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Paper 53
Entered: May 25, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARISTA NETWORKS, INC.,
Petitioner,

v.

CISCO SYSTEMS, INC.,
Patent Owner.

Case IPR2016-00303
Patent 6,377,577 B1

Before BRYAN F. MOORE, MIRIAM L. QUINN, and MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. 318(a)

I. INTRODUCTION

Arista Networks, Inc. ("Petitioner") filed a Petition to institute an *inter partes* review of claims 1, 2, 7–10, 12–16, 18–22, 25, and 28–31 of U.S. Patent No. 6,377,577 B1 (Ex. 1001, "the '577 patent"). Paper 1 ("Pet."). Cisco Systems, Inc. ("Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp."). On June 11, 2016, we instituted an *inter partes* review of claims 1, 2, 7–10, 12–16, 18–22, 25, and 28–31. Paper 8 ("Dec. on Inst.").

After institution, Patent Owner filed a Patent Owner Response (Paper 19, "PO Resp."), and Petitioner filed a Reply (Paper 24, "Pet. Reply"). A consolidated oral hearing for this case and related Cases IPR2016-00306, IPR2016-00308, and IPR2016-00309 was held on March 7, 2017, and a transcript of the hearing has been entered into the record of the proceeding as Paper 51 ("Tr."). Patent Owner filed a Motion to Exclude Evidence (Paper 44, "PO Mot."). Petitioner filed an Opposition to Petitioner's Motion to Exclude Evidence (Paper 46, "Pet. Opp."); and Petitioner filed a Reply to Patent Owner's Opposition to the Motion to Exclude Evidence (Paper 48, "PO Reply to Opp.").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 7–10, 12–16, 18–22, 25, and 28–31 are unpatentable, but has not shown that claim 2 is unpatentable.

A. Related Proceedings

The '577 patent is involved in *Cisco Systems, Inc. v. Arista Networks, Inc.*, Case No. 4:14-cv-05343 (N.D. Cal.) and *Cisco Systems, Inc. v. Arista*

Networks, Inc., Network Devices, Related Software and Components Thereof (II), ITC Inv. No. 337-TA-945. Pet. 1; Paper 5, 1. Petitioner has also filed other petitions requesting *inter partes* review of the '577 patent: IPR2015-00973, IPR2015-01049, and IPR2016-00301. Paper 5, 1. Petitioner also has filed numerous petitions requesting *inter partes* review of other patents owned by Patent Owner.

B. The '577 Patent

The '577 patent is titled, "Access Control List Processing in Hardware," and relates generally to a method for performing access control list processing in hardware using an associative memory. Ex. 1001, Abstract. Data packets transmitted between network devices can be restricted using a technique known as "access control." *Id.* at 1:6–8. One access control technique is to use access control lists, or "ACLs," to determine whether to permit or deny transmission of a packet to a particular destination. *Id.* at 1:13–15 ("[T]he ACL describes which selected source devices are permitted (and which denied) to send packets to which selected destination devices.").

The Specification provides an example of a known ACL format, where each ACL includes "access control specifiers." *Id.* at 1:17. These specifiers contain information to match with incoming packets, and then based on a match, specify a particular access result (e.g., whether transmission of a packet is "specifically permitted or specifically denied"). *Id.* at 1:16–27. Figure 1 of the '577 patent is reproduced below.

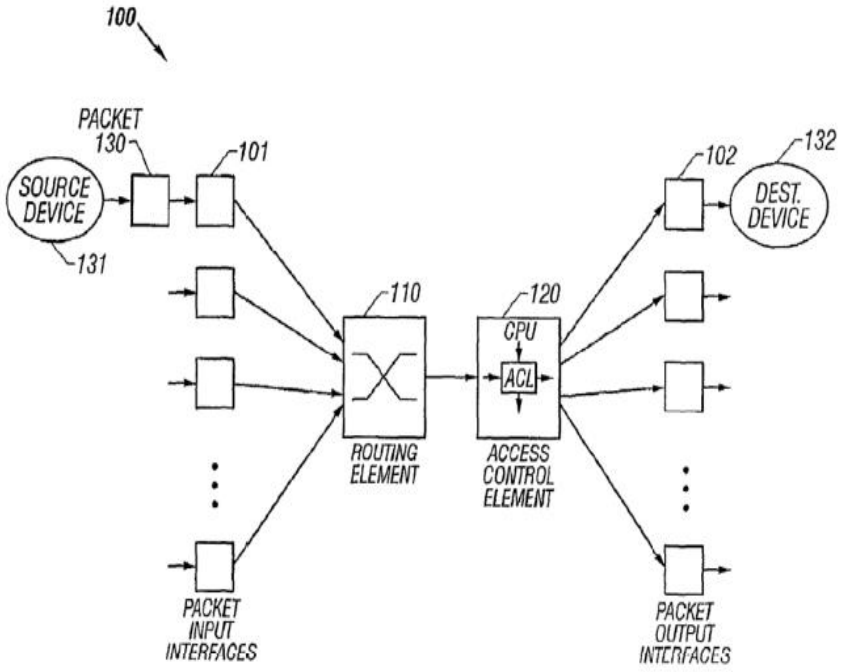

FIG. 1

Figure 1 is a block diagram of a system for performing access control in accordance with the '577 patent. As shown in Figure 1, packet 130 arrives at one of the system's packet interfaces 101. *Id.* at 3:30–31. Routing element 110 then selects one or more of the output interfaces to which the packet should be forwarded. *Id.* at 3:32–36. Prior to forwarding, access control element 120 determines whether to allow transmission of the packet. *Id.* at 3:36–40. Figure 2 of the '577 patent is reproduced below.

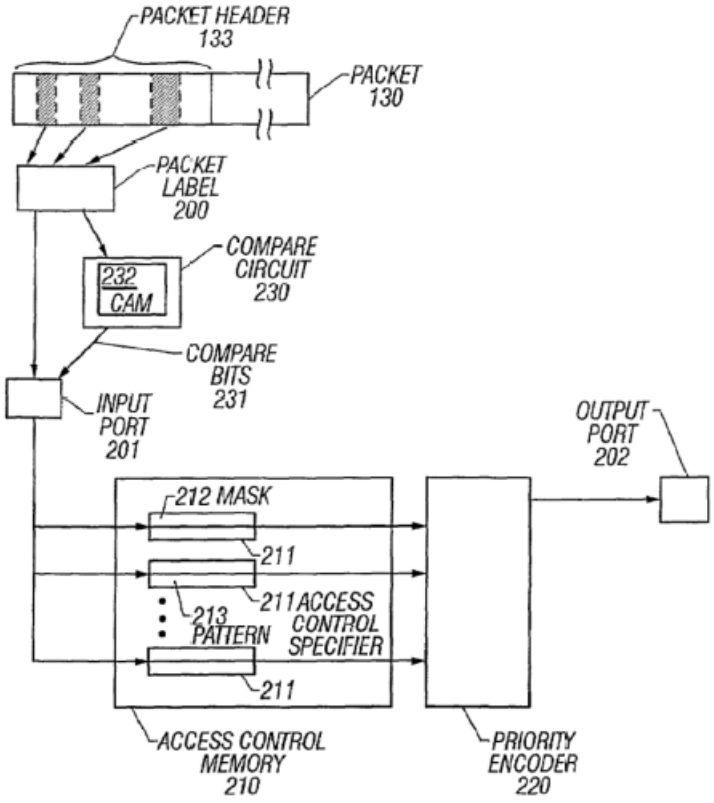

FIG. 2

Figure 2 is a block diagram of an access control element that contains access control patterns. When packet 130 arrives at access control element 120, packet label 200 is created based on information derived from packet header 133 of packet 130. *Id.* at 4:1–4. The information in packet label 200 is compared to label match mask 212 and label match pattern 213 of each access control specifier 211. *Id*. at 4:34–47. If a match is found with a particular access control pattern, priority encoder 200 selects the corresponding access control specifier 211 with the highest priority and provides an indicator of that access control specifier 211 to output port 202.

Id. at 4:47–56. The indicator specifies an access control result, which specifies if the packet should be transmitted. *Id.* at 4:57–65.

C. Illustrative Claim

Petitioner challenges claims 1, 2, 7–10, 12–16, 18–22, 25, and 28–31 of the '577 patent. Claim 1 is the only independent claim, and is reproduced below:

> 1. A method, including the steps of
>
> maintaining a set of access control patterns in at least one associative memory;
>
> receiving a packet label responsive to a packet, said packet label being sufficient to perform access control processing for said packet;
>
> matching matchable information, said matchable information being responsive to said packet label, with said set of access control patterns in parallel, and generating a set of matches in response thereto, each said match having priority information associated therewith;
>
> selecting at least one of said matches in response to said priority information, and generating an access result in response to said at least one selected match; and
>
> making a [r]outing-decision in response to said access result.

Ex. 1001, 7:34–48.

D. Instituted Ground of Unpatentability

References	Basis	Challenged Claims
Huey[1] and ATM UNI Specification.[2]	§ 103	1, 2, 7–10, 12–16, 18–22, 25, and 28–31

[1] U.S. Patent No. 5,467,349, issued Nov. 14, 1995 (Ex. 1020).
[2] ATM User-Network Interface Specification, Version 3.0, Sept. 10, 1993 (Ex. 1021).

II. ANALYSIS

A. Assignor Estoppel

Patent Owner urges that the Board should have denied institution under an application of assignor estoppel, which Patent Owner admits the Board does not recognize as a defense in *inter partes* review proceedings. PO Resp. 57–64. None of the arguments presented persuaded us to deviate from our continued policy of rejecting assignor estoppel as doctrine applicable to *inter partes* review. As we have explained in other decisions where a patent owner has argued this issue:

> Under the AIA, "a person *who is not the owner of a patent* may file with the Office a petition to institute an *inter partes* review of the patent." 35 U.S.C. § 311(a) (emphasis added). Consequently, under the statute, an assignor of a patent, who is no longer an owner of the patent at the time of filing, may file a petition requesting *inter partes* review. This statute presents a clear expression of Congress's broad grant of the ability to challenge the patentability of patents through *inter partes* review.

Athena Automation Ltd. v. Husky Injection Molding Sys. Ltd., Case IPR2013-00290, slip op. at 12–13 (PTAB Oct. 25, 2013) (Paper 18); *see also Esselte Corp. v. DYMO B.V.B.A.*, Case IPR2015-00779 (PTAB Aug. 28, 2015) (Paper 13); *B/E Aerospace, Inc. v. MAG Aerospace Indus., LLC*, Case IPR2014-01510, slip op. at 14–15 (PTAB March 26, 2015) (Paper 24); *Redline Detection, LLC, v. StarEnvirotech, Inc*., Case IPR2013-00106, slip op. at 12-13 (PTAB June 30, 2014) (Paper 66); *Synopsys, Inc. v. Mentor Graphics Corp*., Case IPR2012-00042, slip op. 16–17 (PTAB Feb. 19, 2014) (Paper 60). Regarding these cases, Patent Owner asserts that,

> Although the Board has been reluctant to apply assignor estoppel in the context of *inter partes* review . . . , Cisco

> respectfully submits that the Board should have applied the doctrine of assignor estoppel to deny the institution of this Petition. The Board's continual rejection of the assignor estoppel defense is contrary to the rules governing this proceeding and works a substantial injustice on Cisco by allowing Cheriton and Bechtolsheim, through their company Arista, to disavow [their] prior assignment and use these proceedings as an end run around the assignor estoppel doctrine.

PO Resp. 58. We have reviewed and considered Patent Owner's arguments for application of assignor estoppel, as quoted above and otherwise explicated throughout its Patent Owner Response. We are cognizant of the specter of forum shopping, but we agree with the Board's prior statement that, "Congress has demonstrated that it will provide expressly for the application of equitable defenses when it so desires." *Redline*, Paper 40, slip op. at 4 (PTAB Oct. 1, 2013) (citing *Intel Corp. v. Int'l Trade Comm'n*, 946 F.2d 821, 836–38 (Fed. Cir. 1991)). Accordingly, we decline to apply assignor estoppel to this *inter partes* review proceeding.

A. Patent Owner's Motion to Exclude Evidence

Patent Owner moves to exclude several of Petitioner's exhibits, including Exhibit 1021 and Exhibit 1028. PO Mot. 1.

1. Ex. 1028 will not be excluded

Exhibit 1028 is a declaration from Ms. Sandra Schroeder, who works for Pearson, the parent company of Prentice Hall, Inc., which published ATM UNI Specification. *See* Ex. 1028 ¶ 1. Patent Owner asserts the declaration should be excluded because Ms. Schroeder has not presented any actual records corroborating her testimony and she has no personal knowledge of the publication of the ATM UNI Specification. PO Mot. 12. We disagree. The declaration from Ms. Schroeder may be used as evidence

of Prentice Hall's routine business practice supporting the publication of the ATM UNI Specification. *See Swindell Dressler Int'l Co. v. Travelers Cas. & Sur. Co.*, 827 F. Supp. 2d 498, 502 (W.D. Pa. 2011); *see* Fed. R. Evid. 406, 803, and 902; *see also, e.g. Envirex, Inc. v. Ecological Recovery Assocs., Inc., et al.*, 454 F.Supp. 1329, 1333 (M.D. Pa. 1978) ("[E]vidence of the routine practice of an organization, *whether corroborated or not*, is relevant to prove that the conduct of the organization in a particular occasion was in conformity with the routine practice") (emphasis added); American Jurisprudence Proof of Facts; Second Series, 35 POF 2d 589 ¶¶ 1–11 (1983). Also, as Petitioner points out, Patent Owner did not request the underlying corroborating records during these proceedings.

Patent Owner also asserts that,

> For purposes of public availability of the ATM UNI reference, the relevant date is not the date Prentice Hall may have given the ATM UNI reference as the publication date. The relevant date is the date the ATM UNI reference was available and indexed in a library or available for download from the Internet.

PO Mot. 13–14. A motion to exclude is the wrong vehicle to challenge public availability, which is a substantive issue that goes to the sufficiency of the evidence, not to admissibility at issue here. *FLIR Sys., Inc. v. Leak Surveys, Inc.*, IPR2014-00411, slip. op., Paper 113 at 4 (PTAB September 3, 2015) ("A motion to exclude is not a vehicle for addressing the weight to be given evidence."); *see also* 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012) ("A motion to exclude . . . may not be used to challenge the sufficiency of the evidence to prove a particular fact.").

For the reasons above, we do not exclude Exhibit 1028.

2. Ex. 1021 will not be excluded

Exhibit 1021 is the ATM UNI Specification. Patent Owner argues the ATM UNI Specification should be excluded as irrelevant because "Arista has not provided any competent evidence showing that the ATM UNI reference was publicly available before the critical date of the '577 patent." PO Mot. 3–6. Again, a motion to exclude is the wrong vehicle to challenge public availability, which is a substantive issue that goes to the sufficiency of the evidence, not to admissibility at issue here. *FLIR Sys., Inc.*, Paper 113 at 4. Thus, Patent Owner's arguments regarding Exhibit 1021 will not be considered and we do not exclude Exhibit 1021.

3. Exs. 1027, 1029, 1030, 1031

We do not rely on Exhibits 1027, 1029, 1030, or 1031 in this decision. Thus, Patent Owner's motion to exclude regarding these Exhibits is dismissed as moot.

B. Claim Construction

In an *inter partes* review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278 (Fed. Cir. 2015) ("We conclude that Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA."), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set

forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner proposes constructions for the terms "access control," "associative memory," "packet label," "responsive," and "access control specifier." Pet. 5–9. Patent Owner objects to the Board's modified construction of "access control," agrees with Petitioner's proposed construction of "access control specifier," and proposes a clarification of the term "access result." PO Resp. 15–22. For the purposes of this Decision, only the following terms require construction.

1. "access control"

In the Decision to Institute we construed "access control" consistent with the construction reached in connection with determining whether to institute *inter partes* review of the '973 IPR. We construed "access control" as "restriction[] on the transmission of a packet or alteration of a selected output interface for the packet." *See* '973 IPR, Paper 11, 4–5 (Decision on Request for Rehearing).

Patent Owner asserts "Arista never relies on or points to any example in Huey or ATM UNI (the only alleged prior art of record) where there is an alteration of a selected output interface in response to access control processing." PO Resp. 22. Petitioner agrees, stating "Arista does not rely

on the portion of the definition requiring an "alteration of an output interface." Pet. Reply 20. Because the parties neither rely on the "alteration" portion of the construction nor dispute the "restriction" portion of the construction, we construe, for purposes of this decision, "access control" to mean "restriction on the transmission of a packet" and need not determine whether the "alteration" portion of the construction from the Decision on Institution is correct.

2. "access control specifier"

In the Decision on Institution, we construed "access control specifier" to mean "a specifier that includes information for matching with a packet and that may indicate, or aid in indicating, an access result." The parties do not dispute the interpretation of "access control specifier" set forth in our Decision on Institution, and we discern no reason based on the record before us to change that interpretation for purposes of the Final Decision. PO Resp. 22; *See generally*, Pet. Reply. Accordingly, we adopt our claim construction for "access control specifier" from the Decision on Institution.

3. "access result"

In the Decision on Institution, we declined to limit "access result" to a permit/deny decision for the same reasons stated above with respect to "access control." Dec. on Inst. 13–14. However, we did not explicitly define "access result." We stated that Patent Owner's proposed construction is unduly narrow because it ignores "altering" or "modifying" the output interface. *Id.* Nevertheless, as explained above, the parties in this *inter partes* review do not rely on the "altering" or modifying" of the output interface.

Patent Owner asserts "the Board has, in other related proceedings for the '577 patent, consistently required that an 'access result' be premised on a successful match, which is described by the '577 patent. Put differently, the Board has distinguished, for example, discarding packets (e.g., defective packets) when there is no match with an access control specifier." PO Resp. 22 (citations omitted). Petitioner does not respond to this assertion. However, Petitioner's analysis of the references acknowledges that a successful match is required. *See* Pet. Reply 8 ("The Board's understanding at institution was correct—the input port of Huey/ATM UNI generates access results 'in response to' successful matches . . . ."); *see also* Tr. 33:9–20 (Petitioner states "Of course, the Board found that there must be a successful match."). In the analysis below, consistent with the claim language and the Specification, we require the prior art and evidence presented to show a successful match with an "access control specifier."

C. The Challenged Claims – Obviousness over Huey and ATM UNI Specification

Petitioner contends that claims 1, 2, 7–10, 12–16, 18–22, 25, and 28–31 are unpatentable under 35 U.S.C. § 103 as obvious over Huey and ATM UNI Specification. Pet. 12–57. Petitioner relies on the testimony of Dr. H. Johnathan Chao. Ex. 1002. Patent Owner disagrees with Petitioner's contentions. PO Resp. 23–57.

1. Huey

Huey, titled "Address Handler for an Asynchronous Transfer Mode Switch," teaches an address handling circuit for an asynchronous transfer mode ("ATM") switch. Ex. 1020, Abstract, 1:8–10. The address handling circuit processes a cell data stream including a plurality of cells. *Id.* at 4:58–

60. Each cell has a header portion with a virtual channel identifier (VCI) and a virtual path identifier (VPI) and a data payload portion. *Id.* at 4:60–62.

Figure 4 of Huey depicts a functional block of an ATM switching system.

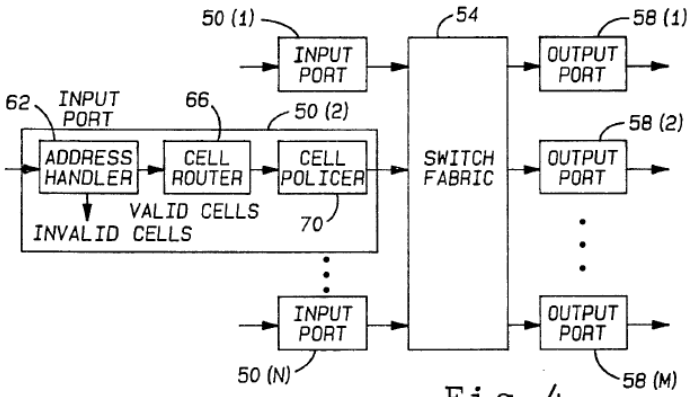

Fig-4
PRIOR ART

As shown in Figure 4, ATM switching system includes a plurality of input ports, 50(1), 50(2), to 50(N), switch fabric 54, and a plurality of output ports 58(1), 58(2), to 58(M). *Id.* at 3:34–38, 5:54–56. Each input port 50 can include an address handler 62, a cell router 66, and a cell traffic policer 70. *Id.* at 3:38–40. Address handler 62 evaluates header 24 of each cell 22 input thereto to validate cells for routing by cell router 66 and to detect invalid cells that are not routed. *Id.* at 3:40–42. Cell traffic policer 70 monitors input data streams including a plurality of cells 22 on a VP and/or VC basis at entry points to ATM switching network 10. *Id.* at 3:46–48. Cell policer 70 monitors ATM cell input rates to ensure one subscriber does not exceed a subscribed peak input data rate. *Id.* at 3:52–54. Cell policer 70 can also monitor average input data stream rates if needed. *Id.* at 3:54–55.

Figure 10A of Huey is reproduced below.

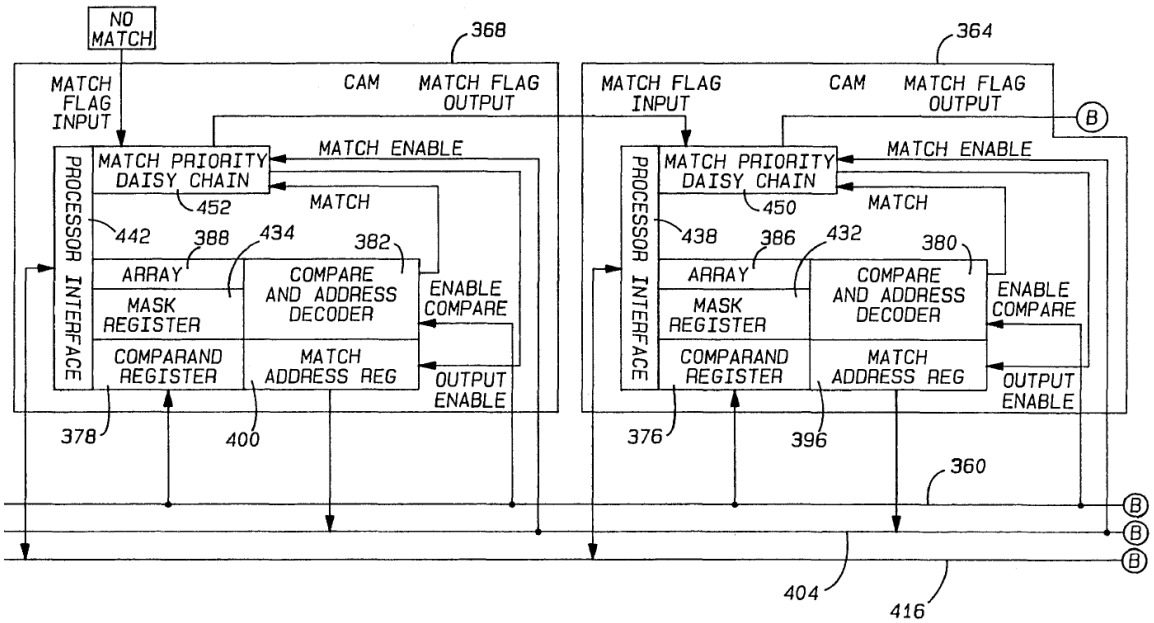

Fig-10a

Figure 10A is a detailed logic diagram of address handling circuit 340 which parallels operation of address handling circuit 200 of Figure 8. *Id.* at 8:45–48. Content addressable memory circuits ("CAMs") 364 and 368 load the VPI/VCI addresses from compare bus 360 into comparand registers 376 and 378. *Id.* at 9:13–15. CAMs 364 and 368 compare the VP/VC address against VC/VP addresses stored in arrays 386 and 388 to determine if there is a match. *Id.* at 9:17–20. A match by CAM 364 or 368 is signaled to match address circuit 392, which enables the highest priority CAM that has the match. *Id.* at 9:20–23. The contents of the match address register of the highest priority CAM is output onto match address bus 404. *Id.* at 9:23–25.

2. ATM UNI Specification

ATM UNI Specification defines the interfaces used between ATM user devices and switches. Ex. 1021, 30–31. It teaches that "[a] traffic contract is comprised of a [Quality of Service ("QoS")] class, a vector of

traffic parameters, a conformance definition and other items as specified in section 3.6." *Id.* at 76. It also teaches a Usage Parameter Control ("UPC"), which "is defined as the set of actions taken by the network to monitor and control traffic in terms of traffic offered and validity of the ATM connection." *Id.* at 96, 122. "The UPC is intended to control the traffic offered by an ATM connection to ensure conformance with the negotiated Traffic Contract." *Id.* at 125.

3. ATM UNI Specification is a Printed Publication

Patent Owner asserts "Arista's evidence supporting ATM UNI's alleged publication date is legally insufficient. Arista therefore has not met its burden to establish ATM UNI as prior art." PO Resp. 4. Petitioner submits the ATM UNI Specification as Exhibit 1021, which on page 5 provides a copyright notice dated 1993 by Prentice Hall. Ex. 1021, 5. Petitioner alleges in the Petition that the ATM UNI Specification's publication date is December 1993. Pet. 3. In response to Patent Owner's argument that the ATM UNI Specification's publication date of 1993 is insufficient evidence of its public accessibility (PO Resp. 4), Petitioner provides a declaration of an employee of Pearson (parent of Prentice Hall) (Ex. 1028). Pet. Reply. 2, 22.

The determination of whether a given reference qualifies as a prior art "printed publication" involves a case-by-case inquiry into the facts and circumstances surrounding the reference's disclosure to members of the public. *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). "Because there are many ways in which a reference may be disseminated to the interested public, 'public accessibility' has been called the touchstone in determining whether a reference constitutes a 'printed publication' bar under

35 U.S.C. § 102(b)." *In re Hall*, 781 F.2d 897, 898–99 (Fed. Cir. 1986). To qualify as a prior art printed publication, the reference must have been disseminated or otherwise made accessible to persons interested and ordinarily skilled in the subject matter to which the document relates prior to the critical date. *Kyocera Wireless Corp. v. Int'l Trade Comm'n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008).

Although Patent Owner challenges whether the ATM UNI Specification is a printed publication, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in an *inter partes* review). Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are obvious, and one aspect of such a showing is that the references relied upon are patents or printed publications.

Having reviewed the parties' arguments and supporting evidence, we determine that Petitioner has demonstrated sufficiently that the ATM UNI Specification is a printed publication based on the following reasons and factual findings. First, we find that the ATM UNI Specification was published by Prentice Hall in 1993. We base our findings on the testimony of Ms. Schroeder, an employee of Pearson, parent of Prentice Hall, filed as Exhibit 1028. We also support our findings based on the indicia of publication found on the ATM UNI Specification, Exhibit 1021, and the totality of the facts including that the ATM UNI Specification is a book published by a well-known publisher several years before the critical date of June 30, 1998.

Patent Owner asserts "the only evidence of record that Arista can rely on for proving public availability are: (i) ATM UNI' s copyright date of 1993; and (ii) ATM UNI's two instances of library cataloguing markings . . . ." PO Resp. 6. Patent Owner asserts that "ATM UNI's copyright of 1993, standing alone, is legally insufficient to establish that ATM UNI was publicly available in 1993, or at any point prior to the critical date of June 30, 1998."[3] *Id*. at 7 (citing *iONROAD Ltd. v. Mobileye Tech. Ltd.*, IPR2013-00227, slip op., at 3 and 15–16 (PTAB Aug. 27, 2013) (Paper 18) ("*iONROAD*").

Patent Owner cites to *Hilgraeve* for the proposition that a copyright notice is "insufficient to establish that a product was known or used by others on that date." *Hilgraeve, Inc. v. Symantec Corp.*, 271 F. Supp. 2d 964, 976 (E.D. Mich. 2003). However, panels have relied on such a notice as probative evidence of publication. *See, e.g.*, *Ford Motor Co. v. Cruise Control Techs. LLC*, Case IPR2014-00291, slip op. at 7–8 (PTAB June 29, 2015) (Paper 44); *FLIR Systems, Inc. v. Leak Surveys, Inc.*, IPR2014–00411, slip op. at 18–19 (PTAB Sept. 5, 2014) (Paper 9) (copyright notice establishes prima facie prior art date). Additionally, in this case, unlike *Hilgraeve*, ATM UNI Specification is not a user manual shipped with a product but is a book published by a well-known publisher, i.e., Prentice Hall.

[3] Patent Owner does not assert that the copyright date is hearsay. Nevertheless, at the time of issuing this Decision, the ATM UNI Specification qualifies as an ancient document under Fed. R. Evid. 803(16) because it is now more than 20 years old.

Patent Owner also relies on *iONROAD*. In *iONROAD*, however, the exact month of publication was at issue and the copyright notice did not indicate the month. *iONROAD*, Paper 18 at 15–16. Here, the copyright notice shows a publication date of 1993, well before the critical date of 1998 regardless of which month in 1993 it was published. *See Fujitsu Semiconductor Ltd. v. Zond, LLC*, IPR2014-00802, 2015 WL 5834202, at *19 (PTAB Oct. 2, 2015) (Considering the length of time between the alleged publication date and the critical date in assessing whether a reference qualified as a printed publication); *Ford*, Paper 44 at 7–8 (June 29, 2015) ("the date of the copyright notice is well before the filing date of the patent application that became the '463 patent").

The declaration of Ms. Schroeder, who works for Pearson, the parent company of Prentice Hall, Inc. supports Petitioner's contentions regarding the publication date of the ATM UNI Specification. Ex. 1028. Ms. Schroeder testifies that the ATM UNI Specification was published in 1993. Ex. 1028 ¶ 4. Ms. Schroeder testifies that "[a]s a part of its ordinary course of business, Pearson [parent company of Prentice Hall] publishes educational, technical, and professional literature." *Id.* at ¶ 3. To the extent Patent Owner asserts that the declaration is insufficiently corroborated to show an actual publication date, the declaration nevertheless supports the conclusion that a book, with indicia reciting publication by Prentice Hall, was published.

The probative value of routine business practice to show the performance of a specific act has long been recognized. *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986) (citations omitted). "Evidence of routine business practice can be sufficient to prove that a reference was made accessible

before a critical date." *Constant v. Advanced Micro–Devices, Inc.*, 848 F.2d 1560, 1569 (Fed. Cir. 1988). We credit Ms. Schroeder's testimony as showing the routine general business practice of Prentice Hall and supporting the copyright date on the ATM UNI Specification.

Patent Owner relies on *L-3 Communications Holdings, Inc. v. Power Survey, LLC*, IPR2014-00832, slip op. at 16–17 (PTAB Nov. 14, 2014) (Paper 9) and *TRW Automotive US LLC v. Magna Electronics Inc.*, IPR2015-00960, slip op. at 18–19 (PTAB Oct. 5, 2015) (Paper 9) for the proposition that a date on a document does not establish that an accompanying document was available to, or disseminated to, the public. PO Resp. 6–7. However, *TRW* involved symposium papers, which are not necessarily disseminated to the public, and *L-3 Communications* involved a corporate report that was "circulated to select employees of Sarnoff Corporation." *L-3 Comm'ns*, Paper 9 at 16–17; *TRW Auto.*, Paper 9 at 18–19. Patent Owner has not presented evidence that the ATM UNI Specification is similarly limited in distribution or not generally disseminated to the public.

As noted above, the ATM UNI Specification is a technical reference published by a well-known, commercial publisher. Mere distribution to commercial publishers without restrictions on use has been held to constitute publication. *See Garrett Corp. v. United States*, 422 F.2d 874, 878 (Cl. Ct. 1970) ("While distribution to government agencies and personnel alone may not constitute publication, distribution to commercial companies without restriction on use clearly does." (internal citation omitted)) (discussed in *Mass. Inst. of Tech. v. AB Fortia*, 774 F.2d 1104, 1109 (Fed. Cir. 1985) and *N. Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 936–37 (Fed. Cir.

1990)). Here, we have more than just distribution to a commercial publisher; we have work published by the commercial publisher.

In this case, the ATM UNI Specification was distributed to Prentice Hall, which is in the business of publishing and selling such papers to interested persons. *See* Ex. 1028 ¶¶ 1–4. Therefore, the facts and circumstances surrounding the reference's disclosure to members of the public suggest public dissemination. *See In re Klopfenstein*, 380 F.3d at 1350. Additionally, because *inter partes* review is designed and intended to afford expedited and efficient relief, it serves the interest of justice to allow the Petitioners to rely on the copyright date of technical references published by a well-known publisher in this case.

Patent Owner also asserts "Arista provides no explanation as to the meaning of the Arizona State University (ASU) Catalog Card Number included in ATM UNI ('Catalog Card Number')." PO Resp. 7. This assertion is moot. We do not rely on the card catalog number. As noted above, the ATM UNI Specification is not a University thesis paper, which may or may not be made available to the public in the regular course of business of the University. Rather, the ATM UNI Specification is a technical reference distributed by a commercial publisher of educational, technical, and professional literature.

Accordingly, based on the facts and circumstances of this case, we conclude that the ATM UNI Specification was a printed publication that was publicly accessible before the invention date of the '577 patent (i.e., June 30, 1998), and is, therefore, prior art to the challenged claims.

4. Analysis

Petitioner asserts that a combination of Huey and the ATM UNI Specification renders obvious claims 1, 2, 7–10, 12–16, 18–22, 25, and 28–31. Pet. 12–57. We have reviewed the Petition, Patent Owner's Response, Petitioner's Reply, as well as the relevant evidence discussed in those papers and other record papers. As described in further detail below, we determine that the record sufficiently establishes Petitioner's contentions for claims 1, 7–10, 12–16, 18–22, 25, and 28–31, but not for claim 2, and we adopt Petitioner's contentions discussed below as our own.

5. Claim 1

Independent claim 1 recites "maintaining a set of access control patterns in at least one associative memory." Petitioner cites Huey's VP and VC addresses stored in CAM arrays (at least one associative memory), CAMs 364 and 368. Pet. 13 (citing Ex. 1002 ¶¶ 93–107), as the recited "access control patterns" and cites the ATM UNI Specification's Usage Parameter Control (UPC) for performing "access control" (citing Ex. 2021 §§ 3.6.3.2.3.1, 3.6.3.2.3.5). Pet. 13–17. Independent claim 1 recites "receiving a packet label responsive to a packet, said packet label being sufficient to perform access control processing for said packet." Petitioner cites Huey's cell header, which includes VPI/VCI addresses, as the recited "packet label." Pet. 17–18. Independent claim 1 also recites "matching matchable information, said matchable information being responsive to said packet label, with said set of access control patterns in parallel, and generating a set of matches in response thereto, each said match having priority information associated therewith." Petitioner cites Huey's teaching of matching VPI/VCI addresses with VP/VC addresses stored in CAMs 364

and 368 in parallel, and generating matches associated with priority information. Pet. 19–21.

Independent claim 1 also recites "selecting at least one of said matches in response to said priority information, and generating an access result in response to said at least one selected match." Petitioner cites Huey's teaching to select the contents of the match register of the highest priority CAM, cites the ATM UNI Specification's teachings regarding Usage Parameter Control, and argues that Huey's cell traffic policer 70 "necessarily generates a discard instruction, i.e., an access result, for cell[s] that violate, or fail to conform to, the Traffic Contract." Pet. 25; *see id.* at 22–26. Finally, independent claim 1 recites "making a routing decision in response to said access result." Petitioner argues that the combination of Huey and the ATM UNI Specification teaches that Huey's cell traffic policer 70 makes a routing decision in response to said access result by discarding cells that do not conform with the Traffic Contract. Pet. 26–27. Petitioner sets forth reasons to combine Huey and the ATM UNI Specification on pages 12–13 of the Petition.

Patent Owner argues that Huey does not disclose "access control" because "[n]owhere does Huey disclose any discarding of cells when there is a match . . . [a]nd Huey's discarding of cells when there is no match in the CAM results in the cell being dropped prior to the cell being passed on to the cell router or cell policer." PO Resp. 31 (citing Ex. 2015); *id.* at 27–33. Specifically, Patent Owner argues that Huey does not have the ability to restrict transmission of a packet or alter a selected output interface for a packet, as our construction of "access control" requires. Petitioner is not relying, however, upon Huey's operation when the VP/VC information from

a cell header cannot be matched. To the contrary, Petitioner is relying upon a scenario where the VP/VC information from a cell header *does* match, but the cell is nevertheless subsequently discarded by cell traffic policer 70 for not conforming with the Traffic Contract. Pet. 22–26. As a result, this argument by Patent Owner is not persuasive.

Patent Owner also argues that Huey's address handling circuit does not perform "access control." PO Resp. 27–33. This argument also is not persuasive because Petitioner relies upon the *combination* of Huey's address handling circuit and cell traffic policer 70 for performing the claimed method, not upon Huey's address handling circuit alone. *See, e.g.*, Pet. 13 ("Combined, the address handler and policer perform the claimed method.").

Patent Owner also argues that "[n]either Huey's cell policer or the ATM UNI Specification's UPC are implemented in an associated memory, as required by the '577 patent's claims." PO Resp. 34. Specifically, Patent Owner argues that the claims are limited to performing "access control" in hardware rather than software. *Id*. at 34. For support, Patent Owner states "[a] key aspect of the '577 patent's invention is the implementation of access control in hardware memory." *Id.* (citing Ex. 1001, Abstract). Patent Owner does not assert, and we do not determine, that the cited text from the Abstract is a clear and unmistakable disavowal of implementations using software. Thus, despite the language in the Abstract, we determine that the claims do not require that "access control" occur in hardware memory.

Claim 1 contains several limitations, of which only "maintaining access control patterns in at least one associative memory" is arguably limited to a hardware implementation by its recitation of "associative memory." As Petitioner point out, however, "[t]he claim is otherwise silent

as to what structure—whether software or hardware—generates the "access result" or performs any of its other steps." Pet. Reply 9. Therefore, we do not agree with Patent Owner's argument.

Patent Owner also argues that the ATM UNI Specification's UPC and Huey's cell policer do not disclose "access control" because the traffic control data and cell policer are not stored or implemented in a CAM. PO Resp. 33–37. As noted above, the only limitation that arguably requires a CAM is "maintaining access control patterns in at least one associative memory." Patent Owner is not specific in its argument, however, about which step or steps must occur in the CAM. *Id.* Patent Owner appears to be referring to the "matching," "selecting," and/or "access result" steps. The claim, however, does not explicitly require those limitations to be performed in a CAM. Thus, we do not agree with Patent Owner's argument.

Patent Owner also argues that the combination of Huey and the ATM UNI Specification does not disclose "access control patterns." PO Resp. 37–39. Specifically, Patent Owner asserts "Huey's VP/VC addresses are not used by the cell policer / UPC to enforce Traffic Contract, which Arista contends is the element that performs the access control, thus cannot be the 'access control patterns' described and claimed in the '577 patent." *Id.* at 39. We disagree.

As discussed above, we are persuaded that Huey teaches that its cell policer performs "access control." Huey also teaches that "[c]ell [traffic] policer 70 monitors ATM cell input rates to ensure one subscriber does not exceed a subscribed peak input data rate. Cell policer 70 can also monitor average input data stream rates if needed." Ex. 1020, 3:52–55. The ATM UNI Specification provides further details about Huey's user to network

interfaces ("UNI") 18, such as a Usage Parameter Control that ensures conformance with a Traffic Contract by, *inter alia*, discarding cells that exceed allowed rate limits. *See*, *e.g.*, Ex. 1021, 76, 122, 125–126. Thus, Huey's cell traffic policer 70 is imposing "a restriction on transmission of a packet," as our construction requires, at least when it discards a non-conforming cell.

Patent Owner also suggests the fact that VC/VP addresses are not used by the cell policer/UPC to enforce the Traffic Contract is a failure by Petitioner to show step of "maintaining access control patterns in at least one associative memory." PO Resp. 39. Patent Owner's argument on this point refers to "access control" generally, thereby conflating two limitations of the claim. When the limitations and Petitioner's contentions are examined individually in addition to as a whole, however, it is clear the cell policer is related to claim 1's recitation of "making a routing-decision in response to said access result" and the VC/VP addresses are related to the "maintaining" and "matching" limitations.

Huey's discard instruction, which Petitioner contends is the recited "access result," is based on whether a cell passed to the policer exceeds the Traffic Contract. Pet. 25. Claim 1 requires only that the access result be generated "in response to" the match so the VC/VP addresses used to match do not need to also be used by the cell policer. Huey's discard instruction is generated "in response to" a match by the address handling circuit because a match necessarily precedes the determination by cell traffic policer 70 to discard a non-conforming cell. *See*, *e.g.*, Pet. 23 (citing Ex. 1020, 9:39–41, Fig. 10b). Put another way, no cell is ever discarded by cell traffic policer 70 unless that cell has first been matched by address handler 62. There is no

requirement that the "access control specifiers" are directly used in ultimately making the routing decision. Thus, the VC/VP addresses that are used to make a match are not required by the claims to also generate the access result.

Patent Owner also asserts that Huey's ATM cell header, relied on by Petitioner, cannot meet the limitation of "receiving a packet label responsive to a packet, said packet label being sufficient to perform access control processing for said packet." PO Resp. 39–46. Although Patent Owner asserts the limitation is not met, Patent Owner first argues that "Huey's ATM cell header is not analogous to the claimed packet label." Specifically, Patent Owner argues that there are "fundamental differences" between the ATM protocol in Huey and the IP protocol described in the Specification. *Id.* at 40–41. Patent Owner then argues that an ATM cell header is not analogous to the claimed packet header. PO Resp. 41–45. To the extent Patent Owner is making an analogous art argument, Patent Owner fails to set forth the proper standard for assessing analogous art and fails to present a coherent corresponding analysis.

"References within the statutory terms of 35 U.S.C. § 102 qualify as prior art for an obviousness determination only when analogous to the claimed invention." *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (finding both hair brush art and toothbrush art to be analogous to a claim to a hair brush) (citing *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992)). "Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with

which the inventor is involved." *Id.* (citations omitted). The scope of the field of endeavor is a factual determination based on the scope of the application's written description and claims. *Bigio*, 381 F.3d at 1326.

Patent Owner makes two arguments in regard to whether ATM cells are "analogous" to IP packets. First, Patent Owner argues that ATM cells are not relevant to IP packets because IP packets have variable length rather than fixed length packets. PO Resp. 42. Patent Owner has not established that the field of the inventor's endeavor is variable length IP packets, nor does Patent Owner present evidence or argument on that point. Patent Owner also argues that ATM networks are "sharply" different than IP networks because ATM cells do not contain specific source and destination information. *Id.* at 42–43. Again, Patent Owner has not established that the field of the inventor's endeavor is IP networks, nor does Patent Owner present evidence or argument on that point. Ultimately Patent Owner argues, "[w]hile the claimed packet label is responsive to a packet that would include IP specific information, for example, identifying the specific source and destination of the packet—i.e., information also necessary to perform access control for the packet—Huey's cell header does not include and does not need similar identifying information." *Id.* at 45. We are not persuaded by Patent Owner's argument because, as noted above, Patent Owner has not performed a proper analogous art analysis.

Patent Owner also argues that Huey does not meet the limitation to a "packet label . . . sufficient to perform access control processing." *Id.* at 46. Patent Owner incorporates its "analogous" arguments discussed above into this argument, thus our analysis below applies to the arguments made on pages 39 to 46 of the Patent Owner Response. *See Id.* at 39–46.

Specifically, Patent Owner argues that "Huey's ATM cell header is not sufficient to perform access control processing for the ATM cell and therefore does not meet claim 1's requirement that the received packet header be 'sufficient to perform access control processing' for the packet." *Id.* at 46. Patent Owner argues that Huey's address handler performs only "ordinary forwarding operations." *Id.* In particular, Patent Owner argues that "identifying the specific source and destination of the packet [is] information [] necessary to perform access control for the packet." *Id.* at 45.

We have construed "access control" to mean "restriction on the transmission of a packet." Our construction does not distinguish between "ordinary forwarding" and "access control" generally, nor does it require specific source and destination information. Pet. Reply 13. Patent Owner also argues "there is no indication that Huey's ATM cell header (the alleged packet label) is sufficient to perform access control based solely on the operations of Huey's address handler." *Id.* at 46. However, the claim does not recite that the determination of whether a packet label is "sufficient to perform access control" rests solely on the operation of an address handler on the packet header. As discussed above, Petitioner is relying upon the combination of Huey's address handler and cell policer. With respect to the cell policer, Patent Owner contends that its operations "do ***not*** rely on any information in Huey's ATM cell header" (*id.*), but, as Petitioner correctly points out, "the VPI and VCI information in the cell header is used by the input port to apply traffic control to each cell" (Pet. Reply 14–15). Therefore, Patent Owner's arguments are not commensurate with the scope of the claims and are not persuasive.

Patent Owner asserts that neither Huey nor the ATM UNI Specification renders obvious "matching matchable information, said matchable information being responsive to said packet label, with said set of access control patterns in parallel, and generating a set of matches in response thereto, each said match having priority information associated therewith" and/or "generating an access result in response to said at least one selected match." PO Resp. 47–48. Specifically, Patent Owner asserts that Huey discards cells based on a lack of a match. *Id.* We disagree. As noted above, Huey's discard instruction, which Petitioner contends is the recited "access result," is based on whether a cell passed to the policer exceeds the Traffic Contract. *Id.* at 35. Claim 1 requires only that the access result be generated "in response to" the match. Huey's discard instruction is generated "in response to" a match by the address handling circuit because a match necessarily precedes the determination by cell traffic policer 70 to discard a non-conforming cell. *See, e.g.*, Pet. 23 (citing Ex. 1020, 9:39–41, Fig. 10b).

Patent Owner also argues that "Huey does not disclose 'access result' and therefore also does not disclose making a routing decision 'in response to said access result.'" PO Resp. 48. Specifically, Patent Owner argues that "Huey does not disclose this claim element because Huey's ATM switching system determines the entire transmission path for a cell the moment that the cell enters the ATM network, and not in response to an access result." PO Resp. 48 (citing Ex. 2015 ¶ 160). Patent Owner suggests that changing the output interface is a routing decision that Huey fails to make. *Id.* at 49. This is irrelevant because we construed "access control" to include "restriction on the transmission of a packet," i.e., dropping the packet—which is a routing

decision that we have found that Huey does make. Thus, we are not persuaded by this argument.

Upon consideration of the parties' contentions and supporting evidence, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 1 is unpatentable because the claimed subject matter would have been obvious over the combination of Huey and the ATM UNI Specification to a person of ordinary skill in the art.

6. Claim 2

Claim 2 recites that the method also includes "the step of performing at least two of said steps of receiving, matching, selecting, and making a routing decision, in parallel using a pipeline technique." Ex. 1001, 7:48–52. The Specification describes that the step of selecting an output interface and the step of determining the output permission for a packet, which includes matching a packet label against the access control memory, determining all of the successful matches, determining the highest priority match, and providing an output result, are performed in parallel. *Id.* at 6:40–53. It is less clear whether the individual steps within the step of determining the output permission for a packet, i.e., matching a packet label against the access control memory, determining all of the successful matches, determining the highest priority match, and providing an output result, are performed in parallel. Nevertheless, the Specification does support the fact that when discussing parallel operations it is discussing two steps of processing a packet occurring at the same time.

Petitioner states that "[u]nder the BRI standard, therefore, claim 2 must cover a pipelined process where the relevant steps occur at the same time, but for different packets." Pet. Reply 18. However, Patent Owner

does not appear to suggest that the relevant steps must occur on the same packet at the same time. PO Resp. 50–54. Thus, this "pipeline" argument by Petitioner is irrelevant.

Petitioner asserts that "[Huey's] pipeline architecture is performed on a stream of cells in real time, thus the steps of receiving, matching, selecting, and making a routing decision, in parallel." Pet. 29 (citing Ex. 1020, 8:67–9:9). Patent Owner responds that "performing steps 'in real time' is not the same as performing those steps 'in parallel' as Arista alleges." PO Resp. 51. We agree with Patent Owner in this regard.

Patent Owner points out that the passage relied on by Petitioner discusses three things: 1) "Huey describes that the contents of the ATM cell header can be simultaneously loaded into a register"; 2) "Huey generally discusses that the comparison of the VPI/VCI subfields take place 'in real time"'; and 3) "the [parallel] connection of Huey's CAMs." PO Resp. 50–52.

Petitioner cites to the following passage from Huey:

> The ATM cell header 24, minus the HEC byte, is simultaneously loaded into a header register 352. The entire ATM cell header 24 can be used for comparison or selected fields or bits of the header can be used. For the purposes of discussion, the VPI/VCI subfields will be loaded into header register 352 and used for comparison. One skilled in the art will appreciate that the invention can apply to all combinations of the ATM cell header fields and/or bits. In addition, comparison of the VPI/VCI subfields takes place in real time. If many VCI/VPI subfields are simultaneously loaded, an address field for locating cells within temporary cell 10 buffer 348 could also be used.

Ex. 1020, 8:67–9:9; Pet. 28–29 (citing Ex. 1020, 8:67–9:9). The cited section states only that the comparison of the VPI/VCI subfields occurs in "real time,"

not that the entire process is performed in "real time." As to the simultaneous loading of the ATM header, Petitioner does not explain how this means that any two of the listed steps occurs in parallel. PO Resp. 52. Additionally, the comparison of the VPI/VCI subfields in "real time" may suggest that the step of matching is performed efficiently on subfields for a particular header, but it does not suggest that matching occurs in parallel with another step in the process.

Petitioner also cites to the following from Huey:

> While address handling circuit 340 of FIGS. 10A and 10B is implemented with CAMS 364 and 368 connected in parallel and with a priority circuit or system, CAMs 364 and 368 could also be connected in series as shown in FIG. 8 if desired.

Id. at 29 (quoting Ex. 1020, 10:46–50). Petitioner asserts, based on this passage, that "Huey discloses that the CAMs are performing their respective functions in parallel." *Id.* We disagree. The quoted section does not address whether any separate ones of the relevant steps of the claim occur "in parallel," but only that the CAMs are physically connected in parallel, not that they operate in parallel to each another. PO Resp. 52.

Finally, in its Reply, Petitioner asserts that one of ordinary skill in the art would "understand the speed benefits and efficiency from operating the address handler and cell policer at the same time, rather than waiting for one packet to finish the entire pipeline before starting the next." Pet. Reply 18–19 (citing Ex. 1033 at xi, 1–2). Petitioner cites to another reference, Exhibit 1033 (Kogge, *The Architechure of Pipelined Computers*, 1981) ("Kogge"), to show the efficiency of operating the steps in parallel.

There are two problems with Petitioner's assertion. First, Petitioner has not shown a reason to combine Kogge with Huey and the ATM UNI

Specification. Second, to the extent this reference is used to show the scope and content of the art at the time of the invention, Kogge makes it clear that parallelism and pipelining are different concepts that are "generally discernably different in their general approach." Ex. 1033, 1. Petitioner has not explained how Kogge shows that putting packets through the pipeline without waiting for the previous packet to finish would be considered operating in parallel given that this reference distinguishes parallel operation from pipeline operation. Petitioner argued at the oral hearing that Patent Owner was advocating "a particular flavor of parallelism, as opposed to what's understood by normal parallel pipelining." Tr. 41:6–14. However, neither Petitioner nor its declarant has explained what "normal parallel pipelining" is or what the basis is for us to define "normal parallel pipelining." Thus, we are not persuaded by Petitioner's contention that one of ordinary skill in the art would modify Huey to meet the limitation of performing at least two of said steps "in parallel using a pipeline."

Upon consideration of the parties' contentions and supporting evidence, we determine that Petitioner has not demonstrated by a preponderance of the evidence that claim 2 is unpatentable because it would have been obvious over the combination of Huey and the ATM UNI Specification.

7. Claims 9 and 10

Claims 9 and 10 both recite "said priority information for each said access control pattern is responsive to a position of said access control pattern in a memory." Petitioner cites Huey's selection of the match that occurs in the highest priority CAM, i.e., CAM 364 or 368. Pet. 32–37 (citing Ex. 1002 at ¶¶ 137–144), as the recited "position of said access

control pattern in a memory." Pet. 32–37. We adopt these contentions as our own findings. Patent Owner asserts that "merely giving priority to one CAM over another CAM is not analogous to the claimed 'priority information' being 'responsive to a position of said access control pattern in a memory.'" PO Resp. 54. Patent Owner relies on the Specification's statement that "[t]he priority encoder [] [then] selects the single access control specifier [] with the highest priority (in a preferred embodiment, the one with the lowest address in the access control memory 210)." *Id*. at 55 (quoting Ex. 1001, 4:48–56). Based on this quotation, Patent Owner asserts that because Huey prioritizes based on in which one of two CAMs the match occurs rather than an address within one CAM, Huey cannot meet the limitation of claim 9. PO Resp. 56.

Petitioner responds that the claimed "a memory" can be read broadly to include both CAMs of Huey. Pet. Reply (citing Ex. 1002 ¶¶ 141–142). We agree. A "position" in "memory" reasonably can be read more broadly than a physical address in one physical memory. *Id.* Thus, under the broadest reasonable construction, the claimed a memory is not limited to a single physical memory. Thus, Huey's determination of priority based on in which physical CAM the match occurred meets the limitation of claims 9 and 10.

Upon consideration of the parties' contentions and supporting evidence, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 9 and 10 are unpatentable because their subject matter would have been obvious over the combination of Huey and the ATM UNI Specification to a person of ordinary skill in the art.

8. Claims 7, 8, 12–16, 18–22, 25, and 28–31

Patent Owner argues that dependent claims 7, 8, 12–16, 18–22, 25, and 28–31, which depend ultimately from claim 1, are patentable for the same reasons as claim 1 discussed above. PO Resp. 38, 50. Patent Owner does not raise any additional arguments with respect to those claims.

Petitioner contends that claims 7, 8, 12–16, 18–22, 25, and 28–31 are unpatentable under 35 U.S.C. § 103 as obvious over Huey and ATM UNI Specification. Pet. 12. To support its contentions, Petitioner provides detailed explanations as to how this proffered combination meets each claim limitation. *Id.* at 30–32, 37–57. Petitioner also relies upon a Declaration of Dr. Chao, who has been retained as a declarant by Petitioner for the instant proceeding. Ex. 1002 ¶¶ 132–136, 145–192. We adopt these contentions as our own.

Upon consideration of the parties' contentions and supporting evidence, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 7, 8, 12–16, 18–22, 25, and 28–31 are unpatentable because they would have been obvious over the combination of Huey and the ATM UNI Specification.

III. CONCLUSION

Petitioner has met its burden of proof by a preponderance of the evidence in showing that claims 1, 7–10, 12–16, 18–22, 25, and 28–31 of the '577 patent are unpatentable based upon the following grounds of unpatentability:

References	Basis	Challenged Claims
Huey and the ATM UNI Specification.	§ 103	1, 7–10, 12–16, 18–22, 25, and 28–31

Petitioner has not met its burden of proof by a preponderance of the evidence in showing that claim 2 of the ’577 patent is unpatentable.

IV. ORDER

After due consideration of the record before us, and for the foregoing reasons, it is:

ORDERED that the Motion to Exclude is *denied* as to Exhibits 1021 and 1028, and *dismissed as moot* as to Exhibits 1027 and 1029–1031;

FURTHER ORDERED that claims 1, 7–10, 12–16, 18–22, 25, and 28–31 of the ’577 patent are held unpatentable;

FURTHER ORDERED that claim 2 of the ’577 patent has not been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, the parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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