Net Navigation Systems, LLC v. Huawei Technologies Co., Ltd. et al Doc. 73

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

NET NAVIGATION, LLC	§	
	§	
	§	Civil Action No. 4:11-cv-660-RAS-ALM
v.	§	
	§	
	§	
CISCO SYSTEMS, INC. and AT&T INC.	§	
	§	
_____	§	
	§	
NET NAVIGATION, LLC	§	
	§	
	§	Civil Action No. 4:11-cv-662-ALM
v.	§	
	§	
	§	
HUAWEI TECHNOLOGIES CO., LTD.,	§	
HUAWEI TECHNOLOGIES USA INC., and	§	
FUTUREWEI TECHNOLOGIES, INC.	§	

MEMORANDUM OPINION AND ORDER[1]

This claim construction Memorandum construes the disputed claim terms of United States Patent Nos. 5,901,147 ('147), 6,307,860 ('860), 6,434,145 ('145) and 6,625,122 ('122).

[1] Upon consent of the parties, Civil Action No. 4:11-cv-662 has been referred to the United States Magistrate Judge for all proceedings in accordance with 28 U.S.C. § 636(c). Thus, for Civil Action No. 4:11-cv-662, this Memorandum shall be treated as a Memorandum Opinion and Order. For Civil Action No. 4:11-cv-660, this Memorandum shall be treated as a Report and Recommendation. Within fourteen (14) days after service of the magistrate judge's report, any party may serve and file written objections to the findings and recommendations of the magistrate judge. 28 U.S.C. § 636(b)(1)(C). Failure to file written objections to the proposed findings and recommendations contained in this report within fourteen days after service shall bar an aggrieved party from *de novo* review by the district court of the proposed findings and recommendations and from appellate review of factual findings accepted or adopted by the district court except on grounds of plaint error or manifest injustice. *Thomas v. Arn*, 474 U.S. 140, 148 (1985); *Rodriguez v. Bowen*, 857 F.2d 275, 276-77 (5th Cir. 1988).

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Net Navigation filed common claim construction opening and reply briefs in both civil actions. The Defendants in both civil actions collectively filed a unified responsive brief in both civil actions. Citation herein is made to the briefing of the 4:11-cv-660 civil action: Net Navigation's Opening Brief (Dkt. 124), Defendants' Responsive Brief (Dkt. 133) and Net Navigation's Reply Brief (Dkt. 139). The Court conducted a claim construction hearing on November 14, 2012. For the following reasons, the Court provides the constructions set forth below.

BACKGROUND

The four patents-in-suit each claim priority to separate and unrelated original patent applications, except that the '145 Patent incorporates by reference the '860 Patent. The four patents generally relate to techniques for networking devices together, such as techniques utilized in computer networking equipment. Each patent addresses different problems that occur when transmitting data through network devices such as network switches and routers.

The '147 Patent relates to techniques for controlling congestion in a switch through the manner in which data queues are organized in the switch. '147 Patent Abstract. How much of the system's memory is consumed by any one given queue is controlled by a threshold limit. The threshold limit may be variable, with the threshold being high if the congestion of the system is low and the threshold being low if the congestion of the system is high. '147 Patent at 1:35-51.

The '860 Patent relates to a system that provides an interface between two networks in which data may need to be transformed between the networks. Abstract. The system utilizes two processors. The first processor determines how data is to be transformed and the second processor transforms the data at commands from the first processor. '147 Patent at 1:65-2:1. In

some embodiments the first process is an intelligent programmable processor that may be slow and the second processor can have less intelligence but may be faster and less expensive. '147 Patent at 2:6-19, Abstract.

The '145 Patent describes a system in which data received at a port of a network device may be processed by different processing channels in parallel. '145 Patent Abstract. High data transmission rates may be obtained by using multiple data processing channels in parallel to increase system throughput. '145 Patent at 28-35.

The '122 Patent relates to techniques for selecting data for transmission in a network device. '122 Patent at 1:5-7. Data flows are provided with a data flow bandwidth parameter. '122 Patent at Abstract. Data flows are scheduled in queues for transmission dependent upon the bandwidth requirements. '122 Patent at Abstract, 4:6-67.

A summary judgment motion of invalidity based on indefiniteness has also been filed with regard to one term of the '860 Patent. Dkt. 123. That motion is addressed in a separate Memorandum Opinion.

LEGAL STANDARDS

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). The purpose of claim construction is to resolve the meanings and technical scope of claim terms. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). When the parties dispute the scope of a claim term, "it is the court's duty to resolve it." *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381

F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent's intrinsic evidence to define the patented invention's scope. *Phillips,* 415 F.3d at 1313-14; *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312-13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id*. Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id*. Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id*.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. at 315 (quoting *Markman*, 52 F.3d at 979). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp.v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex. Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning that it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc*., 242 F.3d 1337, 1343-44 (Fed. Cir. 2001). This presumption does not

arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct.'" *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent"). The well established doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). "Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during

prosecution." *Omega Eng'g, Inc.*, 334 F.3d at 1324. However, the prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). Statements will constitute disclaimer of scope only if they are "clear and unmistakable statements of disavowal." *See Cordis Corp. v. Medtronic Ave, Inc.*, 339 F.3d 1352, 1358 (Fed. Cir. 2003). An "ambiguous disavowal" will not suffice. *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010) (citation omitted).

The doctrine of claim differentiation provides that "different words or phrases used in separate claims are presumed to indicate that the claims have different meaning and scope." *Seachange Intl. Inc., v. C-COR, Inc.*, 413 F.3d 1361, 1368 (Fed. Cir. 2005) (citing *Karlin Tech. Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999)). However, the doctrine "only creates a presumption that each claim in a patent has a different scope; it is not a hard and fast rule of construction." *Id*. at 1369 (quoting *Kraft Foods, Inc. v. Int'l Trading Co.*, 203 F.3d 1362, 1368 (Fed. Cir. 2000)). The "claims cannot enlarge what is patented beyond what the inventor has described as the invention." *Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) (citations omitted).

Although, "less significant than the intrinsic record in determining the legally operative meaning of claim language," the Court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id*. at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the

pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id*. Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*.

DISPUTED CLAM TERMS

‘147 Patent

1. Preambles of Claims 1, 29, 31, including "network routing apparatus" and "network data" Claims 1, 29, 31

"A method for processing cells in an ATM switch, the method comprising:" ‘147 Claim 1

"A method for processing network data in an network routing apparatus, the method comprising": ‘147 Claim 29

"A network routing apparatus comprising": ‘147 Claim 31

Net Navigation	Defendants
Preambles are not limiting ; to the extent they are, only claim 1 is limited to processing ATM cells in an ATM switch; Alternatively, if "network routing apparatus" is construed: "a device for forwarding data in a network" Alternatively, if "network data" is construed: no construction necessary or "information transmitted in a network"	Preambles are limitations, and limited to processing of ATM cells in an ATM switch "network routing apparatus": "a switch that operates on ATM cells" (came as "ATM Switch) "network data": "fixed size segments of information used in an ATM network, each having a header field and a payload field" (same as "cells")

The primary issues before the court are whether the preambles are limiting, and if so, what is the proper construction of "network routing apparatus" and "network data."

a. The Parties' Positions

Net Navigation argues that as an initial matter preambles are generally not limiting, quoting the Federal Circuit as holding "a preamble is not limiting where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." Dkt. 124 at 5 (quoting *Catalina Mktg. Int'l, Inc. v.*

Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002). Net Navigation asserts that the preambles in question recite classic purposive language and are thus not limiting. As to the antecedent basis arguments raised by Defendants, Net Navigation notes that the *Eaton* case states that when a preamble provides antecedent basis "then the preamble **may** act as a necessary component of the claimed invention." Dkt. 139 at 3 (citing *Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003) emphasis added).

If the preambles are to be construed, Net Navigation asserts that only claim 1 is limited to processing ATM cells in an ATM switch. As to the terms "network routing apparatus" and "network data," even if the preambles are limiting Net Navigation asserts that these terms do not require construction because the terms have widely accepted meanings and have no specialized meaning in the context of the '147 Patent. Dkt. 124 at 5-6. Alternatively, if construed, Net Navigation asserts that its constructions are consistent with the specification. Dkt. 124 at 6 (citing 3:9, 20:7-8, 22:7-9, 22:21, 21:55-57 and 27:16-20).[2] Net Navigation also cites to a variety of technical dictionaries. Dkt. 124 at 6-7.

Net Navigation asserts that Defendants' constructions of "network routing apparatus" and "network data" improperly limit the scope of claims 29 and 31 to one type of network device, ATM switches. Net Navigation acknowledges that an ATM switch is disclosed in the preferred embodiment but asserts that the claim terms in question are not limited to a particular type of device. Dkt. 124 at 7. Net Navigation also asserts that the doctrine of claim differentiation dictates that these terms by given a different meaning since the terms "ATM switch" and "cells" are used in the preamble of claim 1 but not in the other claims. In particular, Net Navigation

[2] Unless otherwise noted, the patent column and lines (x:y) used herein references the corresponding patent in which the claim term is being construed.

notes that different claim terms are presumed to have a difference in meaning (citing *Tandon Corp. v. U. S. Int'l Trade Comm'n*, 831 F.2d 1017, 1023 (Fed. Cir. 1987)) and further notes that the only difference between claims 1 and 29 is the replacement of the term "cell" with "network data" and replacement of the term "ATM switch" with "network routing apparatus." Dkt. 124 at 7-8. Net Navigation asserts that the claims should not be rewritten and effect should be given to the use of different terms in the different claims.[3]

Defendants assert that the Federal Circuit has held that a preamble is limiting "if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim." Dkt. 133 at 4 (quoting *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1303, 1309-10 (Fed. Cir. 2004). Defendants assert that without the preambles one cannot determine the context of the claims or even if the steps apply in a network routing context at all, and thus the preambles are essential. Dkt. 133 at 4-5. Defendants assert that the specification reinforces that the limitation of the terms to ATM switches, citing to the patent title and to a statement in the Background of the Invention which states "the present invention relates to networks, and more particularly to controlling congestion in ATM switches in networks." Defendants assert that the key aspect of the disclosed embodiment would be lost unless the preambles are construed. Dkt. 133 at 6.

Defendants further assert that the preambles are limiting because terms within the claim bodies rely upon the preambles for antecedent basis, quoting the Federal Circuit to assert that the claims "clearly fall[] within those cases where the preamble is held to be limiting because the 'limitations in the body of the claim rely upon and derive antecedent basis from the preamble.'"

[3] The parties dispute whether Net Navigation's constructions raise written description and enablement validity issues but appear to agree that such issues should be argued at a later time. Dkt. 133 at 9, n. 9; Dkt. 139 at 1, n.1.

Dkt. 133 at 6 (quoting *Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc.*, 687 F.3d 1300, 1311 (Fed. Cir. 2012 (citing *Eaton Corp. v. Rockwell Int'l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003)). Defendants note that in the body of claim 1 references to "the cells" and "the switch" refer back to the preamble for antecedent basis. Defendants also assert that the agreed construction for cells refers to a use in ATM networks, thus confirming that "the switch" in the claim body is the "ATM switch" provided in the preamble. Dkt. 133 at 6. Defendants also assert that the body of claim 29 refers to "the network data" and "the apparatus" and that the body of claim 31 refers to "the apparatus," all terms which derive antecedent basis from the preambles. Dkt. 133 at 6.

Defendants assert that when construing "network routing apparatus" and "network data," such terms should be limited to ATM systems. Defendants assert that the entire patent is focused on ATM devices. Defendants note the title of the patent includes "ATM switches" and cites to the following quotations:

> In an ATM switch, queue thresholds vary dynamically depending on switch congestion. All the queues are organized in one or more classes. The thresholds for each claim depend inversely on the number of cells in all the queues of the class. Abstract.
>
> The present invention relates to networks, and more particularly to controlling congestion in ATM switches in networks. 1:6-8.

Dkt. 133 at 7. Defendants also state that the Description of Preferred Embodiments section of the patent begins: "An ATM switch threshold function is described below." Dkt. 133 at 7 (quoting 3:18). Defendants also cite to numerous other portions of the specification which reference ATM switches and cells. Dkt. 133 at 7, n. 7. At the hearing, Defendants pointed to the Description of the Drawings which repeated described drawings as including "an ATM switch of the present invention." Hearing Tr. at 42. Defendants quote the Federal Circuit: "[w]hen a

patent thus describes the features of the 'present invention' as a whole, this description limits the scope of the invention." Dkt. 133 at 8 (quoting *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007). Thus, Defendants assert that a clear disavowal is not needed in the specification in such circumstances to read limitations from the specification embodiments into the claims. Defendants assert that the only specification support cited by Net Navigation is standard concluding paragraph boilerplate language asserting that the claims are not limited to the disclosed embodiments, and such boilerplate is standard language that does not serve to disregard a patent's whole explicit description. Dkt. 133 at 8-9. Defendants further assert that the techniques of the '147 Patent are specific to idiosyncrasies of ATM systems. For example, Defendants assert that the disclosed technique tracks the available capacity of the memory at any given time by counting the number of cells in the memory. Defendants assert that this scheme relies on the ATM feature that the cells are a fixed size so that cell count is an accurate measure of memory usage. Dkt. 133 at 9 (citing 1:37-61, 12:64-13:3). Defendants conclude that the patent discloses only ATM, the techniques are specific to ATM and there is nothing to indicate that the inventor had possession of any claimed subject matter beyond ATM at the time of filing. As to Net Navigation's claim differentiation arguments, Defendants noted at the oral hearing that the Federal Circuit has found that two claims can cover the same subject matter using different terms, citing *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006). Hearing Tr. at 56-57.

On reply to Defendants' idiosyncratic ATM features argument, Net Navigation asserted at the oral hearing that the novelty of the '147 patent was using the available memory information to control congestion with the use of region ID's to adjust thresholds. Thus, Net

Navigation asserted that the novelty was not counting cells but related to keeping track of memory usage to set thresholds. Hearing Tr. at 39.

b. Analysis

The parties agree that it is basic tenet that preambles are typically not limitations. However, preambles are limitations when "necessary to give life, meaning, and vitality." Defendants correctly point out that when antecedent basis for terms in the claim body is found in the preamble, such preambles may form a claim limitation. Here, in each case terms in the claim bodies receive antecedent basis from the preamble. Thus, in claim 1 "the cells" refers to the cells of the preamble and "the switch" refers to "an ATM switch" recited in the preamble. Likewise for claim 29, "the network data" refers to "network data" first identified in the preamble and "the apparatus" refers to "a network routing apparatus" provided in the preamble. Similarly, in claim 31, the body of the claim contains "the apparatus" which finds antecedent basis in "a network routing apparatus" of the preamble. Thus, for example, "the switch" is not just any switch but "the ATM switch" and "the apparatus" is the "network routing apparatus." The preambles therefore provide meaning to the claim terms found in the body.

As to claim 1, the parties do not dispute that including the preamble as a limitation, requires a construction that claim 1 is limited to an ATM switch. With regard to claims 29 ad 31, Defendants do make a point that the only disclosed embodiment is ATM embodiment. However, merely being the sole embodiment does not mandate restricting to that embodiment. *Phillips*, 415 F.3d at 1323. Defendants have not pointed to a disavowal within the specification; rather they only point to the sole embodiments being ATM.

As noted in *Phillips*, ultimately, the claims are still the fundamental starting point. *Phillips*, 415 F.3d at 1312-13. Here the intent and meaning of the claims was made explicitly clear that more than ATM was being claimed as some independent claims explicitly call out cells and ATM switches (claim 1, 8, 13, 20, 26) however other claims do not (claim 29 and 31). Moreover, claims 1 and 29 are almost verbatim identical, except for one claim explicitly reciting cells and ATM switch and the other claim (claim 29) explicitly not referencing ATM but rather merely using "network data" and "network routing apparatus." Defendants are correct that as noted in *Curtiss-Wright* two claims may cover the same general subject matter using different terms. However, *Curtiss-Wright* was not a case, as here, in which near verbatim claims exist but for the disputed term. *See Curtiss-Wright*, 438 F.3d at 1380-81. Here the intent and scope of the claims can be seen clearly. Moreover, merely because the described embodiments are ATM protocols, a sole embodiment does not mandate limiting the claims to that embodiment. *Phillips*, 415 F.3d at 1323. Defendants have not pointed to language in the specification that disavows the claim meaning. At the oral hearing Defendants asserted that the entirety of the specification had to be given weight to determine "what the inventors actually invented and intended to envelop with the claims." Hearing Tr. at 55-56 (quoting *Renishaw PLC v. Marpass Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). As noted above, the claims seem clear. Further, Defendants' citations to the "present invention" language are lacking. For example, at 1:5-8 cited by Defendants the specification states "the present invention relates to networks" and only "more particularly" to ATM switches. The descriptions of the drawings referenced by Defendants do not state that the present invention is limited to ATM switches by merely that the drawings show "an ATM switch <u>of</u> the present invention."

The specification further provides support and understanding that the concepts of interest broadly related to memory usage, switch congestion and adjusting thresholds. Thus, for example the Summary of Invention begins, "[t]he present invention allows changing thresholds depending on the switch congestion." 1:37-40. Cells are only mentioned in relation to "in some embodiments." *Id.* Other portions of the Summary of Invention are also drafted in the context of controlling the amount of "memory" a queue is allowed to use as opposed to merely controlling the count of cells in a queue. 1:42-47, 2:7-17. In the context of the intrinsic record as a whole, including the claims and the specification, it is not clear that one skilled in the art would understand the terms "network data" and "network routing apparatus" to be limited in a manner sought by Defendants.

The Court finds the disputed terms of the preambles of Claims 1, 29 and 31 to be limiting. The Court does not find the terms in Claims 29 and 31 to be ATM limited. The Court construes "network routing apparatus" as: "a device for forwarding data in a network." The Court construes "network data" as: "information transmitted in a network."

2. "in order to control congestion of the [switch/apparatus]" '147 Claims 1, 29, 31

Net Navigation	Defendants
Plain and ordinary meaning. Alternatively: "in order to control excess network traffic of the switch / apparatus	"[in order to control] the total [amount of data / number of cells] out of the total capacity of the [switch / apparatus]"

a. The Parties' Positions

Net Navigation asserts that the disputed term does not require construction because the individual words have familiar, non-technical accepted meanings. Net Navigation asserts that in contrast, Defendants' construction merely will cause jury confusion. Dkt. 124 at 10. Net

Navigation cites to examples in the specification in which the term "congestion" was used with reference to generally handling/controlling "switch congestion." Dkt. 124 at 10-11 (citing Abstract, 1:7-9, 1:33-34, 12:2). To further support its construction, Net Navigation offers several extrinsic evidence dictionary definitions. Dkt. 124 at 11. Net Navigation asserts that the Defendants' inclusion of "total [amount of data/number of cells] out of the total capacity" is not helpful to the jury. Net Navigation also asserts that such language is a rewrite of the claim language including a concept absent from the claim language and is improper. Dkt. 124 at 11.

Defendants assert that all the parties' constructions incorporate the concept that congestion occurs when there are more incoming cells than the memory can accommodate. Dkt. 133 at 10. Defendants assert their construction is consistent with the specification which describes two embodiments for setting thresholds depending upon the congestion: (1) in which the thresholds vary inversely with the total number of cells in all the queues or (2) in which the thresholds vary inversely with the total number of cells of a particular class of queues. Dkt. 133 at 10 (citing 1:38-40; 1:57-61). Defendants assert that "congestion of the switch" is related to the total number of cells in all queues (usage of the total capacity of the switch). Defendants also assert that dependent claim 9 is relevant. Defendants assert that claim 1 is directed toward the first embodiment of controlling congestion of the entire switch (all queues) and dependent claim 9 relates to managing separate queues for different classes. Dkt. 133 at 11. At the oral hearing, Defendants asserted that their construction describes how congestion control techniques apply. Hearing Tr. at 61.

On reply, Net Navigation asserts that Defendants have not explained why a construction is necessary. Net Navigation asserts that Defendants' construction improperly reads out of claim 1 the second embodiment of controlling congestion (congestion based on queue class) and

asserts that a construction that reads out an embodiment is rarely correct. Dkt. 139 at 5 (citing *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007)). Net Navigation further asserts that Defendants' claim 9 arguments also fail because claim 9 depends from claim 1 and thus claim 1 must necessarily encompasses claim 9. Net Navigation asserts that Defendants' construction must be rejected as it would read out of claim 1 the second embodiment that Defendants assert dependent claim 9 covers. Dkt. 139 at 5.

b. Analysis

Though Defendants may be correct that their construction describes "how congestion control techniques apply," the issue before the Court is how to construe "in order to control congestion of the [switch/apparatus]", not describing how congestion control techniques apply. Net Navigation has pointed to portions of the intrinsic record which use the term "congestion" in the context of the plain and ordinary meaning. *See* Abstract, 1:7-9, 1:32-37, 2:7-17; 12:2, 12:47-48. Such usage is provided in a manner similar to the general meaning of the term as would be known in the art. Defendants do not point to any disavowal that limits "congestion" to the language of Defendants' construction. The remaining language "in order to control" and "of the[switch/apparatus]" would be understood by one in art without further construction. Having resolved the construction dispute by rejecting Defendants' construction, the Court finds that the term "in order to control congestion of the [switch/apparatus]" does not need construction.

‘860 PATENT

1. “first circuit” / “first processor” / “second circuit” / “second processor” ‘860 Claims 1, 2, 7, 8, 10, 11, 17 / ‘860 Claims 34, 41 / ‘860 Claims 1, 2, 8, 10 / ‘860 Claim 34

Net Navigation	Defendants
“first circuit / processor”: “a circuit / processor denoted as ‘first circuit’ / ‘first processor’ for purposes of this claim” “second circuit / processor”: “a circuit / processor denoted as ‘second circuit’ / ‘second processor’ for purposes of this claim”	“first circuit”: “a circuit / processor that determines how data are to be transformed for transmission” “second circuit / processor”: “a circuit / processor which is not software programmable that is different from the first processor”

The central dispute between the parties with regard to the circuit/processor terms is whether the second circuit/processor is “not software programmable.”

a. The Parties’ Positions

Net Navigation asserts that claim 1 requires three different circuits and the different identifiers (circuit C1, first circuit, and second circuit) merely serve to distinguish one circuit from another. Net Navigation asserts that Defendants construction is flawed in that the construction includes a negative limitation of “not software programmable.” Net Navigation asserts that negative limitations are disfavored by the Federal Circuit absent clear language of disclaimer. Dkt. 124 at 16. Net Navigation also asserts that the doctrine of claim differentiation gives rise to a presumption that Defendants’ construction is improper because claim 13 which depends from claim 1 adds the limitation “wherein the second circuit is not programmable with software.” Net Navigation notes that the ‘860 Patent specification states “in some embodiments”

the second circuit is not software programmable, indicating non-limiting language. Dkt. 124 at 16 (quoting 4:8-12).

Defendants assert that the patent specification explains distinctions between a first processor and a second processor in which the first processor determines how data are to be transformed for transmission and a second processor transforms the data at commands from the first processor. Dkt. 133 at 13-14, n. 10 (citing 1:64-2:1 and 10/5/2000 Response to Office Action at 14-16). Defendants assert that Net Navigations' vague constructions do not adequate explain how the second circuit/processor must be different from the first circuit/processor. Dkt. 133 at 14. Defendants assert that the specification makes clear that the second processor is not software programmable, quoting the specification:

> To achieve high performance, some network processors are implemented as dedicated processors optimized for the specific tasks they have to perform in specific systems. These processors are sometimes hardwired for the specific tasks, protocols and standards. While these processors are fast, they have a disadvantage that they are not easily adaptable to a wider range of tasks, protocols, and standards. There, such processors have limited applicability.
>
> There also exist more intelligent processors adaptable to a wide range of systems having different tasks, protocols and standards. Examples are software programmable processors. However, the higher intelligence often comes at the costs of performance. In particular, software programmable processors can be considerably slower than their hardwired counterparts. 1:38-52

Dkt. 133 at 14. Defendants also assert that the specification distinguished the disclosed techniques from prior art devices with multiple programmable processors:

> Because the second processor can be inexpensive, the entire network processor system can be inexpensive compared to devices with multiple software programmable processors. 2:33-36
>
> [T]he second processor can be fast and inexpensive because the second processor does not need much intelligence. Much intelligence is not needed because the second processor transforms data at commands from the first processor. 2:12-18

> The channels 150 execute commands from microcontroller 160. In some embodiments, the four channels 150.x are implemented by a single channel circuit that performs the function of the four channels 150 using time division multiplexing. The channel circuit is not software programmable. The channel circuit is fast and inexpensive. 4:6-12.

Dkt. 133 at 15. Defendants assert that accordingly the claims cannot encompass what was specifically distinguished. Dkt. 133 at 15 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F. 3d 1359, 1366-67 (Fed. Cir. 2002). Defendants state that claim 13 is consistent with its construction because claim 13 also states that the first circuit is "programmable with software prepared…" and the second circuit is "not programmable." Defendants state that claim 13 thus does not only just add a limitation that renders the claims identical under Defendants construction. Defendants also note that the doctrine of claim differentiation cannot broaden claims beyond their meaning in light of the specification. Dkt. 133 at 17.

On reply, Net Navigation asserts that the passage cited by Defendants at 1:64-2:1 states nothing about the second processor not being programmable but rather characterizes the processors as being different on other grounds. Net Navigation asserts that the explicit language of the claims describes the differences of the circuits/processors. Dkt. 139 at 6-7. As to the specification quotes Defendants cite, Net Navigation asserts the passages include many examples of permissive language (as opposed to restrictive language) such as "some," "sometimes," "examples," "can make" and "can be." Dkt. 139 at 7.

Net Navigation also asserts that the basic distinction over the prior art was not the use of "non-programmable" processors but rather that as stated at 1:64-2:1 a "first processor determines how data are to be transformed for transmission" and a "second processor transforms the data at commands from the first processor." Dkt. 139 at 7-8. Net Navigation also asserts that *CSC*

Fitness actually rejected adding a limitation and that as in CSC Fitness the specification in the present dispute never requires the second circuit to be not programmable. Dkt. 139 at 8.

b. Analysis

The claims on their face appear to use "first" and "second" in the ordinary sense that such terms are used patent claims – in a manner merely being used to distinguish that two different circuits/processors are being claimed. Moreover, the surrounding claim language provides particular detail as to the operations of each circuit/processor such that a circuit/processor in the abstract is not claimed but rather the circuit/processors in accordance with the surrounding claim limitations is claimed. *See* 21:52-22:5, 25:30-35, 25:42-44. Thus, the claims themselves provide description as to how each of the circuits/processors operates. To the extent Defendants are attempting to read into the claims an embodiment from the specification, Defendants have not pointed to disavowal in the specification or other portions of the intrinsic record that contradict the clear claim language. Further, as Net Navigation notes the specification cites identified by Defendants generally use "permissive" language.

With regard to Defendants assertions that the basis for distinction from the prior art as described in the Background and Summary of Invention mandates that the second circuit/processor be non-programmable, the intrinsic record as a whole contradicts such mandate. Having described the prior art, the Summary of Invention begins with the following first paragraph:

> The above goals are achieved in some embodiments of the present invention by providing a network processor system which includes at least two processors, a "first" processor and a "second" processor. The first processor determines how data are to be transformed for transmission. The second processor transforms the data at commands from the first processor. For example, in some embodiments, the first processor performs address resolution and determines the

> new addresses to be inserted into the data. The first processor commands the second processor to transform the data by insertion of the new addresses. 1:61-2:5

This language clearly does not characterize the distinction of the prior art as being based upon the second processor being non-programmable. It is noted that the next paragraph, cited by Defendants, begins "[i]n some embodiments." 2:6. Further, even that paragraph merely describes the second processor as being fast and inexpensive and not needing "much intelligence." 2:12-19. In the context of the entirety of the intrinsic record, Defendants have not pointed to a clear disavowal or distinction over the prior art which mandates the limitations Defendants seek. The Court construes the terms such that the second circuit/processor is not required to be non-programmable. The parties have agreed to constructions for "processor" and "circuit." Dkt. 144-1 at 6. Having resolved the parties' disputes, the Court finds that "first circuit/processor" and "second circuit/processor" do not need additional construction beyond the agreed constructions for "processor" and "circuit."

2. "data flow" '860 Claims 8, 34

Net Navigation	Defendants
"stream of data traveling between two devices in a network"	"an ordered group of related data units"

The terms "data flow[s]" / "flow[s]" are disputed terms in the '860 Patent, '145 Patent and '122 Patent.[4] The Court addresses the terms separately with respect to the intrinsic record of each corresponding patent within which the term is utilized.

a. The Parties' Positions

[4] The construction in the '122 Patent was subject to an agreement reached at the oral hearing as described below.

Net Navigation asserts that the '860 specification describes a data flow as being a data stream between devices. Net Navigation cites to 3:9-11: "data between the Ethernet segment and the ATM switch 120 flows through a corresponding MAC"; 3:36-37: "data flow from the Ethernet to ATM (the 'ingress' flow)"; 3:47-48: "the egress flow (from ATM to Ethernet)." Net Navigation asserts that Defendants' construction improperly requires "ordered" data units while the specification makes no such requirement. Dkt. 124 at 17-18. Net Navigation notes that Cisco's own technical dictionary defines "flow" as "streams of data traveling between two endpoints across a network." Dkt. 124 at 18 (quoting *Cisco Systems' Dictionary).*

Defendants assert that the term is also used in the '145 Patent and that the term should be construed in context to the '145 Patent. In their briefing, Defendants reference their arguments regarding the term as used in the '145 Patent as described below. Defendants note that the later filed '145 Patent incorporated the '860 Patent by reference**.** Dkt. 133 at 17. At the oral hearing, Defendants raised two new arguments: (1) that the relationship of claims 1 and 8 mandate an ordered flow and (2) the specification of the '860 Patent discloses a sequential flow through the use of a FIFO in Figure 2. Hearing Tr. at 143-48. In particular, Defendants note that claim 1 requires "data units flowing sequentially between a network port and a network switch" and claim 8 which depends from claim 1 recites "the first and second circuits are operable to process different data flows." Defendants also asserted that the description of a FIFO in Figure 2 and 4:64-5:6 is consistent with sequential flow of related data units.

On reply, Net Navigation asserts that the '145 Patent is extrinsic evidence to the '860 Patent and that the '145 Patent is unrelated to the '860 Patent. Net Navigation cites to *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1167-68 establishing that the '145 Patent intrinsic

record is not controlling because a formal relationship is required before the cross-use of intrinsic records is required. Dkt. 139 at 9.

b. Analysis

The ‘860 Patent was filed before the ‘145 Patent and there is no formal relationship that makes the ‘145 Patent part of the intrinsic evidence of the ‘860 Patent record (the ‘860 Patent is incorporated by reference in the ‘145 Patent specification, however, Defendants point to nothing that establishes the reverse). As to the intrinsic record, Defendants new arguments are not convincing. First it is noted that the construction Defendants seek includes the term “ordered,” not sequentially. Defendants have not tied the terms together, and in fact, based upon the oral hearing Defendants appear to imply a meaning to “ordered” that is not necessarily limited to sequential. Second, even accepting Defendants’ citations to sequential flow in the specification, Defendants have not shown sufficient citation such that the intrinsic record as a whole mandates the use of “ordered” with regard to data flows. As to claim 1, the claim language describes the Circuit C1 receiving the data units flowing sequentially between the network port and the network switch. The claims do not state that the “one data flow” and the “different data flow” as processed by the first and second circuits and recited in dependent claim 8 must be in the same order as the flow between the port and the switch. It is also noted that independent claim 34 does not include the language relied upon in claim 1 by Defendants. The Court rejects Defendants inclusion of “ordered.”

The Court notes that as discussed below with regard to the ‘145 Patent, Defendants assert that “data flow” must imply some relatedness as the ‘145 Patent claims call out different data flows. Defendants assert that absent some relatedness Net Navigation could selectively point to random unrelated data and selectively call some data the first data flow and other data the second

data flow. It is noted that claim 8 of the '860 Patent similarly includes "different data flows," "one data flow," "the same data flow" and "different data flow." A stretched interpretation of "data flow" as described above does not seem to be indicated by the ordinary meaning of the term as used in the '860 Patent. So as to make clear the ordinary meaning, the Court includes "related" within its construction for the '860 Patent. To allow selective creation of unrelated data to be the "one data flow" and the "different data flow" would eviscerate the limitations. Although independent claim 34 defines the relatedness within the claim itself since the claim refers to the data that flows via a particular port ("network data flowing to or from a network via a network port") and the use of "related" may thus not be necessary; the Court shall consistently construe the term for both asserted claims. The Court construes "data flow" in the '860 Patent to be "a stream of related data traveling between two devices in a network."

'145 PATENT

1. Two Different Processing Channel Terms

"at least two of the frames of said one flow are processed by two different processing channels" '145 Claim 1

"to dispatch at least two of the frames of said one flow to two different processing channels" '145 Claim 14

Net Navigation	Defendants
Claim 1 "every frame in one flow is processed by one of the processing channels; at least one frame in the flow is processed by a different processing channel than at least one other frame in the flow" Claim 14 "one circuit assigns all frames in one flow to processing channels, such that every frame in the flow is assigned to one processing channel, but at least one frame in the flow is assigned to a different processing channel as another frame in the flow"	Claim 1 "frames that belong to the same flow are simultaneously processed by different processing channels" Claim 14 "frames that belong to the same flow are dispatched for simultaneous processing by different processing channels"

a. The Parties' Positions

Net Navigation asserts that the basic dispute is whether "frames that belong to the same flow are simultaneously processed by different processing channels." Net Navigation agrees that, for one flow, some frames in the flow must be processed by different processing channels but disagrees that data from the same flow needs to be processed simultaneously. Dkt. 124 at 22. Net Navigation further asserts that although claims 1 and 5 require "processing data in parallel," independent claims 14 and 19 have no such requirement. Net Navigation asserts that more importantly none of the claims require processing data of frames of the same flow in parallel. Dkt. 124 at 24. Net Navigation agrees that in embodiments with one flow processing data of the same flow will happen in parallel; however, Net Navigation notes that the specification describes "in some embodiments multiple flows are transferred through a single port" and "in some embodiments the system 110 has multiple ports." Dkt. 124 at 24 (quoting 3:19-20 and 8:17-18). Net Navigation asserts that its construction is consistent with the specification which describes simultaneous operation of channels (1:29-41), but asserts the specification does not require simultaneous processing of data from a single flow. Net Navigation asserts that Defendants apply a situation inherent in the specification embodiment of a single flow and make that situation a requirement of all multiple flow embodiments. Dkt. 124 at 25.

Defendants' cite to a prosecution statement in which the patentee amended the claims to overcome prior art and stated:

> Simultaneous processing of frames that belong to the same flow by different processing channels as required by Claim 1 is nowhere disclosed or suggested by the Joffe patent. Therefore, Applicants submit that Claim 1 is patentable over the teachings of the Joffe Patent. Feb. 19, 2002 Office Action Response at 16

Dkt. 133 at 23, Ex. E. Defendants assert that the patentee explicitly defined the operative portion of the claim terms and that such definition governs. Dkt. 133 at 23-24. Defendants assert that this conforms to the specification which states "different frames received on the first port are processed by different processing channels in parallel" and "the processing throughput is high because different channels process the data in parallel." Dkt. 133 at 24 (quoting Abstract, 1:45-46). Defendants assert that Net Navigation is ignoring the file history. Defendants assert that though Net Navigation points to portions of the specification which describe "multiple flows" or "multiple ports," whether or not multiple flows or ports are used, frames belonging to the same flow must be processed simultaneously as the patentee told the Examiner. Dkt. 133 at 25. At the oral hearing, Net Navigation emphasized that although the prosecution history statement references claim 1, the exact same amendment was made to claim 14, and thus, the statement is equally applicable to claim 14. Hearing Tr. at 158-160.

On reply, Net Navigation asserts that the single sentence of the Office Action Response relied upon by Defendants ignores the full context of the response. Net Navigation asserts that the statement in isolation ignores that the prior art in question (the '860 Patent – Joffe) was distinguished on the grounds that in the prior art each flow was assigned to one, and only one, processing channel:

> Applicants respectfully submit that the Joffe ['860] patent illustrates in FIG. 1 (which is cited in the above rejection), an ATM switch 120 that is coupled to Slicers 140.0-140.3, and each of Slicers 140.0-140.3 is respectively coupled to the channels CH 0-CH3 that are labeled 150.0-150.3 Dkt. 133 at Ex. E, Feb. 19, 2002 Office Action Response at 15.
>
> One-to-one correspondence between data flows and channels is made clear in the Joffe patent in FIG. 1 and this correspondence is described at column 4, lines 4-8, wherein it is stated "In FIG. 1, the data flow between each slicer 140.x and the corresponding MAC 130.x is controlled by a corresponding channel 150.x (also

> called channel "x" below, i.e. channel 0, 1, 2, or 3). The channels 150 execute commands from microcontroller 160 …" *Id.*
>
> The Joffe patent fails to disclose or suggest that a slicer 140.x can provide data to a non-corresponding channel 150.y and also fails to disclose or suggest that a channel 150.y can provide data to a non-corresponding MAC 130.x. To summarize, the Joffe patent (which is the only reference cited by the Examiner) discloses that each data flow is processed by a single channel, and the Joffe patent fails to disclose or suggest that frames of a single data flow be processed by multiple processing channels. *Id.*

Dkt. 139 at 10-11. Net Navigation asserts that the Applicant then stated the amended claim "explicitly requires that two frames of a single flow are processed by at least two different processing channels." Dkt. 133 at Ex. E, Feb. 19, 2002 Office Action Response at 15. Net Navigation asserts that the distinction repeatedly made was that some frames of the same flow were processed by different channels. Net Navigation cites to *Phillips* to state that the prosecution history as a whole must be reviewed as the prosecution history often lacks clarity. Net Navigation also cites to *Teleflex* to assert that disclaimers must represent "clear disavowal of claim scope." Dkt. 139 at 11. Net Navigation asserts that Defendants' citation to one sentence of the prosecution history does not conform to what the Applicant's repeatedly pointed to as the relevant distinction over the art. Dkt. 139 at 11-12. Net Navigation also asserts that the sentence in question is explicitly limited to claim 1 as the sentence only states "as required by claim 1." Net Navigation asserts that claim 1 and claim 14 are different (claim 1 including the term "parallel processing" which is absent from claim 14). Net Navigation asserts that it is thus clearly improper to apply the prosecution history statement in question to claim 14. Dkt. 139 at 12. At the oral hearing Net Navigation also noted that the Examiner's Reasons For Allowance in the Notice of Allowance did not mention "simultaneous" but rather stated the prior art failed to show among other things "wherein, in at least one flow of the first and second flows, data are transferred in frames, and each frame of one flow is processed by a single one of the processing

channels but at least two of the frames of one flow are processed by two different processing channels. Hearing Tr. at 179-80, Net Navigation Hearing Slide 68 (emphasis in original).

b. Analysis

Defendants' arguments fundamentally hinge on the inclusion of one word "simultaneously" included on page 16 of the Feb. 19, 2002 Amendment. In the Amendment at 15-16 the Applicants provide their argument distinguishing Joffe (the '860 Patent). The Applicants provide five paragraphs of arguments. The first four paragraphs emphasize a one-to-one data flow and channel correspondence of the prior art and the claim's requirement of the data flow being processed by multiple processing channels. Dkt. 133 at Ex. E, Feb. 19, 2002 Office Action Response at 15-16. The first paragraph establishes that Joffe Figure 1 illustrates four slicers respectively coupled to four channels which are respectively coupled to four MACs. *Id.* at 15. The second paragraph emphasizes that this arrangement in Joffe is a "one-to-one correspondence between data flows and channels." *Id.* The third paragraph states that Joffe fails to suggest that a channel can provide data to a non-corresponding MAC and then states that "Joffe patent fails to disclose or suggest that frames of a single data flow be processed by multiple processing channels." *Id.* The fourth paragraph then states "In contrast, Claim 1 now explicitly requires that two frames of a single flow are processed by at least two different processing channels" and then quotes the claim language as amended. *Id.* at 16. Only in the concluding paragraph do the Applicants then make the statement "[s]imultaneous processing of frames that belong to the same flow by different processing channels as required by Claim 1 is nowhere disclosed or suggested by the Joffe Patent." *Id.* Up until the use of the word "simultaneous," the arguments clearly relate to one-to-one channel correspondence and not "simultaneous" processing. The Applicants described of the prior art, described what is missing

in the prior art and pointed to the particular claim language which matched what is missing from the prior art, all in the context of one-to-one correspondence. It is clear that the summation sentence then provided by Applicants does not match the point of distinction being made by Applicants. Had Applicants merely not used the word "simultaneous," the rest of the summation would have matched the prior argument. Reading in context the entire argument, the more reasonable position to be taken from the file history is that the point of distinction was the one-to-one correspondence of Joffe and that the claims require a non one-to-one correspondence. It is also noted that the Examiner's Reasons For Allowance appears to emphasize the one-to-one distinction, not the simultaneous distinction. At most, the inclusion of "simultaneous" creates some ambiguity. As noted in *Phillips*, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Phillips*, 415 F.3d at 1317. The single inclusion of the word "simultaneously" in the otherwise clear record does not create the clarity that requires reading in a limitation of "simultaneously."

This Court construes "at least two of the frames of said one flow are processed by two different processing channels" to mean "at least one frame in the one flow is processed by a different processing channel than at least one other frame in the one flow." The Court construes "to dispatch at least two of the frames of said one flow to two different processing channels" to mean "at least one frame in the one flow is processed by a different processing channel than at least one other frame in the one flow."

2. "data flow" / "flow" '145 Claims 1-3, 11-15, 17, 26, 27

Net Navigation	Defendants
"stream of data traveling between two devices in a network" In its Reply Brief at 13, n. 6, Net Navigation agreed	"an ordered group of related frames"

to: "stream of related data traveling between two devices in a network"	

a. The Parties' Positions

Net Navigation asserts that its construction is consistent with the extrinsic dictionaries cited for the '860 Patent term "flow." Net Navigation further asserts that Defendants construction is inconsistent with the use of "in some embodiments" of '145 Patent specification 3:19-20: "In some embodiments the data ordering is maintained as if the data were processed sequentially by a single processing channel." Net Navigation asserts that it is improper to read in an embodiment merely because some embodiments contain the limitation. Dkt. 124 at 26. At the oral hearing, Net Navigation cited to Figure 1 and the corresponding specification which stated "we will call the data flow 1601 from port 114 to port 118 an 'ingress' flow, and the flow 160E from port 118 to port 114 and 'egress flow.'" Hearing Tr. at 172-73 (citing Figure 1, 4:48-50). Net Navigation also asserted that Figure 2 merely shows the flows 160I and 160E without the ports being dedicated to individual users or ordered and in a manner more consistent with the plain meaning.

Net Navigation further asserts the doctrine of claim differentiation counters Defendants' construction as claim 1 has no limitation of ordering while dependent claim 3 adds the limitation "in the same order in which the data were received" (and similarly claim 17). Dkt. 124 at 26, Dkt. 139 at 13. In its reply, Net Navigation asserts that although relatedness is implied in the use of "stream," Net Navigation would agree to a modified construction of "stream of related data traveling between two devices in a network." Dkt. 139 at 13, n. 6. Net Navigation further asserts that the plain meaning of data is not limited to "frames." Net Navigation notes that

limiting data to frames is inconsistent with the specification which refers to packets (10:6) and frames (10:7).

In response, Defendants assert that the different data flows in the patent must be ordered because if a data flow meant nothing more than unrelated intermingled data, that different data flows could not be distinguished from each other. Dkt. 133 at 25-26. Defendants assert if the data flows were just random streams of data, there would be no reason to maintain order and no way to distinguish one flow from another. Thus, Defendants assert inherently the streams must be "related." Defendants assert that Net Navigation's construction would vitiate the sole distinction made by the patentee to distinguish the prior art during prosecution. Net Navigation again cites to the statement: "simultaneous processing of frames that belong to the same flow by different processing channels." Dkt. 133 at 26-27. Defendants assert that this distinction is meaningless if there is no way to determine whether frames "belong to the same flow." Dkt. 133 at 27. Defendants also cite to the specification as teaching ordering. Defendants cite to the Abstract: "the processed frames are transmitted to a second port in the same order in which they were received on the first port" and to 1:47-61 ("data are transmitted on the second port in the same order in which they were received") and 2:27-31 ("frames will be dispatched to the second flow in the same order…which is the order of the frames in the first data flow").

b. Analysis

Defendants' argument that streams need to be related and not merely random mixtures or selection of data is consistent with the surrounding claim language. Though, the Defendants point to examples in the specification in which ordering is referred to, Defendants have not pointed to disavowal that limits data flows to ordered data flows. In addition, as pointed out by Net Navigation in one citation it is clear that ordering is referred to with permissive "in some

embodiments" language. Further, there are uses of data flow in which it appears to merely represent the data flowing in and out of a given port. 4:48-50, Figure 2. It is also noted that one passage utilizes "[i]n particular, the system of the present invention is suitable for connection oriented protocols which require the frame ordering." 2:27-31. The use of language such as "is suitable" is more permissive in nature and does not conform with an interpretation that the system may only be used with frame ordering. In light of the specification as a whole, the intrinsic record does not reflect a mandate that the data flows must be limited to "ordered" data flows. Such an understanding is consistent with the dependent claims 3 and 17 which add the concept of ordering. Though claim differentiation is not controlling, it does in this case provide further support to Net Navigation's position.

This Court construes "data flow" / "flow" to mean "stream of related data traveling between two devices in a network."

'122 PATENT

1. **"data flow" / "flow" '122 Claims 13, 17**

Net Navigation	Defendants
"stream[s] of data traveling between two devices in a network"	"any data transmission that can be assigned a bandwidth and can compete for bandwidth with other transmissions"

At the oral hearing, the parties reached agreement on the construction of "data flow" / "flow" in the '122 Patent. The parties both agreed in their briefing that a passage in the specification controls the issues:

> Further, the invention is not limited to ATM [asynchronous transfer mode]. In some embodiments, each structure 120 represents a non-ATM data flow or flows. We use the term "data flow" to denote any data transmission that can be assigned bandwidth and can compete for bandwidth with other transmissions. For

> example, a VP [virtual path] is a data flow. Each VC [virtual connection] with a VP is also a data flow. Another example of a data flow is a flow of IP packets having a predetermined source address and a predefined destination address. Another example is a flow of data on a TCP connection or a group of TCP connections. Other examples are possible. 6:26-36.

Dkt. 124 at 28, Dkt. 133 at 8. Net Navigation asserted that Defendants' construction if taken out of context could potentially exclude the example embodiments described above within the passage. At the oral hearing it became apparent that the parties primary disputes are questions related to infringement. Net Navigation agreed to the Defendants' construction and Defendants acknowledged that the examples given are included in the construction. Hearing Tr. at 89-92. As the parties have reached agreement, the Court shall construe "data flows" / "flows" in the '122 Patent to be "any data transmission that can be assigned a bandwidth and can compete for bandwidth with other transmissions."

2. "bandwidth" / "bandwidth requirement" / "bandwidth to be given" '122 claim 13 / '122 Claim 13 / '122 Claim 17

Net Navigation	Defendants
"transmission capacity" "specified transmission capacity" "predetermined specified transmission"	"bits-per-second" "specified bits-per-second" "the allocated percentage of the total bandwidth"

a. The Parties' Positions

Net Navigation asserts that "bandwidth" is a commonly understood term with a plain meaning. Net Navigation asserts that its common meaning is consistent with the usage in the specification at 1:11-15 and 2:7-10 and consistent with technical dictionaries. Dkt. 124 at 29-30. Net Navigation objects to Defendants' use of "bits per second" as the specification notes this is how bandwidth is measured not defined ("here the bandwidth is measured in bits per second"). Dkt. 124 at 30 (quoting 2:16-18). Net Navigation also objects to Defendants' importation of the

limitation "the allocated percentage of the total." Net Navigation states that "percentage" appears in one embodiment, does not appear in the claims, and would be improper to import into the claim. Dkt. 139 at 15.

Defendants cite to the statement at 1:9-10: "data transmission in networks may be subjected to some bandwidth (i.e. bits-per-second) requirements." Defendants assert that this indicates the patentee was acting as his own lexicographer. Dkt. 133 at 29. Defendants assert that the specification repeatedly refers to "bits-per-second" citing to 1:9-10, 2:17-20.

With regard to "bandwidth to be given," Defendants cite to:

> Each VC is to be given some bandwidth which is a portion of the total bandwidth of port 130. 1:21-22.
>
> Each VC is to be given a percentage of the bandwidth as shown in the following Table 2. 4:11-12.

Defendants also cite to Table 2 at 4:15-20 which includes "Percentage of Bandwidth to be given to the VC." Dkt. 133 at 30.

b. Analysis

In order for a patentee to act as a lexicographer, the record "must clearly set forth a definition of the disputed claim term." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). In contrast to the language in the '122 Patent described above with regard to data flow ("we use the term … to denote…"), the language cited by Defendants is not clear lexicography. Defendants have not raised a valid dispute that the term "bandwidth" generally would not be well understood by one skilled in the art. Further, the mere use of "i.e." in the context of the usage of bandwidth in the '122 Patent as a whole does not rise to the level of a clear statement of lexicography. Moreover, Net Navigation points to portions of the

specification which use the term in a general manner and the specification itself elsewhere states that "bits per second" is a measurement of bandwidth as a opposed to a definition of bandwidth ("here the bandwidth is measured in bits per second"). 2:16-18.

As to the percentage argument, Defendants seem to merely point to an embodiment of how bandwidth may be given as a percentage, this merely reflects a disclosed embodiment without clear language of disclaimer within the specification. The Court construes "bandwidth" to mean "transmission capacity," construes "bandwidth requirement" to mean "specified transmission capacity," and construes "bandwidth to be given" to mean "predetermined specified transmission."

CONCLUSION

For the reasons stated, the Court orders / recommends[5] the constructions set forth above.

SIGNED this 11th day of December, 2012.

AMOS L. MAZZANT
UNITED STATES MAGISTRATE JUDGE

[5] See footnote 1 herein.