

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

Portsmouth Network Corporation,

Plaintiff,

v.

Cisco Systems, Inc.,

Defendant.

Civil Action No. 2:23-cv-00441-JRG

JURY TRIAL DEMANDED

PLAINTIFF’S OPENING CLAIM CONSTRUCTION BRIEF

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Exhibit	Description
A	Declaration of Dr. James Olivier in Support of Portsmouth's Claim Construction Positions, and Exhibits 1-4 thereto

I. INTRODUCTION

Portsmouth's proposed claim constructions are consistent with the claims, the intrinsic evidence, extrinsic evidence, and the plain and ordinary meaning of those terms. Defendants, in an effort to read improper extraneous limitations into the claims, assert that the Court should construe numerous terms even though such terms are clear on their face and need no construction. Defendants' proposals are unsupported and are merely transparent attempts to avoid liability.

II. BACKGROUND OF THE TECHNOLOGY

A. The '986 Patent

The '986 patent is directed to efficiently protecting against network failure through the use of redundant switch ports and links. The claimed methods and devices of the '986 patent recite an architecture that rapidly reconfigures a network in response to a detected failure in the network. In some embodiments of the '986 Patent, the system places a first port in an active state while placing a second port in a blocking state, conveying communication traffic over the first link while the first port is in the active state, thereby causing the bridges to build respective databases for use in forwarding the traffic, and sending dummy traffic from the first bridge over the second link downstream to the second bridge, so as to cause the second bridge to modify its database responsive to the second port being in the active state. *See, e.g.*, Dkt. No. 57-1, Claim 12. These methods and systems enable networks to rapidly reconfigure in response to changes in network topology.

B. The '279 Patent

The '279 Patent provides an improved method for routing data flow in a network by using a "dispatcher" node that dynamically assesses resource availability across the plurality of paths in a network. This functionality allows the system to update costs automatically, while the network

is running, in response to network resource constraints, thus allowing for a more efficient transmission of network traffic.

C. The '637 Patent

The '637 Patent provides improved methods for rapidly initiating the diversion of network traffic from a topology with a failed network link to a backup topology. The methods outlined in this patent overcome the limitations of prior art systems, which relied on the upper layers of a network to identify a loss of connectivity before transferring traffic to a backup set of links, which was a slow process and often took several minutes. The '637 Patent's invention reduces the time for this switchover to mere seconds, thus providing an improved system for traffic diversion process.

D. The '394 Patent

The '394 patent is directed to efficiently forwarding multicast packets in a network. The claimed methods and devices of the '394 patent disclose storing lists in each processing unit indicating which multicast packet streams are allowed to be forwarded over the ports, distributing a multicast content request among multiple processing units, updating the lists for each processing unit, and selectively forwarding multicast packets based on the updated lists in each processing unit. The '394 patent also discloses ways to adjust to other changes in the network, such as when a new line card is inserted. For example, the claimed system may disable local ports of the newly-added line card and transmit a multicast status update request, which allows the newly-added processing unit to stay up-to-date. These methods and systems enable a multicast network to adapt to changes in multicast forwarding configurations in a way that minimizes response or lag time.

III. LEGAL PRINCIPLES

“[T]he words of a claim are generally given their ordinary and customary meaning [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the

time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005). “[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321. The patent specification “is always highly relevant to the claim construction analysis.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

However, “even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) quoting *Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004).

Courts may also rely on “extrinsic evidence,” which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995). Expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.*

IV. CLAIM CONSTRUCTION OF THE ’986 PATENT

A. “edge switch”

The term edge switch is readily understood by one of skill in the art and does not require construction. To the extent the term needs any construction, it should be given its plain and ordinary meaning, which is “a switch located at the edge of a network.” This construction is supported by the intrinsic evidence. *See, e.g.*, Dkt. No. 57-1, Abstract; Figs. 1-3; 1:26-38; 2:7-22; 3:15-41; 3:65-4:54; 7:9-8:44; 9:11-10:50. For example, Figure 1 of the ’986 patent discloses a system where access switch 26 and access switch 27 provide access to network 20. *See id.*, Fig.

1. Portsmouth's construction is also consistent with the understanding of a POSITA and the extrinsic evidence. *See* Ex. A, Declaration of Dr. James Olivier in Support of Portsmouth's Claim Construction Positions ("Olivier Declaration"), ¶ 22. For example, Newton's Telecom Dictionary defines an edge switch as "[a] Broadband Switching System which is located at the edge of the network." Ex. A at Ex. 2 (PNC-CSC0027044).

Cisco improperly reads in limitations into its construction that are not the plain and ordinary meaning of this term. Specifically, Cisco construes edge switch to be "core switch that is directly connected to (an) access switch(es)." *See* Dkt. No. 72 at 3. Although Cisco's construction refers to language found in the specification, such limitations are not present in the claims themselves. *See* '986 patent, 1:26-38. It is well-established that limitations and embodiments from the specification should not be read into the claims. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 904 (Fed. Cir. 2004) ("it is improper to read a limitation from the specification into the claims"); *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371 (Fed. Cir. 2003) (holding that it was improper to read a specific order of steps from the specification into method claims because the specification did not include any disclaimer of any other order of steps); *Comark Commc'n, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) ("Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims."). As Dr. Olivier explains in his declaration, the claims make clear that an edge switch does not have to be a core switch that is directly connected to an access switch. *See* Olivier Declaration, ¶¶ 20-22.

Furthermore, Cisco's construction would only cause confusion by introducing a definition that itself depends on the definition of other types of switches, such as core switches and access

switches. Cisco's proposed construction of edge switch also would only further muddy the waters because the meaning of "access switch," which is part of Cisco's proposed definition of edge switch, is also disputed by the parties. Cisco's proposed construction also adds additional ambiguity to the claims. For example, Cisco does not address how a switch is "directly connected" to an access switch, and a POSITA would not understand the particular requirements of Cisco's proposed definition without additional detail. This goes against the basic purpose of the claim construction process, which is to provide clarity to a claim term's meaning.

B. "access switch"

The term "access switch" needs no construction. To the extent that this term needs any construction, it should be given its plain and ordinary meaning which is "a switch providing access to a network." This construction is supported by the intrinsic evidence. *See, e.g.*, Dkt. No. 57-1, Figs. 1, 2A; 1:26-38; 4:50-54; 7:8-22. Portsmouth's construction is also consistent with the understanding of a POSA. Olivier Declaration, ¶¶ 23-24.

Cisco seeks to construe access switch as a "switch with ports that connect to LANs and/or to other network endpoints." While an access switch can connect to LANs and network endpoints, the claims of the '986 patent do not impose such a requirement. The '986 patent specification also makes clear that an access switch is not limited to connecting to LANs and that other network configurations may exist in other embodiments. *See* '986 patent at 7:36-38. Thus, an access switch is not limited to the single embodiment that Cisco cites. *See, e.g., Liebel-Flarsheim Co.*, 358 F.3d at 904 (Fed. Cir. 2004) ("it is improper to read a limitation from the specification into the claims"); *Luv N' Care, Ltd. v. Jackel Int'l Ltd.*, No. 2:14-CV-855-JRG, 115 F.Supp.3d 808, 823 (E.D. Tex. July 20, 2015) ("The Court finds that the examples in the specification are non-limiting embodiments of the invention that should not be imported into the claims.").

V. CLAIM CONSTRUCTION OF THE '279 PATENT

A. “predetermined”

The term “predetermined” needs no construction. A person of ordinary skill in the art would apply the plain and ordinary meaning to this term, which is “to determine beforehand.” Olivier Declaration, ¶ 28. This construction is further supported by extrinsic evidence. For example, Merriam Webster’s Collegiate Dictionary defines “predetermined” as “to determine beforehand.” Ex. A at Ex. 3 (PNC-CSC0027040). The term “predetermined” has a “well-established meaning[] that [is] readily applicable” in the context of the '279 Patent. *Whirlpool Corp. v. TST Water, LLC*, No. 2:15-CV-1528-JRG, 2016 WL 3959811, at *15 (E.D. Tex. July 22, 2016) (finding “no further construction is necessary, particularly in light of the extrinsic dictionary definitions submitted by Plaintiff.”).

Defendant’s proposed construction, “determined before the data flow request,” improperly imports temporal limitations that are not inherent to the term “predetermined.” Specifically, nothing in the claim language or the specification limits the term “predetermined” to just the time period before the data flow request. Defendant’s disclosures provide no evidence to support its position. In fact, based on the language of the claims, the quantity of the quantum can be determined at any point before the system increases “the allocation of resources to the first node on the selected path by a predetermined quantum,” and therefore is not limited to “before the data flow request” as proposed by Defendant. Dkt. No. 57-2, claim 1. In fact, this Court has previously refrained from introducing similar temporal limitations to non-technical terms with plain meanings. In *BMC Software*, the Court determined that the term “periodically” should be giving its “plain and ordinary meaning,” without requiring that the actual “period” of time be construed. *BMC Software, Inc. v. ServiceNow, Inc.*, No. 2:14-CV-903-JRG, 2015 WL 4776970, at *20 (E.D. Tex. Aug. 13, 2015) (finding that the “intrinsic evidence informs a person of ordinary skill in the

art of the scope of the claims with reasonable certainty.” Thus, “predetermined” should be accorded its plain and ordinary meaning.

B. “quantum”

The term “quantum” requires no construction. A person of ordinary skill would apply the plain and ordinary meaning to this term, which is simply an “amount.” Olivier Declaration, ¶ 31.

This construction is supported by intrinsic evidence. The specification of the ’279 Patent describes “node quantum” as the “**amount** by which to increase or decrease node_used_In or Out at each resource allocation or deallocation.” Dkt. No. 57-2, 5:26-30.

Defendant’s proposed construction of “an amount of a requested resource by which to increase or decrease” improperly reads limitations into this term. Nothing in the language of the claims or the specification requires that the actions of “increase[ing] or decreas[ing]” should be read into the term “quantum” itself. This is improper. This Court has previously rejected constructions that “impermissibly attempt[] to import limitations from the specification.” *Abstrax, Inc. v. Hewlett-Packard Co.*, No. 2:14-CV-158-JRG, 2015 WL 156555, at *8 (E.D. Tex. Jan. 12, 2015). Furthermore, the claim language and the specification do not support limiting the term “quantum” to only the “amount of the requested resource.” For example, the ’279 Patent describes a “resource retainment step” in which a node instead of “returning a quantum to the dispatcher...keeps the [quantum] for subsequent use.” Dkt. No. 57-2, 7:20-24. This clearly shows that the term “quantum” is not tied to any specific request. Thus, Defendant’s construction of this term is too narrow and improperly attempts to add extraneous limitations to the term.

VI. CLAIM CONSTRUCTION OF THE ’637 PATENT

A. “a network”/ “a communication network”

The term “a network” or a “communication network” requires no construction. This term is readily understood by one of skill in the art. To the extent this term is construed, it should be

given its plain and ordinary meaning, which is “two or more stations capable of intercommunication.” Olivier Declaration, ¶ 46.

Defendant’s proposed construction of “a VPLS network” is too narrow and contrary to the claims and the specification of the ’637 Patent. The claims of the ’637 Patent do not limit network or communication network to only a VPLS network. In fact, the “Field of the Invention” section of the ’637 Patent provides that the “present invention relates generally to communication networks.” Dkt. No. 57-4, 1:16-17. While this section notes that the invention relates “particularly to methods and systems for providing virtual private LAN services (VPLS),” it does not limit the scope of the invention to just VPLS systems. *Id.* Defendant relies on the embodiments disclosed in the specification of the ’637 Patent, which relate to VPLS systems, to support its construction. However, “examples in the specification are non-limiting embodiments of the invention that should not be imported into the claims.” *Abstrax, Inc.*, 2015 WL 156555, at *5.

B. “deactivating a physical layer of the first set of links connected thereto” / “deactivate the physical layer resources of each node to links in the first set of links connected to that node”

“Deactivating a physical layer of the first set of links connected thereto” / “deactivate the physical layer resources of each node to links in the first set of links connected to that node” are phrases that a POSITA would understand without any construction based on their plain language. Olivier Declaration, ¶ 49.

Defendant’s proposed construction of “deactivating the physical layer [] of all links connected [to] all other nodes other than the detecting node” / “deactivate the physical layer[] of all links connected to] all other nodes other than the detecting node,” reads in additional language into the claims and unnecessarily introduces “the detecting node” into both claims 1 and 16. However, a POSITA would understand the claim language based on the express language of the claim limitation, without the “add[ition] [of] language that is separately recited in the claims.”

Astute Tech., LLC v. Learners Dig. Int'l LLC, No. 2:12-CV-689-JRG, 2014 WL 1385191, at *19 (E.D. Tex. Apr. 2, 2014) (rejecting proposed construction “as being superfluous with surrounding claim language,” and finding that “there is no need to include this separately claimed language” in the construction.).

VII. CLAIM CONSTRUCTION OF THE '394 PATENT

A. “a high-capacity port”

In email correspondence dated October 21, 2024, Cisco agreed to Portsmouth’s construction of “a high-capacity port” as meaning “a port formed by aggregating two or more ports.” Accordingly, the construction of this term is no longer in dispute.

B. “a new processing unit added to the network element”

The term “a new processing unit added to the network element” does not have a specific meaning in the art. However, a POSITA would understand the plain language of the term without the need for any additional construction in view of the '394 patent’s disclosure. *See* Olivier Declaration, ¶¶ 38-39. For example, the '394 patent specification discloses that a processing unit can be a line card and that a new line card can be “inserted into an active network element.” Dkt. No. 57-3, 9:41-43; *see also id.* at 6:47-49 (“line cards 36 can be inserted and removed (“hot swapped”) while the network element is operational.”); 6:23-24 (“Network element 32 comprises multiple processing units, such as line cards 36.”). A POSITA would therefore understand that “a new processing unit added to the network element” means precisely what the plain meaning of those words mean, which is simply to add a processing unit to the network element.

Cisco proposes that a “a new processing unit added to the network element” should mean “a processing unit newly-inserted into the network element.” Dkt. No. 72 at 9. Again, Cisco attempts to read limitations from the specification into the claims. Specifically, Cisco’s proposed construction appears to rely on a single sentence of the '394 patent specification, which discloses

that “[w]hen the database and counters are up-to-date (or after a certain time out), the NP activates the ports of the *newly-inserted line card*, and may start normal operation.” Dkt. No. 57-3, 9:51-53 (emphasis added). As discussed above, Cisco’s proposed construction improperly limits the claims to an example in the specification, but the claim is not necessary limited to only that example. Furthermore, Cisco’s proposed construction merely adds additional ambiguity to the claims. For example, Cisco does not address how soon a processing unit must be inserted for it to be considered “newly-inserted,” and a POSITA would not understand the particular temporal requirements of Cisco’s proposed definition without additional detail.

Therefore, “a new processing unit added to the network element” should be defined by the plain and ordinary meaning of the term.

C. “multicast packet stream”

The term “multicast packet stream” is readily understood by one of skill in the art and does not require construction. To the extent the term needs any construction, it should be given its plain and ordinary meaning, which is “a packet stream that can be sent to multiple devices.” This construction is supported by the intrinsic evidence. *See, e.g.*, Dkt. No. 57-3, Abstract; Figs. 1-4; 1:12-14; 5:61-64; 5:66-6:3. For example, the ’394 patent discloses “[a]t least some of the traffic communicated over network 20 comprises multicast traffic, i.e., streams of multicast packets that are addressed to multiple recipients.” *Id.*, 5:61-64. Portsmouth’s construction is also consistent with the understanding of a POSITA and the extrinsic evidence. *See* Ex. A, ¶¶ 40-45. For example, Newton’s Telecom Dictionary discloses that “[m]ulticast packets are addressed to multiple devices within a group of devices.” Ex. A at Ex. 4 (PNC-CSC002750).

Cisco improperly reads in limitations into its construction that are not the plain and ordinary meaning of this term. Specifically, Cisco construes “multicast packet stream” to require “a channel or movie.” *See* Dkt. No. 72 at 10. Although Cisco’s construction refers to language

found in the specification, such limitations are not present in the claims themselves. It is well-established that limitations and embodiments from the specification should not be read into the claims. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 904 (Fed. Cir. 2004) (“it is improper to read a limitation from the specification into the claims”); *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371 (Fed. Cir. 2003) (holding that it was improper to read a specific order of steps from the specification into method claims because the specification did not include any disclaimer of any other order of steps); *Comark Commc’n, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.”). As Dr. Olivier explains in his declaration, the claims make clear that a multicast packet stream does not have such limitations. *See* Olivier Declaration, ¶ 45.

Therefore, “multicast packet stream” should be defined by the plain and ordinary meaning of the term.

VIII. CONCLUSION

For at least the foregoing reasons, Portsmouth respectfully requests that the Court adopt Portsmouth’s proposed constructions for each of the disputed terms and reject Cisco’s proposed constructions.

Dated: October 23, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on October 23, 2024, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ James Nuttall

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JURY TRIAL DEMANDED

DEFENDANT CISCO'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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EXHIBIT NO.	DESCRIPTION
1	U.S. Patent No. 6,917,986 (highlighted)
2	U.S. Patent No. 7,035,279 (highlighted)
3	U.S. Patent No. 8,014,394 (highlighted)
4	U.S. Patent No. 8,199,637 (highlighted)
5	October 17, 2024 Deposition Transcript of Dr. James Olivier (excerpted and highlighted)
6	<i>Cisco Sys., Inc. v. Portsmouth Network Corp.</i> , Case No. IPR2024-00505 (P.T.A.B. May 8, 2024) (Paper 6), Patent Owner's Preliminary Response for <i>Inter Partes</i> Review of U.S. Patent No. 6,917,986 (excerpted and highlighted)
7	<i>Cisco Sys., Inc. v. Portsmouth Network Corp.</i> , Case No. IPR2024-00505 (P.T.A.B. Aug. 6, 2024) (Paper 7), Decision Granting Institution of <i>Inter Partes</i> Review of U.S. Patent No. 6,917,986 (excerpted and highlighted)
8	U.S. Patent No. 7,035,279 File History (excerpted and highlighted)
9	<i>Cisco Sys., Inc. v. Portsmouth Network Corp.</i> , Case No. IPR2024-00506 (P.T.A.B. Jul. 10, 2024) (Paper 7), Patent Owner's Preliminary Response for <i>Inter Partes</i> Review of U.S. Patent No. 8,014,394 (highlighted)
10	<i>Cisco Sys., Inc. v. Portsmouth Network Corp.</i> , Case No. IPR2024-00506 (P.T.A.B. Mar. 31, 2024) (Exhibit 1006), W.O. 2007/140702 to Li <i>et al.</i> for <i>Inter Partes</i> Review of Patent No. 8,014,394
11	<i>Cisco Sys., Inc. v. Portsmouth Network Corp.</i> , Case No. IPR2024-00506 (P.T.A.B. Mar. 31, 2024) (Exhibit 1007), the certified English translation of W.O. 2007/140702 to Li <i>et al.</i> ("Li") for <i>Inter Partes</i> Review of Patent No. 8,014,394
12	U.S. Patent No. 8,199,637 File History (excerpted and highlighted)
13	E-mail from Ben Ho, Counsel for Portsmouth Network Corporation, to Jonathan Lewis, Counsel for Cisco Systems, Inc. (October 23, 2024 15:17 CST)
14	U.S. Patent No. 5,461,611 to Drake <i>et al.</i> ("Drake")

All emphasis has been added unless noted otherwise.

I. INTRODUCTION

The Court should adopt Cisco’s constructions because they are rooted in the intrinsic record and settle key disputes between the parties. In most instances, Cisco’s proposed constructions seek to resolve the disputes by looking to the claim language itself, the specification’s teaching of the claimed invention, and statements made during the prosecution of each patent. In other instances, Cisco’s constructions quote clear and unmistakable disclaimers made by Portsmouth to the Patent Trial and Appeal Board (PTAB) regarding what those limitations **require** and **define**.

Cisco’s constructions appropriately identify the portions of the intrinsic record corresponding to each of Cisco’s proposals, whereas Portsmouth roots its constructions in extrinsic evidence, indiscriminately pointing to different dictionaries and conclusory assertions of its expert, Dr. Olivier. In doing so, Portsmouth does not afford sufficient weight to the specification and, in many instances, completely disregards its disclaimers recently made to the PTAB. Moreover, in some cases, its positions even contradict the analysis of its own claim construction expert.

II. OVERVIEW OF THE ASSERTED PATENTS

Portsmouth asserts four patents: U.S. Patent No. 6,917,986 (Ex. 1, the “’986 Patent”); U.S. Patent No. 7,035,279 (Ex. 2, the “’279 Patent”); U.S. Patent No. 8,014,394 (Ex. 3, the “’394 Patent”); and U.S. Patent No. 8,199,637 (Ex. 4, the “’637 Patent”). Cisco provided a technical overview in its Technology Tutorial, which is incorporated by reference. Dkt. No. 80.

III. LEGAL STANDARDS

This Court is familiar with the general principles of claim construction, which are not repeated here. *See, e.g., MobileMedia Ideas LLC v. HTC Corp.*, No. 2:10-cv-112, 2012 WL 12894259, at *2–3 (E.D. Tex. Dec. 10, 2012). “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)) (internal quotations omitted).

IV. DISPUTED CLAIM CONSTRUCTION

A. The '986 Patent

1. “edge switch”

Claims	Portsmouth's Construction	Cisco's Construction
1, 4, 6–8, 11, 16, 19–20 ¹	Plain and ordinary meaning OR “switch located at the edge of a network”	“core switch that is directly connected to (an) access switch(es)”

The Court should adopt Cisco's construction for “edge switch” because it is the definition provided in the '986 Patent's specification and is further supported by Portsmouth's explicit disclaimer in its Patent Owner's Preliminary Response (“POPR”). See Ex. 1 ('986 Patent) at 1:35–37; Ex. 6 ('986 POPR). Portsmouth's contention that “edge switch” should be given its plain and ordinary meaning, or in the alternative, should be construed consistent with a 2007 telecom dictionary, ignores the intrinsic record. In fact, Portsmouth's own expert agreed that the intrinsic record's use of the term “edge switch” “shocked” him because it **contradicts** the “plain and ordinary meaning.” See Ex. 5 (Olivier Dep. Tr.) at 61:3–8 (“Q. So you mentioned that you were shocked when you saw how the '986 patent describes edge switch in column 1. Were you shocked because it contradicts what would otherwise be the plain and ordinary meaning of ‘edge switch’? A. Correct.”). Despite that fatal admission, Portsmouth plows forward and asks this Court to adopt a construction based on extrinsic evidence that contradicts the intrinsic evidence.

¹ Portsmouth informed Cisco by email that it was no longer asserting claims 14, 18, and 23 of the '986 Patent, so the claim construction dispute for those claims is no longer at issue. Ex. 13.

Both exceptions that the Federal Circuit has found to the general rule favoring plain and ordinary meaning apply here—“(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.” See *Golden Bridge*, 758 F.3d at 1365 (quoting *Thorner*, 669 F.3d at 1365). **First**, the ’986 patentee acted as his or her own lexicographer by defining “edge switch.” The specification states that “[c]ore switches that are directly connected to access switches are **referred to herein** as edge switches.” Ex. 1 (’986 Patent) at 1:35–37. The Federal Circuit has found that a “patentee’s use of the phrases ‘as used herein’ and ‘refer to’ conveys an intent for [a] sentence [] to be definitional.” *Parkervision, Inc. v. Vidal*, 88 F.4th 969, 976 (Fed. Cir. 2023) (citing *Kyocera Senco Indus. Tools Inc. v. Int’l Trade Comm’n*, 22 F.4th 1369, 1378 (Fed. Cir. 2022) for the proposition that the phrase “also sometimes referred to herein as” indicates lexicography). The use of the phrase “referred to herein” in the sentence at Column 1, lines 35 to 37 of the ’986 Patent therefore defines “edge switch.”

Moreover, contrary to Portsmouth’s contention that Cisco’s definitional construction reads “limitations and embodiments from the specification” into the claims, (Dkt. No. 78, (Op. Br.) at 4), the explicit definition for “edge switch” appears in the “Background of the Invention” section of the ’986 Patent; it **is not** tied to a particular embodiment in the specification. Indeed, Portsmouth’s expert, Dr. Olivier, agreed that the patentee’s definition of “edge switch” at Column 1, lines 35 to 37 of the ’986 Patent does not correlate to any particular embodiment. Ex. 5 (Olivier Dep. Tr.) at 61:24–62:2 (“Q. And so that passage [’986 Patent at 1:35–37] is not correlated to any particular embodiment, right? A. Correct. It’s in the ‘Background of the Invention.’”). Further, Dr. Olivier agreed that use of the phrase “herein” in the definition of “edge switch” at Column 1, lines 35 to 37 informs how “edge switch” should be viewed throughout the ’986 Patent. *Id.* at

61:14–19 (“Q. And that particular statement in column 1, line 35 is meant to inform how ‘edge switch’ should be viewed throughout the rest of the ’986 patent, correct? A. It says ‘herein,’ yes.”); *see also Parkervision*, 88 F.4th at 976. Tellingly, every use of “edge switch” in the claims and specification is consistent with the definition of “edge switch” reflected in Cisco’s construction. *See* Ex. 1 (’986 Patent) at FIGS. 1–3; Abstract; 1:26–38; 2:7–22; 3:15–41; 3:65–4:54; 7:9–8:44; 9:11–10:50; all claims. Thus, the patentee acted as his or her own lexicographer when defining “edge switch,” and the patentee’s chosen definition does not read any particular embodiments into the claims.

Second, Portsmouth recently told the PTAB exactly what Cisco now tells the Court: “[t]he ’986 patent **defines** edge switches as ‘[c]ore switches that are directly connected to access switches.’ [’986 Patent at] 1:35–37.” Ex. 6 (’986 POPR) at 12–13. Here, Portsmouth clearly and unmistakably stated that the ’986 Patent “defines” edge switches by citing the same definition at Column 1, lines 35 to 37. Thus, Portsmouth’s statement in its POPR for the ’986 Patent’s IPR proceedings independently amounts to a clear and unmistakable disclaimer of the scope of “edge switch.” *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017) (“In conclusion, we hold that statements made by a patent owner an IPR proceeding, whether before or after an institution decision, can be considered for claim construction and relied upon to support a finding of prosecution disclaimer.”). In fact, the PTAB endorsed this same definition of “edge switch,” stating: “[t]he ’986 patent describes what constitutes access switches, core switches, and edge switches. . . . Edge switches are ‘[c]ore switches that are directly connected to access switches.’ [’986 Patent] at 1:36–38.” Ex. 7 (’986 Patent IPR Institution Decision) at 7. Yet, neither Portsmouth nor Dr. Olivier addressed or even considered Portsmouth’s explicit statement. *See*

Dkt. No. 78 (Op. Br.) at 3–5; Dkt. No. 78-A (Olivier Decl.) ¶¶ 18–22. And Dr. Olivier admitted that he did not review the POPR “in any great detail.” Ex. 5 (Olivier Dep. Tr.) at 14:3–12.

Portsmouth fails to explain why its proposed plain and ordinary meaning should be adopted over the ’986 Patent’s explicit definition. Portsmouth summarily states that its “construction is supported by the intrinsic evidence,” but simply string-cites passages from the specification with no explanation. Dkt. No. 78 (Op. Br.) at 3. And Portsmouth’s single sentence purporting to demonstrate how Figure 1 supports its construction makes no mention of “edge switch,” and instead exclusively discusses access switches. *Id.* at 3–4. Portsmouth then points to Dr. Olivier’s declaration and a technical dictionary from 2007 (five years after the ’986 Patent’s priority date of January 7, 2002), but neglects to explain why that should inform the understanding of a person of ordinary skill in the art as of January 7, 2002 or should trump the explicit intrinsic definition. *Id.* at 4; Dkt. No. 78-A (Olivier Decl.) ¶ 19; *see also* Ex. 5 (Olivier Dep. Tr.) at 67:22–25. Dr. Olivier testified that he thinks Portsmouth’s construction is better than Cisco’s because the ’986 Patent’s statement on edge switches “contradicts how ‘edge switch’ is used in the art.” *See id.* at 61:9–13 (“Q. And so is it your view that the ’986 patent -- the ’986 patent’s use of the term ‘edge switch’ contradicts how ‘edge switch’ is used in the art? A. That particular statement does.”); *see also id.* at 59:8–62:2. But Dr. Oliver gets the legal standard wrong; where a patentee acts as “its own lexicographer by providing a definition [] in the specification, the definition in the specification controls the meaning [], regardless of any potential conflict with the term’s ordinary meaning as reflected in technical dictionaries.” *3M Innovative Properties Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1374 (Fed. Cir. 2003). Accordingly, Portsmouth’s proposed plain and ordinary construction fails.

Finally, Portsmouth half-heartedly contends that “Cisco’s proposed construction of edge switch would only further muddy the waters,” because it relies on the disputed term “access switch.” Dkt. No. 78 (Op. Br.) at 4–5. But as explained below, “access switch” is also defined in the ’986 Patent, clearing any “muddiness.” Every asserted claim that uses the term “edge switch” also uses or depends on a claim that uses the term “access switch,” so both terms must be understood together regardless of whether they are defined in relation to each other or not. Ex. 1 (’986 Patent) at Claims 1, 4, 6–8, 11, 16, 19–20. Moreover, Cisco’s “edge switch” construction does not present any ambiguity because it comes directly from the ’986 Patent’s specification and Portsmouth’s own POPR statements. Accordingly, the Court should adopt Cisco’s construction.

2. “access switch”

Claims	Portsmouth’s Construction	Cisco’s Construction
1, 2, 5, 6, 10, 11, 13, 17, 22	Plain and ordinary meaning OR “Switch providing access to a network”	“switch with ports that connect to LANs and/or to other network endpoints”

Like “edge switch,” Cisco’s construction for “access switch” finds root in the patentee’s own definition and Portsmouth’s clear and unmistakable POPR disclaimer, and, as such Portsmouth’s proposal of plain and ordinary meaning cannot be correct. *See Golden Bridge*, 758 F.3d at 1365 (stating that plain and ordinary meaning does not apply in cases of patentees being their own lexicographer and disavowal of claim scope).

The patentee again acted as his or her lexicographer, defining an “access switch” in the “Background of the Invention” section as a switch that “has ports that connect to LANs and/or to other network endpoints, such as user computer systems.” Ex. 1 (’986 Patent) at 1:30–32. Additional references to “access switch” throughout the ’986 Patent confirm the patentee’s intended definition. *See id.* at FIGS. 1–3; Abstract; 1:26–38; 2:7–22; 3:15–41; 3:65–4:54; 7:9–8:44; 9:26–10:50; all claims. Indeed, Portsmouth’s expert, acknowledges that the ’986 Patent

“mentions that ‘[t]ypically, users are connected to access switches 26 and 27 by a LAN’” and “discloses that the multiple users 22 ‘are connected via access switches 26 and 27.’” Dkt. No. 78-A (Olivier Decl.) ¶ 27 (quoting Ex. 1 (’986 Patent) at 7:12–14, 7:43–46).

To the extent there is any question that the patentee acted as a lexicographer, Portsmouth resolved such doubt with unambiguous statements to the PTAB: “[t]he ’986 patent further **defines** an access switch as a switch with ‘ports that connect to LANs and/or to other network endpoints, such as user computer systems.’ [’986 Patent at] 1:30–32.” Ex. 6 (’986 POPR) at 13. Thus, Portsmouth clearly and unmistakably disclaimed the scope of “access switch” by relying on the same definition at column 1, lines 30 to 32 in its POPR. And the PTAB recognized that “[t]he ’986 patent describes what constitutes access switches, core switches, and edge switches. Access switches have ‘ports that connect to LANs and/or to other network endpoints, such as user computer systems.’ [’986 Patent at] 1:31–33.” Ex. 7 (’986 Patent IPR Institution Decision) at 7. Tellingly, just as was true for “edge switch,” neither Portsmouth nor Dr. Olivier even considered Portsmouth’s POPR statement in its Opening Brief or opinions, respectively. See Ex. 5 (Olivier Dep. Tr.) at 14:3–12; *see also* Dkt. No. 78 (Op. Br.) at 5; Dkt. No. 78-A (Olivier Decl.) ¶¶ 23–27.

Portsmouth and Dr. Olivier concede that “an access switch can connect to LANs and network endpoints,” but assert that access switches are not limited to that definition. Dkt. No. 78 (Op. Br.) at 5; Dkt. No. 78-A (Olivier Decl.) ¶¶ 25–27; Ex. 5 (Olivier Dep. Tr.) at 72:9–73:20. But the ’986 Patent **defines** “access switch” in its “Background of the Invention” and Portsmouth’s POPR **disclaimed** other access switches based on that definition. Ex. 5 (Olivier Dep. Tr.) at 74:6–14 (“Q. And this passage describing an access switch in the ’986 patent is not correlated to a specific embodiment, correct? A. It’s in the ‘Background of the Invention,’ correct. Q. And so this sentence in the ‘Background of the Invention’ section does not correlate to a specific

embodiment? A. Correct.”). Thus, Cisco’s construction properly covers the full meaning of “access switch” as it appears in the ’986 Patent, as a whole. *See C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 864 (Fed. Cir. 2004) (“Statements that describe the invention as a whole, rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term.”).

Accordingly, the Court should adopt Cisco’s construction for “access switch.”

B. The ’279 Patent

1. “quantum”

Claim	Portsmouth’s Construction	Cisco’s Construction
1, 14, 15, 18	Plain and ordinary meaning, which is “amount” ²	“an amount of a requested resource by which to increase or decrease”

The Court should adopt Cisco’s construction for “quantum” because it comes from the express definition in the specification of the ’279 Patent and provides the correct meaning of the disputed term. Crucially, Cisco’s construction credits a key aspect of the claimed invention—that “[r]esources are allocated in quanta in order to limit the frequency with which allocation and deallocation operations must be performed.” Ex. 2 (’279 Patent) at 5:28–30. Conversely, Portsmouth’s proposal improperly disregards (or misinterprets) intrinsic evidence, and Portsmouth’s equation of “quantum” to “amount” would negate the key claimed benefit of reducing the frequency of requesting and allocating additional resources.

As previously noted, a court will deviate from the plain and ordinary meaning of a term “when a patentee sets out a definition and acts as his own lexicographer.” *Golden Bridge Tech.*, 758 F.3d at 1365. This is exactly what the patentee did here. The ’279 Patent defines

² In its opening brief, Portsmouth explained that “the plain and ordinary meaning of [quantum] . . . is simply an ‘amount.’” Dkt. No. 78 (Op. Br.) at 7 (citing Dkt. No. 78-A (Olivier Decl.) ¶ 33).

“node_quantum—Amount by which to increase or decrease node_used_In or Out at each resource allocation or deallocation.” Ex. 2 (’279 Patent) at 5:26–28. In other words, the specification defines “quantum” as “an amount of a requested resource by which to increase or decrease.” Indeed, Portsmouth relies on this *same language* to support its construction of “amount,” yet it offers no explanation for why the Court should disregard the rest of the patentee’s definition. Dkt. No. 78 (Op. Br.) at 7.

The claims themselves further demonstrate that quantum is “an amount of a requested resource by which to increase or decrease,” and not just any “amount” as Portsmouth argues. The first step of the “method for routing a data flow,” claimed by Claim 1, is “allocating a respective number of quanta of one or more resources in the network to each of the nodes.”³ The specification explains that “[r]esources are allocated in quanta in order to limit the frequency with which allocation and deallocation operations must be performed.” Ex. 2 (’279 Patent) at 5:28–30. In other words, when a node is allocated resources in *quanta* (i.e., increments of quantum as opposed to being allocated the exact *amount* of resources it needs for that request), the node can retain an amount of unused resources (the difference between the quanta and the actual amount that was needed for the data flow). Thus, in subsequent data flows, that node can utilize the unused resources remaining in those quanta without requesting or allocating additional resources. Ex. 2 (’279 Patent), Claim 1 (“if the resources already allocated to the first node on one of the paths are sufficient, directing the data flow from the first node to the second node over the one of the paths without requesting additional resources”); Dkt. No. 80 (Cisco’s Technology Tutorial) at 6:50–8:00 (using a wallet analogy to explain that remaining resources in a previously requested quanta can be used by a later data transfer without another request). As a result, the system will request

³ “Quanta” is the plural of “quantum.”

additional resources less frequently, lowering the burden on the system. *See* Ex. 2 ('279 Patent) at Claim 1 (claiming “requesting an increase in an allocation to the first node” only in the event that “the resources already allocated to the first node are insufficient”); *id.* at 5:28–30.

The patentee provided similar explanations during prosecution:

Claim 1, as amended, specifies that resources are allocated to nodes in the network in predetermined quanta. . . . ***[A]llocation of resources in quanta of this sort is useful in limiting the frequency with which allocation and deallocation operations must be performed.***

Ex. 8 ('279 File History) Oct. 25, 2004, Office Action Response at 9. *See also id.* at 9–10:

Original claim 9 in the present patent application recites increasing the allocation of a resource by a predetermined quantum. . . . ***[R]esources are specifically requested by the nodes and allocated to them in quanta, in order to reduce the communication and computing burden that are involved in frequently changing allocations.***

See also id. Jul. 6, 2005, Office Action Response at 7:

The node may then receive an increased allocation of resources on one of the paths by a predetermined quantum. . . . ***[T]his mode of allocation is useful in limiting the frequency with which allocation and deallocation operations must be performed.***

Thus, a quantum is an amount of resources by which to increase or decrease that does not result in the exact amount being allocated each time. Because of that, allocating in quanta reduces the frequency of requested allocations relative to the frequency of data flow requests.

Tellingly, the patentee explicitly distinguished and disclaimed prior art where exact bandwidth amounts were used instead of “quanta:”

When Drake's⁴ QoS management station . . . allocates a QoS transmission path for a multimedia file, it determines the exact bandwidth required and subtracts the bandwidth from each component on the path (col. 11, lines 11-21).

⁴ Drake refers to U.S. Patent No. 5,461,611, which is prior art to the '279 Patent. *See* Ex. 14.

Id. The patentee explained that unlike the prior art’s usage of exact amounts, in the alleged invention of the ’279 Patent, the node can use its own resources left over from the allocated quanta without requesting additional resources:

Drake does not teach or suggest the possibility that a node could use its own allocated quanta of resources to carry a data flow, without requesting additional resources, if the allocated resources are sufficient.

Id. Indeed, Portsmouth’s expert ***agrees*** that allocating resources in quanta is distinct from allocating exact amounts:

Q. And ***what are other ways of allocating resources*** that a person of ordinary skill in the art would know of ***besides doing so in predetermined quanta?***

A. You could ***just request the exact value*** you need for the resource.

Ex. 5 (Olivier Dep. Tr.) at 98:8–13. Thus, a quantum in the context of the ’279 Patent is not just an “amount.” In fact, a quantum ***cannot be*** the exact amount needed for each request as that would not reduce the frequency of resource requests and allocations.

Portsmouth argues that column 7, lines 20 to 24 of the specification show that its construction is correct, but those lines support ***Cisco’s*** construction, not Portsmouth’s. ***First***, Portsmouth appears to contend that “quantum” is not tied to the “amount of the requested resource” because the specification discusses the concept of “returning a quantum to the dispatcher.” Dkt. No. 78 (Op. Br.) at 7 (quoting Ex. 2 (’279 Patent) at 7:20–24)). But Cisco’s construction allows for an “increase ***or decrease***” in allocated quantum, consistent with the specification’s description of Figure 5 whereby a network may request to decrease the allocated quanta.⁵ Consistent with Cisco’s construction, “quantum” is always tied to an amount that a requested resource is increased

⁵ See Ex. 2 (’279 Patent) at FIG. 5, 7:10–7:11 (“In this case, the node asks the dispatcher to ***remove one quantum*** from its allocation.”).

or decreased. **Second**, Portsmouth incorrectly suggests that “quantum” and “resource” are interchangeable when a node considers whether to keep resources for subsequent requests, replacing the word “resource” with “[quantum]” in its specification quote. See Dkt. No. 78 (Op. Br.) at 7 (“For example, the ’279 Patent describes a ‘resource retainment step’ in which a node instead of ‘returning a quantum to the dispatcher . . . keeps the [quantum] for subsequent use.’”) (alterations in original). But that is the opposite of what specification teaches. Instead, the ’279 Patent explains that “if [the] amount of released resource does not justify returning a **quantum** to the dispatcher,”—in other words, there is less than a quantum available to return—“the node keeps the **resource** for subsequent use, at a resource retainment step 58.” Ex. 2 (’279 Patent) at 7:20–24 (emphasis added). Thus, contrary to Portsmouth’s altered quotation, the resource that is retained is less than a quantum. **Third**, the specification’s use of the terms “amount” and “quantum” separately demonstrates that they do not have the same meaning. *Id.* (“if [the] **amount** of released resource does not justify returning a **quantum** to the dispatcher”). Because the “amount” of that resource is explicitly **not** a “quantum,” a quantum cannot be returned to the dispatcher. See *id.* at 7:3–10, FIG. 5. Thus, Portsmouth’s specification quote supports Cisco’s construction.

For these reasons, the Court should adopt Cisco’s construction for “quantum.”

2. “predetermined”

Claims	Portsmouth’s Construction	Cisco’s Construction
1, 10, 14–16, 18	Plain and ordinary meaning, which is “determined beforehand” ⁶	“determined before the data flow request”

Portsmouth’s proposal to construe this term as “determined beforehand” wholly sidesteps the dispute between the parties—namely, determining the “quantum” **before what**? On the other

⁶ In its opening brief, Portsmouth explained that “the plain and ordinary meaning to [predetermined] . . . is ‘to determine beforehand.’” Dkt. No. 78 (Op. Br.) at 6 (citing Dkt. No. 78-A (Olivier Decl.) ¶ 28).

hand, Cisco’s proposal resolves the dispute by explaining that the “quantum” is “determined **before the data flow request.**” Portsmouth’s proposed non-construction essentially asks the Court to improperly leave this dispute to the jury. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (“When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute.”). The Court should adopt Cisco’s construction because it resolves the parties’ dispute as to claim scope and is directly supported by the language of the claims and the specification.

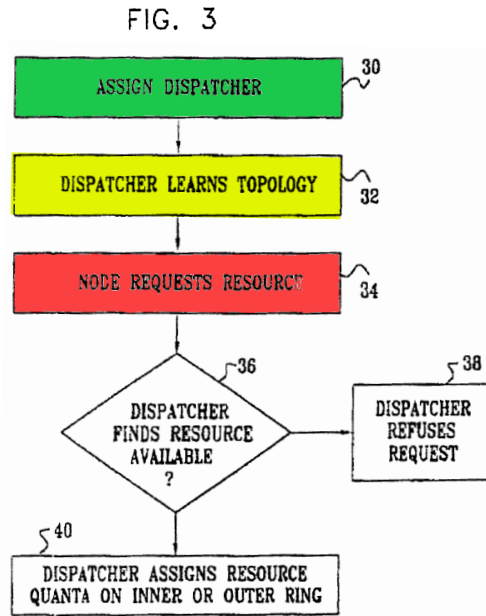
Claim 1 of the ’279 Patent resolves this dispute. The first step of the claimed “method for routing a data flow” is “**allocating a respective number of quanta** of one or more resources in the network to each of the nodes,” followed by “**receiving a request at the first node to . . . carry the data flow**” (*i.e.*, the data flow request), and then, if the available resources are insufficient, “requesting an increase in an allocation to the first node of the requested resources . . . [and] **in response to [that] request, . . . increasing the allocation** of resources to the first node on the selected path by a **predetermined quantum.**” Ex. 2 (’279 Patent) at Claim 1. This claim language demonstrates two facts. *First*, the node had been allocated quanta (at step 1) **before** any data flow request had been made (at step 2), confirming that the size and type of a quantum is known **before** the data flow request. *Second*, the “predetermined quanta” recited by the last step of Claim 1 uses the term “predetermined quantum” to refer back to the same type and size of quanta that were allocated in the first step of Claim 1 (quanta that are determined before the data flow request).

Although Portsmouth concedes that predetermined means “determined **beforehand,**” Portsmouth argues that a quantum amount can be “determined at any point before the system increases the allocation of resources to the first node on the selected path by a predetermined quantum.” Dkt. No. 78 (Op. Br.) at 6 (internal quotations omitted). In other words, Portsmouth’s

proposal states that the quantum may be “predetermined” at any point before the last step of Claim 1. But the whole point of using the phrase “predetermined quantum” in the last step of Claim 1 is that it is the same quantum increment that was used to “allocat[e] the respective number of quanta” in the first step of Claim 1. If Portsmouth were correct that the “predetermining” could happen at any point, then the claim could have eliminated the word “predetermined” altogether and simply claimed “increasing the allocation of the recourses to the first node on the selected path by a [] quantum.” Ex. 2 (’279 Patent) at Claim 1 (omitting “predetermined”). Obviously, that quantum needs to be known (or determined) in order to allocate it in the last step of the claim. The Court should reject Portsmouth’s attempt to read out the “predetermined,” requirement because “[i]t is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.” *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 (Fed. Cir. 2017).

The ’279 Patent’s specification confirms that initial setup of the network occurs before the data flow request and includes configuring the quantum, further supporting Cisco’s construction. Figure 3 (shown in color below) depicts the initial setup of the claimed network. **First**, “[i]n preparation for this method, a dispatcher entity is chosen or assigned . . . at an assignment step 30” (green). Ex. 2 (’279 Patent) at 5:59–63. **Second**, “[a]t a learning step 32, [the] dispatcher [] learns the topology . . . and builds the tables of network information to be used subsequently in flow allocations” (yellow). *Id.* at 6:6–10. Notably, “**the dispatcher is configured with** the following parameters for each of the nodes with respect to each of the resources . . . **node_quantum**—Amount by which to increase or decrease node used In or but at each resource allocation or deallocation.” *Id.* at 5:14–27. Indeed, even “each node [] maintains its own record of the . . . node_quantum.” *Id.* at 5:34–50. Thus, the quantum is predetermined and known by both the dispatcher and requesting node at the step where the dispatcher learns the topology (in yellow).

Third, after that predetermination, the “node receives a request from one of its clients to send data to another node” *in step 34* (red), i.e., a data flow request is made. *Id.* at 6:11–14.



Ex. 2 ('279 Patent) at FIG. 3 (annotation added).

Thus, Figure 3 and its surrounding description—like the claims—confirm that the quantum is determined *before* the data flow request. Portsmouth’s suggestion that “predetermined” means that “the quantum can be determined at any point before the system increases ‘the allocation of resources’” (which is in step 40 long after the configuration of quanta) runs contrary to this teaching and finds no support in the specification.

Portsmouth’s proposal also is contradicted by other portions of the specification. For example, the '279 Patent explains that “in response to a request by a node to allocate a quantum of resources, *the dispatcher checks whether allocation of the additional quantum will put the node over budget* on either or both rings.” Ex. 2 ('279 Patent) at 7:30–33. The only way to check whether the allocation of additional quantum will put the node over budget is to know the size of the quanta. Thus, at least by the time of a request to increase allocation, the quantum is known

and used by the system. *Id.* Portsmouth’s understanding that the quantum need not be determined until the very last step of the claim, after all of the requests, also runs counter to these teachings.

Portsmouth’s suggestion that there could be multiple “predeterminations” of the quantum—the first at the initial setup; and then a second “re-predetermination” that can change the predetermined quantum size right before the last step of allocating an additional predetermined quantum—finds no support in the claims or specification. Indeed, Portsmouth does not—and cannot—find any support for any assertion that a second “predetermination” of a quantum occurs at the very end of the process. In sum, as the claims themselves and the specification demonstrate, the quantum used by the ’279 Patent is determined once. That determination occurs at the outset of the process when quanta are first configured in the system and before any data flow requests. And that “predetermined quantum” is then used in the last step of the process of Claim 1.

Accordingly, the Court should adopt Cisco’s construction for “predetermined.”

C. The ’394 Patent

1. “a high-capacity port”

The parties agree that “a high-capacity port” is “a port formed by aggregating two or more ports.” Thus, this construction is no longer in dispute.

2. “a new processing unit added to the network element”

Claims	Portsmouth’s Construction	Cisco’s Construction
8, 18	Plain and ordinary meaning	“a processing unit newly-inserted into the network element”

As described in the specification of the ’394 Patent, the way in which a person of ordinary skill in the art would add a new processing unit to a network element is by inserting it into the network element. *See, e.g.*, Ex. 3 (’394 Patent) at 9:41–53. Portsmouth proposes no other purported method. Dkt. No. 78 (Op. Br.) at 9. Instead, Portsmouth asks the Court to construe this term as “plain and ordinary meaning,” while simultaneously conceding that a POSITA would need

to look to specification to understand this term's meaning. Dkt. No. 78 (Op. Br.) at 9; *see also* Dkt. No. 78-A (Olivier Decl.) ¶ 38. The Court should reject Portsmouth's contradictory invitation and adopt Cisco's well-supported construction.

Cisco's proposal is necessary and reflects the plain meaning provided by the specification:

When ***a new line card is inserted*** into an active network element, ***the NP of the new line card*** runs a process that updates its filtering database. Typically, ***the NP of the new line card*** disables its local ports 44 for a certain period of time (e.g., by setting the ADMIN_STATUS of these ports to DOWN), during which a multicast status update request (e.g., an IGMP general query) is transmitted through all the ports of the network element. The multicast content clients respond to the status update request, thus allowing ***the newly-added NP*** to update its local filtering database, port counters and aging counters. When the database and counters are up-to-date (or after a certain time out), the NP activates the ports ***of the newly-inserted line card***, and may start normal operation.

Ex. 3 ('394 Patent) at 9:41–53. Notably, Cisco does not limit its construction to a type of line card or even to a specific type of processing technology, generally. Instead, Cisco's construction of “a new processing unit added to the network element” is broad enough to cover any type of processing unit that is newly-inserted into a network element. Further, Cisco's construction is correct because the '394 Patent's primary description of adding a new processing unit to a network element comes directly from the paragraph above, which refers to the processing unit being added as “the newly-inserted line card.” Ex. 3 ('394 Patent) at 9:52–53. Indeed, Portsmouth states as much in opening. In Portsmouth's “Background Of The Technology” section, it asserts that “[t]he '394 patent also discloses ways to adjust to other changes in the network, such as ***when a new line card is inserted***.” Dkt. No. 78 (Op. Br.) at 2. In addition, when asked if he was “aware of any part of the '394 Patent's specification that uses a different word other than ‘insert’ to convey the addition of a new processing unit,” Portsmouth's expert was unable to identify any other example. Ex. 5 (Olivier Dep. Tr.) at 123:19–23.

Portsmouth complains both that Cisco’s construction adds a “temporal limitation,” and also that “Cisco does not address how soon a processing unit must be inserted to be considered ‘newly-inserted.’” Dkt. No. 78 (Op. Br.) at 10. Cisco adds no such limitation; instead, it uses the word “new,” which is the *same* word used in the claim term itself. Thus, to the extent Portsmouth believes there is a temporal ambiguity in the claim term “a *new* processing unit added to the network element,” it should have proposed a construction for the term “new.” If anything, Cisco’s proposal better resolves this ambiguity by explaining that “new” refers to “newly-inserted.” In other words, under Cisco’s proposal, the processing unit may have been “old” and “used” in a different network element before, or it may have never been used, but not be “new” because it was purchased several years ago and is thus considered “old.” Cisco’s proposal thus clarifies—consistent with the exact words used by the specification—that “new” refers to the fact that it is “newly-inserted,” as opposed to, for example, newly-purchased.

Portsmouth’s complaint that a person of ordinary skill in the art would not understand the temporal nature of “newly-inserted” raises a problem with the claim term itself, not with Cisco’s specification-rooted construction. Specifically, *the claims* recite the word “new” but fail to define “how soon a processing unit must be [added] for it to be considered” a new processing unit. *Id.* To the extent the Court agrees with Portsmouth’s contention that “a POSITA would not understand the particular temporal requirements” of the claim term “without additional detail” (*id.*), the Court should find that claims 8 and 18 are indefinite.

The Court should also reject Portsmouth’s request for “plain and ordinary meaning” because there is no “plain and ordinary meaning” of the term in the art, and Portsmouth’s brief demonstrates that the understanding of the claims comes directly from the specification.

First, as Portsmouth’s expert recognizes, a POSITA would not understand this claim term to have a well-understood meaning in the art. Dkt. No. 78 (Op. Br.) at 9 (citing Dkt. No. 78-A (Olivier Decl.) ¶ 38) (“The term ‘a new processing unit added to the network element’ does not have a specific meaning in the art.”); *see also* Dkt. No. 78-A (Olivier Decl.) ¶ 38 (“‘A new processing unit added to the network element’ is a term that does not have a specific meaning in the art.”). The Court should not construe this term as plain and ordinary meaning because it has “no commonly understood meaning reflected in general dictionaries or similar sources,” and it does not “have a ‘particular meaning in a field of art.’” *Davis-Lynch, Inc. v. Weatherford Int’l, Inc.*, No. 6:07-cv-559, 2009 WL 1097510, at *14 (E.D. Tex. Apr. 20, 2009) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–14 (Fed. Cir. 2005)).

Second, Portsmouth’s attempt to sidestep its own expert’s analysis falls flat. Portsmouth tries to contradict Dr. Olivier by contending that “a POSITA would understand the plain language of the term without the need for any additional construction *in view of the ’394 patent’s disclosure*.” Dkt. No. 78 (Op. Br.) at 9. But that last clause gives the truth away. Portsmouth concedes that a POSITA would need to consult the specification to learn that the network element 32 includes line cards 36 that “can be inserted and removed.” Dkt. No. 78 (Op. Br.) at 9 (citing and quoting Ex. 3 (’394 Patent) at 9:41–43; 6:47–49; 6:23–24). Because artisans would need to understand this term in light of the intrinsic record—as the parties and Portsmouth’s expert agree—the Court should adopt Cisco’s intrinsic-record-based definition instead of a nebulous “plain and ordinary” meaning. *Stingray IP Sols., LLC v. Legrand*, No. 2:21-cv-00193-JRG, 2022 WL 1138202, at *8–*10 (E.D. Tex. Apr. 14, 2022) (construing a claim term when “[n]either party proffers a ‘plain and ordinary meaning’ of the term,” and noting the Examiner found the term “has no specific meaning in neither the claims nor the specification.”); *see also Blue Spike, LLC v.*

Texas Instruments, Inc., No. 6:12-cv-499-MHS-CMC, 2014 WL 5299320, at *29–*30 (E.D. Tex. Oct. 16, 2014) (quoting *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 906 (2014)) (construing a claim term that Defendant argued “has no specific meaning in the art,” noting that “the ‘claims viewed in light of the specification . . . , inform those skilled in the art about the scope of the invention with reasonable certainty.’”), objections overruled, No. 6:12-cv-499, 2015 WL 12911327 (E.D. Tex. June 24, 2015).

In *Stingray*, this Court stated that “[a] skilled artisan looking at the claims and seeing this term would have looked first to the specification for clarification (where the term is not used) and then to the prosecution history, where he would have found the applicant’s definition.” *Id.* at *10. Here, like in *Stingray*, a POSITA would have understood the meaning of this term by looking to the intrinsic record, which expressly describes the scenario “[w]hen **a new line card is inserted** into an active network element,” and when “the NP activates the ports **of the newly-inserted line card.**” Ex. 3 (’394 Patent) at 9:41–42, 52–53.

Accordingly, the Court should adopt Cisco’s construction for “a new processing unit added to the network element” as meaning “a processing unit newly-inserted into the network element.”

3. “multicast packet stream”

Claims	Portsmouth’s Construction	Cisco’s Construction
1, 3–18	Plain and ordinary meaning OR “A packet stream that can be sent to multiple devices”	“the actual content coming from a multicast source, such as a channel or movie”

Cisco’s proposal mirrors statements Portsmouth made to the PTAB in its ’394 POPR for the purposes of preserving the validity of the claims. The Federal Circuit “[e]xtend[ed] the prosecution disclaimer doctrine to IPR proceedings[.]” *Aylus*, 856 F.3d at 1360. And Cisco’s proposal merely seeks to “hold Plaintiff to [its] representation” made to the PTAB. *See Ramot at Tel Aviv Univ. Ltd. v. Cisco Sys., Inc.*, No. 2:19-cv-225, 2020 WL 2517581, at *16 (E.D. Tex. May

15, 2020); *see also Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-cv-52-JRG-RSP, 2017 WL 4385567, at *3 (E.D. Tex. Sept. 9, 2017), report and recommendation adopted, No. 2:16-cv-52-JRG-RSP, 2017 WL 4310161 (E.D. Tex. Sept. 28, 2017) (“Regardless of whether an examiner or panel agreed with the patentee’s statement, the statement itself may result in disclaimer because it constitutes a representation to the public about the scope of the patent.”) (internal citations omitted). Here, Portsmouth represented that this term has a clear and specific meaning:

The ’394 patent is clear that the multicast packet or content stream refers to the actual content coming from a multicast source, such as a TV channel or movie, and not a multicast group itself.
EX1001, 5:66–6:3 (“Source 24 may transmit multicast packet streams that carry, for example, live IP Television (IPTV) channels, video movies, audio content, stock quotes and/or any other suitable type of multicast content”).

Ex. 9 (’394 POPR) at 11. In other words, Portsmouth expressly disclaimed the possibility that the claimed multicast packet stream can refer to a multicast group. Rather, the multicast packet stream must mean the actual content coming from a multicast source, such as a TV channel or movie. Portsmouth’s disclaimer was not an off-hand comment; instead, its disclaimer buttressed its validity arguments and accords with the specification. *Id.* at 11–12.⁷

Despite Portsmouth’s express disclaimer, Portsmouth contends that Cisco improperly reads limitations from the specification into the claims. Dkt. No. 78 (Op. Br.) at 10. For support, Portsmouth again relies on the expert testimony of Dr. Olivier. *Id.* at 10–11. But Dr. Olivier never considered the key intrinsic evidence for this dispute—the ’394 Patent POPR. *Compare* Dkt. No.

⁷ Portsmouth distinguished the prior art W.O. 2007/140702 to Li *et al.* (“Li”), arguing that “a channel, or multicast group, is different from a multicast packet stream.” *Id.* at 11–12. Li was originally published in Chinese. The IPR included EX1006 (the original publication) and EX1007 (the certified English translation of EX1006). *See* Exs. 10–11. Portsmouth’s disclaimer also is consistent with the ’394 Patent’s specification. Dkt. No. 78 (Op. Br.) at 11 (quoting Ex. 3 (’394 Patent), 5:66–6:3 (“Source 24 may transmit multicast packet streams that carry, for example, live IP Television (IPTV) channels, video movies”))).

78-A (Olivier Decl.) ¶ 38 (“My opinion . . . is informed by a review of the intrinsic evidence”) *with* Ex. 5 (Olivier Dep. Tr.) at 45:2–6 (“Q. You’d agree that IPRs are also included in what’s considered intrinsic evidence. True? A. I believe they’re part of the prosecution history, yes.”) *and with* Ex. 5 (Olivier Dep. Tr.) at 131:3–5, 17–18 (“Q. Do you recall if you reviewed Portsmouth’s preliminary response for the ’394 patent IPR? A. I don’t believe I did A. Okay. Like I said, it’s the first time me seeing it, so –”) *and with* Ex. 5 (Olivier Dep. Tr.) at 134:3–11 (“Q. And so sitting here today, you have not taken a read of Portsmouth’s preliminary response? A. Correct. I think we went over that earlier.” Q. And so Portsmouth’s preliminary response didn’t factor into any of your claim construction opinions for the ’394 patent? A. Correct.”). Further, Dr. Olivier admitted that Portsmouth’s statements align with Cisco’s proposal:

Q. And so here Portsmouth is stating that the ’394 patent makes clear that the multicast packet stream or the multicast content stream is referring to the actual content, right?

A. Makes it clear that the multicast packet or content stream refers to the actual content coming from the multicast source and is not a multicast group itself. Okay.

Q. So Portsmouth is saying that the multicast packet or content stream refers to the actual content itself, right?

. . . .

A. I guess I’d have to read everything that’s going on in front of it to see what they’re talking about. ***So that’s what they’re saying here, yes, that the multicast packet or content stream refers to the actual content coming from a multicast source, such as a TV channel or movie, and not the multicast group.***

Q. And just to clean the record, you would agree that Portsmouth is saying that the multicast packet or content stream refers to the actual content itself, right?

A. I can only read what they said here, which is, the actual content coming from a multicast source, such as a TV channel or movie, and not a multicast group itself.

Ex. 5 (Olivier Dep. Tr.) at 132:10–133:12.

Because Portsmouth expressly disclaimed claim scope to the PTAB to preserve validity, the Court should adopt Portsmouth’s clear and unmistakable disclaimer.

D. The ’637 Patent

1. “a network” / “a communication network”

Claims	Portsmouth’s Construction	Cisco’s Construction
1, 2, 16–25	Plain and ordinary meaning	“a VPLS network”

Cisco’s construction reflects the scope of the ’637 Patent as a whole relating to VPLS networks. “When a patent describes the features of the ‘present invention’ as a whole, this description limits the scope of the invention.” *Wastow Enterprises, LLC v. Truckmovers.com, Inc.*, 855 F. App’x 748, 750 (Fed. Cir. 2021) (quoting *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007) (internal quotations omitted)). That is the case here, where the ’637 Patent’s specification explains: “[t]he present invention relates generally to communication networks, and **particularly to methods and systems for providing virtual private LAN services (VPLS).**” Ex. 4 (’637 Patent) at 1:16–19.

The dispute here is almost identical to a dispute that the Federal Court decided in *Wastow*. 855 F. App’x at 750–52. In *Wastow*, the Federal Circuit construed the generic claim term “device” as limited to a “universal folding boom trailer,” where the patent stated that the present invention related to a “universal folding boom trailer.” *See id.* at 750. Here too, the ’637 Patent states that the present invention relates to VPLS. Ex. 4 (’637 Patent) at 1:16–19. Portsmouth argues that the Court should ignore the fact that the invention states that it relates particularly to VPLS because the first half of the present invention sentence states that the patent “relates generally to communication networks,” (Dkt. 78 (Op. Br.) at 8), but that was also the case in *Wastow*. The patent at issue in *Wastow* stated, “[t]he present invention relates generally to a method and

apparatus for transporting and delivering multiple trucks, **and in particular, to a universal folding boom trailer**” 855 F. App’x at 750 (citing ’583 Patent at 1:19–23). The “general” language thus does not indicate an intent to broaden the scope of the patent, but rather states the broader field of the particular invention. *See id.*

Not only does the ’637 Patent state that the present invention relates “particularly to **methods and systems for providing virtual private LAN services (VPLS)**,” but the title of the patent itself is “**VPLS Remote Failure Indication**.” Ex. 4 (’637 Patent) at Title. This is again the same as the *Wastow* patent, where the Federal Circuit explained that the patent’s title, “Universal Folding Boom Trailer,” further supported construing “device” to mean “Universal Folding Boom Trailer.” *Wastow*, 855 F. App’x at 751. The Federal Circuit explained that especially where the present invention related to that particular device, the patent’s title “indicates that a relevant artisan would understand that the claims require a universal folding boom chair.” *Id.* (citing *Ruckus Wireless, Inc. v. Innovative Wireless Solutions, LLC*, 824 F.3d 999, 1003 n.2 (Fed. Cir. 2016) (“We have used the title of a patent to aid in claim construction.”); *Forest Lab ’ys, LLC v. Sigmapharm Lab ’ys, LLC*, 918 F.3d 928, 933 (Fed. Cir. 2019) (partly relying on the patent’s title when limiting claim’s scope); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 823 (Fed. Cir. 2016) (same)). Here too, just as in *Wastow*, where the ’637 Patent explicitly states that its present invention relates to VPLS and the title is “VPLS Remote Failure Indication,” the “title thus reinforces what the written description makes clear.” *Wastow*, 855 F. App’x at 751.

Portsmouth argues that Cisco’s construction is “contrary to the claims and specification of the ’637 Patent,” (Dkt. No. 78 (Op. Br.) at 8), but the rest of the specification is consistent with the field of invention and patent title. The Federal Circuit has repeatedly explained that “an inventor may disavow claims lacking a particular feature when the specification describes ‘the

present invention’ as having that feature.” See *Wastow*, 855 F. App’x at 750 (quoting *Poly-America, L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016); citing *Luminara Worldwide, LLC v. Liown Elecs. Co.*, 814 F.3d 1343, 1353 (Fed. Cir. 2016)). Here, like in *Wastow*, “the specification does just that.” See *Wastow*, 855 F. App’x at 750. For example, the “Background of the Invention,” for the ’637 Patent starts, “[v]irtual private local area network services (VPLS) is a multipoint-to-multipoint (MP-MP) service, which emulates local area network (LAN) functionality over provider networks.” Ex. 4 (’637 Patent) at 1:21–26. The next three paragraphs continue to explain VPLS networks, and only VPLS networks. *Id.* at 1:21–57. Additionally, *all* embodiments disclosed by the ’637 Patent consider a VPLS network. See, e.g., *id.* at 5:26–46 (reproduced in part below).

For example, in FIG. 1, user node 24A is connected through a local routing network to ring node 32A using two separate links 44A and 48A. **Links 44A and 48A are associated with VPLS1 and VPLS2, respectively.** Similarly, endpoints 24B, 24C and 28 are connected to their **ring nodes using VPLS1** over links 44B . . . 44D, **and using VPLS2** over links 48B . . . 48D, respectively Thus, the endpoints of network 20 are able to communicate via two alternative topologies. **The first topology, which uses VPLS1**, comprises the ring network and links 44A . . . 44D. **The second topology, which uses VPLS2**, comprises the ring network and links 48A . . . 48D. The first and second topologies defined above are respectively referred to herein as the “**VPLS1 topology**” and the “**VPLS2 topology**” for brevity. . . .

See also *id.* at 7:40–45 (reproduced below).

FIG. 3 is a flow chart that schematically illustrates a method for protecting network traffic, in accordance with an embodiment of the present invention. The method begins with a user, such as a network operator or designer, **configuring the different links of the VPLS1 and VPLS2 topologies**, at a configuration step 70.

See also *id.* at FIGS. 1, 3 (reproduced below with annotations):

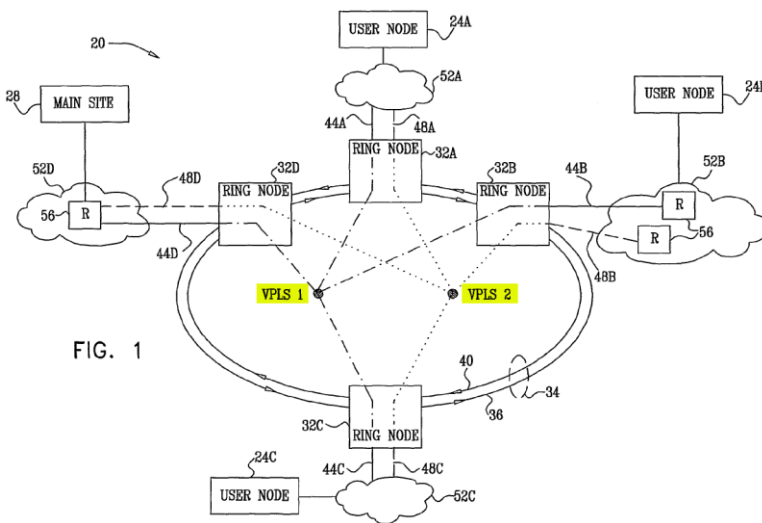
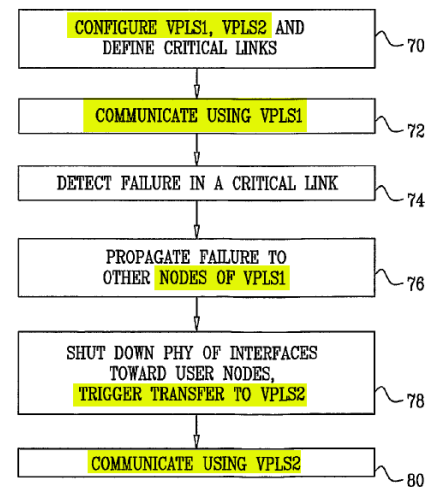


FIG. 1

FIG. 3



The “non-limiting” statements the patent makes with regard to Figure 1 are also instructive. The specification states: “[a]lthough the example of FIG. 1 refers to VPLS over a ring topology, the *methods and systems described herein are in no way limited to ring networks.*” *Id.* at 6:1–3. Notably, the non-limiting caveat only relates to the ring topology, not the VPLS nature of the network; the sentence does not state that the methods and services are not limited to VPLS networks, just that they are not limited to VPLS over a *ring network*. Thus, the methods and systems can relate to a VPLS network with a non-ring network topology. And just as in *Wastow*, the ’637 Patent “supplies compelling support for a conclusion of disavowal of claim scope beyond [VPLS].” *See Wastow*, 855 F App’x at 751.

“[W]hen a patent ‘repeatedly and consistently’ characterizes a claim term in a particular way, it is proper to construe the claim term in accordance with that characterization.” *GPNE Corp. v. Apple Inc.*, 830 F.3d 1365, 1370 (Fed. Cir. 2016) (citing *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1318 (Fed. Cir. 2014)); *see also Tap Pharm. Prods., Inc. v. Owl Pharm., L.L.C.*, 419 F.3d 1346, 1353 (Fed. Cir. 2005) (affirming construction of “particle” as requiring both a “drug” and a “drug retaining substance” where all 31 embodiments required both, which were directly related to the benefit of the invention.). Here, the ’637 Patent repeatedly and consistently describes

its alleged invention as relating to VPLS. Portsmouth's proposed plain and ordinary meaning construction of "two or more stations capable of intercommunication," on the other hand, is entirely untethered to the specification and does not fully capture what a network is.⁸

Accordingly, the claimed "network" should be construed to mean "VPLS network."

2. "deactivating a physical layer of the first set of links connected thereto" / "deactivate the physical layer resources of each node to links in the first set of links connected to that node"

Claims	Portsmouth's Construction	Cisco's Construction
1, 6–10, 12–25	Plain and ordinary meaning	"deactivating the physical layer[] of all links connected [to] all other nodes other than the detecting node" / "deactivate the physical layer[] of all links connected [to] all other nodes other than the detecting node"

Cisco's proposed construction reflects the plain meaning of the claims themselves, as well as the patentee's own clear and unmistakable statement during prosecution as to what the "deactivating" claim term means. *See Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1350 (Fed. Cir. 2011) ("Phillips counsels looking to the prosecution history to 'show what a person of skill in the art would have understood disputed claim language to mean.'").

As an initial matter, although Portsmouth accuses Cisco of "read[ing] in additional language into the claims," it **agrees** with Cisco's interpretation of the claims. Dkt. No. 78 (Op. Br.) at 8. Indeed, Portsmouth's own expert, Dr. Olivier, agreed that Cisco's construction is how a person of ordinary skill in the art would understand the "deactivating" term—*i.e.*, that **all links** would be deactivated. *See* Ex. 5 (Olivier Dep. Tr.) at 147:6–11 ("Q. And so you would agree that a person of ordinary skill in the art would understand claim 1 of the '637 patent to require that physical layers of **all links** connected to all other nodes other than the detecting node are to be

⁸ Portsmouth's dispute with Cisco on this issue is peculiar given that Portsmouth accused VPLS configurations of Cisco products of infringement.

deactivated? A. Correct. . . .”). Given Portsmouth’s concession, the Court should resolve the claim scope in Cisco’s favor—*i.e.*, that the deactivation applies to all links.

To the extent there was any ambiguity as to the meaning of the claim term—and there is not—the patentee eliminated any such ambiguity during prosecution. More specifically, to overcome prior art in prosecution, the patentee clearly and unequivocally stated that the deactivation step applies to ***all*** nodes within the network:

[The prior art] discloses only that a single physical layer of a single link connected to only two nodes [] is deactivated. [The prior art] fails to show or describe that physical layers of links connected to [other nodes in the network] are deactivated as well. In contrast, ***claim 1 requires that physical layers of all links connected [to] all other nodes other than the detecting node are to be deactivated.*** Therefore, [the prior art] fails to meet claim 1.

Ex. 12 (’637 File History Amendment) at 10–11 (emphasis in original). Such a clear statement is evidenced by the emphasis that ***the patentee*** included in its remarks, by bolding, italicizing, and underlining the pertinent disclaimers, and by the patentee’s further statements that “the requirement of deactivating the physical layer of all links connected to the nodes of the network is an important feature of the present invention.” *Id.*

Portsmouth’s criticisms of Cisco’s proposed construction misstate and/or misunderstand the claim construction inquiry. Portsmouth appears to argue that no construction is necessary because “a POSITA would understand the claim language [*i.e.*, that all links would be deactivated] based on the express language of the claim limitation, without the addition of language that is separately recited in the claims.” Dkt. No. 78 (Op. Br.) at 8 (internal quotations omitted). But the question is not ***whether*** or not a POSITA would understand the words as written, but rather ***what*** a POSITA would understand the claim term to mean. See *Chewy, Inc. v. Int’l Bus. Machines Corp.*, 94 F.4th 1354, 1359 (Fed. Cir. 2024) (“Claim terms are generally given their ***plain and***

ordinary meaning, which is the meaning one of ordinary skill in the art would ascribe to a term when read in the context of the claim, specification, and prosecution history.”); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004) (“A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention.”). Moreover, the “additional language” Portsmouth argues Cisco added are the words that the patentee used to clarify exactly what is and what is not included in their claim to get the patent allowed through prosecution. Portsmouth should be held to that language now “so as to exclude any interpretation of claims that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.” *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985); *see Gillespie v. Dywidag Systems Intern., USA*, 501 F.3d 1285, 1291, (Fed. Cir. 2007) (“The patentee is held to what he declares during the prosecution of his patent.”). Accordingly, the Court should adopt Cisco’s proposal.

V. CONCLUSION

For the foregoing reasons, the Court should adopt Cisco’s proposed constructions.

Dated: November 6, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic service are being served with a copy of **DEFENDANT CISCO'S RESPONSIVE CLAIM CONSTRUCTION BRIEF**, *via* the Court's CM/ECF system per Local Rule CV-5(a)(3) on this the 6th day of November, 2024.

/s/ *Melissa R. Smith*

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

Portsmouth Network Corporation,

Plaintiff,

v.

Cisco Systems, Inc.,

Defendant.

Civil Action No. 2:23-cv-00441-JRG

JURY TRIAL DEMANDED

PLAINTIFF'S REPLY CLAIM CONSTRUCTION BRIEF

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B	IPR2024-00505, Paper No. 2, Petition for <i>Inter Partes</i> Review
C	IPR2024-00505, Paper No. 6, Patent Owner Preliminary Response
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H	Excerpt of Transcript of James Olivier Deposition, taken on October 17, 2024

I. INTRODUCTION

Cisco incorrectly asserts that there are special definitions or disclaimers for **6 of the 8 claim terms** that are disputed. Contrary to Cisco’s arguments, however, every use of a term in the specification does not “define” that term and every argument during prosecution does not “disclaim” all other embodiments. These are rare exceptions that must be “clear” and “unmistakable,” which is not the case here. *See e.g., Cont’l Cirs. LLC v. Intel Corp.*, 915 F.3d 788, 797 (Fed. Cir. 2019); *3M Innovative Properties Co. v. Tredgar Corp.*, 725 F.3d 1315, 1326–29 (Fed. Cir. 2013). For the remaining two terms, Cisco attempts to read in limitations or narrowly construe well-understood terms like “predetermined” and “newly added,” that need no construction. Overall, Cisco’s claim construction positions are contrary to established law and improperly attempt to read in limitations or rewrite or narrow the terms in a transparent attempt to avoid liability. Unlike Cisco’s proposed constructions, Portsmouth’s proposed constructions are consistent with established law that terms should be given their “plain and ordinary” meaning as supported by the intrinsic record and the understandings of the person of ordinary skill (“POSA”). *Philips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005). Corrigent respectfully requests that the Court adopt Portsmouth’s constructions.

II. CLAIM CONSTRUCTION OF THE ’986 PATENT

A. “edge switch”

Cisco argues that the specification expresses a clear intent to define “edge switch” because the specification states that “[c]ore switches that are directly connected to access switches are **referred to herein** as edge switches.” Dkt. No. 83 at 4. But the specification does not show a clear intent to limit “edge switch” to a particular definition. Instead, the ’986 patent broadly allows for alternative implementations “using network types and bridge devices of other sorts.” Dkt. No. 57-1, 7:36-38. The ’986 patent also specifically discloses that edge switches themselves can be

implemented in a variety of ways. For example, they can be connected to core switches via multiple links. *See id.* at 7:46-52. (“As another example, although edge switch 28 is shown as having only a single link to WAN 24, in actuality the edge switch typically has two or more redundant links. If these links are both connected to another core switch upstream of the edge switch, they can be managed by the core switch in a manner substantially similar to that described below.”). Thus, edge switches are not limited to a specific implementation. Cisco’s construction, however, would improperly exclude these embodiments, which is “rarely, if ever, correct.” *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010) (quoting *Vitronics Corp. v. Conceptronic Inc.*, 90 F.3d 1576, 1583–84 (Fed. Cir. 1996)).

Cisco also argues that Portsmouth’s statements about edge switches in the parallel IPR proceeding limit the term’s scope. Dkt. No. 83 at 5. Defendant’s, however, fail to meet their burden of proving the existence of a clear and unmistakable disclaimer that would have been evident to one skilled in the art. *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063-64 (Fed. Cir. 2016); *see also VARTA Microbattery GmbH v. Audio Partnership LLC*, 2023 WL 5103113 at *3-4 (E.D. Tex. Aug. 9, 2023). That is because there is none. Further, Cisco ignores that neither Cisco nor Portsmouth proposed a construction for this term in the IPR. Ex. B at 11–12; Ex. C at 4. Rather, Portsmouth’s statements about edge switches in the IPR were made to highlight Cisco’s improper characterization of an access switch as an edge switch. *See* Ex. C at 12–14. Portsmouth’s statements in the IPR are not dependent on any particular construction of “edge switch,” and both parties clearly explained that no such construction was necessary. *Id.* at 4. Additionally, not only did the Board reject Portsmouth’s arguments in granting institution of the IPR, but the Board also expressly found that no construction for the term “edge switch” was necessary. *See* Dkt. No. 83-7 at 10; Ex. D at 22. As the Board rejected Portsmouth’s arguments and found no construction was

needed, Portsmouth's statements in the IPR do not give rise disclaimer. *Galderma Laboratories, L.P. v. Amneal Pharmaceuticals LLC*, 806 F. App'x 1007, 1010 (Fed. Cir. 2020).

Further, Cisco's proposed construction would not only improperly add limitations that are not found within the claims themselves and exclude embodiments disclosed in the specification, but it is also contrary to the understanding of a POSA.¹ Accordingly, the Court should reject Cisco's proposed claim construction and use the plain and ordinary meaning of "edge switch."

B. "access switch"

Cisco's arguments regarding "access switch" mirror its arguments for "edge switch" and are flawed for the same reasons. The '986 patent specification does not express a clear intent to define "access switch" to a particular implementation. The '986 patent acknowledges that access switches may be configured under multiple implementations, including being connected via multiple links and connecting directly to other access switches in the network. *See* Dkt. No. 57-1, 7:17-23 ("A lateral link 34 between access switches 26 and 27 is used to provide protection in case of a failure in one of access links 30 or 32 or in the corresponding ports of the access switches or edge switch. Protection could similarly be afforded by providing a single access switch with dual edge ports to edge switch 28."). Cisco's proposed construction excludes these embodiments.

Additionally, as explained above, Portsmouth's statements in the IPR acknowledge the '986 patent's language but do not expressly construe or disclaim the scope of the term. *See Trivascular*, 812 F.3d at 1063-64; *Galderma Laboratories*, 806 F. App'x at 1010; *VARTA Microbattery*, 2023 WL 5103113 at *3-4. Instead, Portsmouth's statements are part of a broader discussion highlighting Cisco's arguments improper characterization of various switches. *See Ex.*

¹ Cisco complains that Dr. Olivier's declaration references Newton's Telecom dictionary from 2007. However, Dr. Olivier confirmed that the dictionary aligned with the understanding of a POSA at the relevant time. Dkt. No. 78-1, ¶¶ 18-19.

C at 12–14. Again, Portsmouth’s statements in the IPR are not dependent on any particular construction of “access switch,” and, as with “edge switch,” both parties agreed that no construction was necessary. *Id.* at 4; Ex. B at 11–12 (“Petitioner submits that, for the purposes of this proceeding and the grounds presented herein, no claim term requires express construction.”). Further, like with “edge switch,” the Board rejected Portsmouth’s argument, instituted IPR, and also expressly found that no claim constructions were needed. Thus, there can be no disclaimer. *Galderma Laboratories, L.P.*, 806 F. App’x at 1010. Accordingly, the Court should reject Cisco’s proposed claim construction and use the plain and ordinary meaning of “access switch.”

III. CLAIM CONSTRUCTION OF THE ’279 PATENT

A. “predetermined”

Cisco’s construction improperly reads a specific temporal limitation into the term “predetermined” that is unnecessary and has no support in the specification or the claim itself. The term “predetermined” is a well-known and common term that simply means “to determine beforehand.” Ex. A, Olivier Declaration, Dkt. No. 78-1, ¶ 28.²

Cisco’s proposed construction, “determined before the data flow request,” improperly attempts to read in a limitation that the “quantum” assigned as the resource allocation step has the same value as the quantum assigned after the resource request step. This reading is unsupported by the specification and the claims. The term “predetermined” is introduced at the very last step of the claim, and modifies the term “quantum” as related *to that step*. In fact, even in the specification, the only time “predetermined quantum” is mentioned is in relation to the dispatcher

² Cisco asserts Portsmouth “sidesteps” the dispute between the parties, but every claim term does not have to be construed, especially here where the term “predetermined” needs no construction. *See U.S. 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) (“[D]istrict courts are not (and should not be) required to construe every limitation...”)

increasing the allocation of a node's resources upon a request by a node *after* it receives a data flow request from the client. Dkt. No. 83-2, 2:51–55; 3:21–24. Nothing in the specification supports Cisco's claim that the "predetermined" refers "back to the same type and size of quanta that were allocated in the first step of Claim 1." Dkt. No. 83 at 14. In fact, none of Cisco's citations to the specification explicitly or implicitly provide that the "quantum is determined before the data flow request." *Id.* at 16. Rather, Cisco's citations, including to Figure 3, only discuss the steps involved in setting up the system architecture.

Thus, based on the on the language of the claim, the quantity of the quantum as used can be determined at any point before the system increases "the allocation of resources to the first node on the selected path by a predetermined quantum," and therefore is not limited to "before the data flow request" as proposed by Cisco. Dkt. No. 57-2, claim 1. Thus, "predetermined" should be accorded its plain and ordinary meaning.

B. "quantum"

Cisco asserts that this term was expressly defined based on the specification's description of a different term, "node_quantum." Dkt. No. 83 at 10. However, even the descriptions of node_quantum in the specification do not support Cisco's proposed construction.

'279 Specification	Cisco's Construction
"node_quantum—Amount by which to increase or decrease node_used_In or Out at each resource allocation or deallocation" Dkt. No. 83-2 at 5:26-30	"an amount of a requested resource by which to increase or decrease"
"node_used_In—Amount of the resource currently allocated to the node on the inner ring." Dkt. No. 83-2 at 5:22-23	
"node_used_Out—Amount of the resource currently allocated to the node on the outer ring." Dkt. No. 83-2 at 5:24-25	

Cisco's definition adds in the term "*requested* resource," which the claims and the specification never use to describe "quantum" or the terms "node_quantum," "node_used_In" or "node_used_Out" on which Cisco relies. Rather, the term "quantum" just takes on its plain and

ordinary meaning, which is an “amount.” Nothing in the specification suggests that the term “quantum” itself is tied to the action of requesting a resource or to the action of increasing/decreasing the resource. This is further demonstrated by the language of the claims. For example, the first step in claim 1 requires “allocating a respective number of *quanta* of one or more resources in the network to each of the nodes...” This demonstrates that the terms quantum/quanta are not tethered to increasing or decreasing resources or to requesting resources as suggested by Cisco’s construction, but rather simply relate to the *amount* of the resource allocated consistent with the term’s plain and ordinary meaning.

Moreover, contrary to Cisco’s argument, Portsmouth’s construction does not put any numerical value on the term “quantum.” Portsmouth does not claim that “quantum” means only the “*exact* amount needed for each request,” as argued by Cisco, but rather simply means “amount.” Dkt. No. 83 at 12. Portsmouth’s expert supports this. Ex. H, 90:18–25. The quantum itself can be a specific, predetermined amount, as described by the ’279 Patent, but the term “quantum” alone does not require the remainder of Cisco’s construction, i.e., the “requested resources by which to increase or decrease.” The actual numerical quantity of this amount can be determined by the system, and does not need to be defined in the construction for the term “quantum.” This is shown by the Cisco’s cited portions of the prosecution history, which establish that the term “quantum” is not simply associated with the increase or decrease of resources, but also with resource allocation. Dkt. No. 83 at 11; Dkt. No. 83-8 at 9. Similarly, Cisco’s citations to Portsmouth’s expert’s testimony do not support its construction. Dr. Olivier identifies other ways for allocating resources, but confirms that the term “quantum” “is simply an amount.” Ex. H,

90:18-25.³

Thus, the Court should give the term “quantum” its plain and ordinary meaning.

IV. CLAIM CONSTRUCTION OF THE ’637 PATENT

A. “a network”/ “a communication network”

Cisco again attempts to improperly limit the scope of the well-understood term “network” by arguing the specification expressly defines it. While the ’637 patent describes embodiments relating to VPLS and the title includes VPLS, the specification also describes other types of networks and topologies and states that it relates generally to communication networks. Dkt. No. 83-4 at 1:16–19. For example, the specification discusses multi-point to multi-point networks and pseudowires. Dkt. No. 83-4 at 1:59–67; 2:6–7. Cisco’s construction would exclude these embodiments, and improperly read limitations into the claims. *See, Convolv, Inc. v. Dell, Inc.*, No. 2:08-CV-244-CE, 2011 WL 31792, at *16 (E.D. Tex. Jan. 5, 2011) (rejecting construction that would “exclude the embodiments of the specification.”); *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1312 (Fed. Cir. 1999) (holding that “we do not read limitations into the claims from the specifications that are not found in the claims themselves.”). The title’s inclusion of VPLS and the specification’s statement that it “particularly” relates to VPLS are not clear and unmistakable definitions and disavowals of all other types of networks. *See, Pitney Bowes*, 182

³ Cisco incorrectly argues that the “resource retainment” step supports its construction, based on the incorrect assertion that the node does not release the quantum because “the resource that is retained is less than a quantum.” *Id.* at 13. Nothing in the ’279 patent suggests this. The specification states that if “the node finds that (used_In–resource amount released) is less than or equal to (allowed_In– [l+p]xnode_quantum),” then it requests for the removal of one quantum. Dkt. No. 83-2 at 7:7–10. If the opposite is true, the quantum is retained. *Id.* at 7:20–24. This is further shown in claim 14, which states that the system, “upon release of the requested resources” compares “an amount of the resources that have been released to a predetermined threshold; and if the amount is greater than the predetermined threshold, deallocat[es] the predetermined quantum from the first node.” *Id.* at claim 14. The resource retainment step has nothing to do with the availability of the quantum on the node, but rather with a predetermined threshold in the system as defined by the equation in the specification and as outlined in Figure 5. Dkt. No. 83-2, Fig. 5.

F.3d at 1312 (holding that “we...will not read limitations into the claims from the patent title”); *Hochstein v. Microsoft Corp.*, 730 F. Supp. 2d 714, 726 (E.D. Mich. 2010), *aff’d*, 430 F. App’x 898 (Fed. Cir. 2011) (explaining that “the Federal Circuit has explicitly stated that the title is nearly irrelevant to claim construction.”) (internal quotation marks omitted).

Cisco’s reliance on *Wastow* is misplaced. Dkt. No. 83 at 24. In *Wastow*, the Federal Circuit found that the claims were limited to a “universal folding boom trailer,” where the specification “repeatedly describe[d] ‘the present invention’ as a universal folding boom trailer.” *Wastow Enterprises, LLC v. Truckmovers.com, Inc.*, 855 F. App’x 748, 750 (Fed. Cir. 2021). The Court further found that the “specification also tie[d] the stated benefits of the invention over prior art to the use of a universal folding boom trailer.” *Id.* Unlike in *Wastow*, the ’637 patent does not limit the invention to VPLS. Dkt. No. 83-4 at Abstract. Instead, it relates generally to a “method for handling communication failures in a network” and applies to VPLS and other communication networks. For example, the ’637 Patent describes other network topologies as relevant to the invention, including, for example, “multipoint-to-multipoint (MP-MP) communication service” and “pseudowire (PW) services.” Dkt. No. 83-4 at 1:59–67; 2:6–7; *see also*, Ex. H at 137:9–18.

Thus, the Court should reject Cisco’s improper attempt to limit the terms to a specific network because (1) there was no express definition or disclaimer, (2) is contrary to the plain and ordinary meaning of the term, and (3) would exclude embodiments disclosed in the specification.

B. “deactivating a physical layer of the first set of links connected thereto” / “deactivate the physical layer resources of each node to links in the first set of links connected to that node”

Cisco again attempts to read extraneous limitations into the term, alleging there was a disclaimer during prosecution. There was not and the statements Cisco cites merely explain that the prior art did not disclose that the other links in the first set of links connected to that node were deactivated. *See* Dkt. No. 83-12, at 11–12 (“Grenier only discloses a single link connected to two

nodes that are deactivated, and Grenier did not disclose that the links connected to other nodes in the first set of links were deactivated.”). This is already recited in the claim language and no further construction is necessary. Similarly, Cisco’s citations to Dr. Olivier’s testimony confirm what the claims already state, i.e., “deactivating a physical layer of the first set of links...caus[es] a loss of connectivity in the first set of links.” Ex. 83-4 at claim 1; Dkt. No. 83-5 at 147:6–11. Cisco’s attempts to read limitations into the claim is improper and unnecessary. Thus, the Court should reject Cisco’s construction, and find that the plain and ordinary meaning applies to this term.

V. CLAIM CONSTRUCTION OF THE ’394 PATENT

A. “a new processing unit added to the network element”

Cisco again attempts to construe the meaning of a well-understood phrase, which needs no construction. Dkt. No. 78-1, ¶ 38.⁴ While Cisco seems to argue that there cannot be a plain and ordinary meaning because Portsmouth cites to the specification in support of its construction, this argument lacks merit. It is well-established that terms should be given their plain and ordinary meaning as supported by the intrinsic record and a POSA’s understanding. *Philips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005). Thus, citing the specification in support of the plain and ordinary meaning is typical and not a “contradictory invitation” as Cisco asserts.

While it is proper to interpret the claims in view of the specification, however, there is no need to rewrite the claim term based on a purported “primary description” in the specification. Accordingly, the Court should reject Cisco’s proposed claim construction and construe “a new processing unit added to the network element” under its plain and ordinary meaning.

B. “multicast packet stream”

⁴ Cisco also incorrectly asserts that because this is not a coined phrase with a specific definition in the art it must be construed. Dkt. No. 83 at 20. But the phrase is readily understood and needs no construction. Dkt. No. 78-1, ¶ 38.

Cisco does not dispute that “multicast packet stream” has a well-understood meaning in the art as a packet stream that can be sent to multiple devices. Dkt. No. 78-1, ¶ 40, Ex. 4 (“multicast packets are addressed to multiple devices within a group of devices.”). Cisco also admits this understanding is consistent with the specification. Dkt. No. 57-3, 5:61–64.

Cisco’s entire argument is thus based on incorrectly characterizing Portsmouth’s statements in the IPR. Dkt. No. 83 at 21–23. Cisco ignores, however, that neither party to the IPR argued this term needed to be construed and that the Board did not construe this term. *See* Ex. E at 12; Ex. F at 4; Ex. G at 13; *Galderma Laboratories*, 806 F. App’x at 1010. Further, Cisco ignores that Portsmouth’s statements related to the fact that the prior art *Li* reference only disclosed a channel and not a stream of content. Ex. F at 11–12 (“*Li* clearly defines ‘channel’ as a multicast group.... But a channel, or multicast group, is different from a multicast packet stream.”). There was no clear and unmistakable disclaimer of claim scope. *See Trivascular*, 812 F.3d at 1063–64; *Galderma Laboratories*, 806 F. App’x at 1010; *VARTA Microbattery*, 2023 WL 5103113 at *3–4.

While Cisco also cites the specification in a passing footnote, it does not support Cisco’s limiting construction. Dkt. No. 83 at 22, fn. 7 (citing ’394 patent, 5:66-6:3). Instead, it just confirms that multicast packet streams can carry certain content. It does not, however, limit the scope of multicast packet streams contrary to the term’s plain and ordinary meaning.

Accordingly, the Court should reject Cisco’s proposed claim construction and use the plain and ordinary meaning of “multicast packet stream” as a packet stream that can be sent to multiple devices, which is consistent with the only evidence of record from one of skill in the art and the patent specification.

VI. CONCLUSION

For the foregoing reasons, Portsmouth respectfully requests that the Court adopt Portsmouth’s proposed constructions for each of the disputed terms.

Dated: November 22, 2024

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Portsmouth Network Corporation

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on November 22, 2024, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ James R. Nuttall
James R. Nuttall