for terms does not always render a claim indefinite."

MPEP § 2173.05(e) (8th ed. Rev. 2, May 2004). In *Slimfold Manufacturing Co. v. Kinkead*

Industries, Inc., 810 F.2d 1113, 1117 (Fed. Cir. 1987), the court held that "the missing antecedent

clause, the absence of which was not observed by the examiner of the original patent or by Kinkead

in its reissue protest documents, did not fail to inform the public during the life of the ['274] patent of the limits of the monopoly asserted." The *Slimfold* court held that addition of the missing antecedent basis during reissue was not a substantive change.

Here, Claim 1 recites a system that includes first and second computing devices. The first time a user logs into the system, the system provides media content to the first computing device. The second time the user logs in, it provides media content to the second computing device. Claim 1 states that when the system provides media content to the second device, it does so because the user logged in from the second computing device. Thus, a person of ordinary skill in the art would understand that when the system provides media content to the first computing device, it does so because the user logged in from that device. The antecedent basis for "the login information received from the first computing device" recited in Claim 5 is therefore present at least by implication. Indeed, the Federal Circuit noted in *Slimfold* that an antecedent basis can be present by implication. *Slimfold*, 810 F.2d at 1116 ("[W]hether the antecedent was already there by implication depended on the facts of the case."); *Cross Medical Products v. Medtronic Sofamor Danek*, 424 F.3d 1293, 1319 (Fed. Cir. 2005).

To be sure, a person of ordinary skill in the art would understand that Claim 5 narrows the scope of Claim 1 to instances in which the user must provide login information from the first computing device. In other words, Claim 1 may cover situations where a user logs onto the system from one computing device and the system provides media content to another, "first," computing device. But in Claim 5, the user must log onto the system from the first computing device. Thus, the claim's reference to "the login information received from the first computing device" instead of "login information received from the first computing device" does not render the claim indefinite. Accordingly, a person of ordinary skill in the art would understand that "the login

information received from the first computing device" means "the login information corresponding to the first user, wherein the login information was received from the first computing device."

3. Court's Construction

For the reasons set forth above, the Court construes the phrase **"the login information received from the first computing device"** to mean **"the login information corresponding to the first user, wherein the login information was received from the first computing device."**

I. "a third system"

Disputed Term	Plaintiff's Proposal	Defendant's Proposal
"a third system"	Plain and ordinary meaning. The term is not indefinite, and no construction is necessary.	Indefinite

1. The Parties' Positions

The Parties dispute whether the term "a third system" is indefinite given that the claims do not recite "a second system."[13] Plaintiff argues that there is no need to recite a second system. Plaintiff contends that if at least two systems are connected to the system of Claim 1, one of them is necessarily a "third system" that can satisfy Claim 17. According to Plaintiff, Defendant's IPR expert agrees. Plaintiff contends that the claim is not indefinite because a person of ordinary skill in the art would understand the scope of the claim.

Defendant responds that basic logic requires the existence of "a second system" before a reference to "a third system" makes sense. Defendant notes that Claim 17 recites a "third system" even though there is no "second system" in the claims. Defendant argues that the term therefore

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[13] The Parties' arguments for this disputed term can be found in Plaintiff's Opening Claim Construction Brief (Dkt. No. 105 at 35) (citing Dkt. No. 105-13 at ¶ 237); Defendant's Responsive Claim Construction Brief (Dkt. No. 112 at 38); and Plaintiff's Reply Claim Construction Brief (Dkt. No. 116 at 13) (citing Dkt. No. 105-13 at ¶ 237).

lacks an antecedent basis and is indefinite. Addressing Plaintiff's multiple system argument, Defendant contends that multiple systems are not discussed anywhere in the claims. Defendant also asserts that Plaintiff mischaracterizes Dr. Gray's comments.

Plaintiff replies that Defendant's expert, Dr. Gray, agrees that a person of ordinary skill in the art would understand that Claim 1 can cover systems that comprise multiple systems, even though it does not recite a "second" system. According to Plaintiff, its explanation is perfectly logical.

2. Analysis

The term "a third system" appears in Claim 17 of the '938 Patent. Defendant contends that Claim 17 recites a "third system," but does not recite a "second system" in the claims. Defendant argues that basic logic requires the existence of a "second system" before a reference to a "third system" makes sense. Defendant concludes that because multiple systems are not discussed anywhere in the claims, the term therefore lacks an antecedent basis and is indefinite.

Defendant is not entirely correct that the term lacks antecedent basis. The recited phrase is "*a* third system," and not "*the* third system." However, Defendant correctly argues that the claims do not include a "second system." Thus, the claim language is indefinite, especially given the ambiguity created by using "system" and "device" interchangeably in the specification. The specification states that "the system 150 may be integrated within a device, for example the PE device 102, to enable management of user configuration, and utilization of plurality communication interfaces and/or devices." '938 Patent at 10:37–40. Claim 1 recites "a system," "a plurality of computing devices," "a first computing device of the plurality of computing devices," and "a second computing device of the plurality of computing devices." Given this, it is unclear if the "third system" is a "third device" or actually a "third system." Multiple systems are

not discussed anywhere in the claims, and the patentee could have used the word "device," if that is what was intended.

Plaintiff argues that by reciting a "third" system rather than a "second" system, the claim language clarifies that the "third system" is separate from the "first" and "second" devices, while at the same time distinguishing it from the system of Claim 1. If this were the case, then the patentee could have used the word "third device," and not "third system." There is no way a person of ordinary skill in the art would understand whether the recited "third system" is a "third device" or "third system" when viewed in the context of the intrinsic evidence. Basic logic requires the existence of a "second system" before reference to a "third system" makes sense.

3.   Court's Construction

For the reasons set forth above, the term **"a third system"** is indefinite for failing to inform, with reasonable certainty, those skilled in the art about the scope of the invention.

V.   CONCLUSION

The Court adopts the constructions above for the disputed 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 16th day of November, 2021.

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ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE