

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
v.
CORRIGENT CORPORATION,
Patent Owner.

IPR2023-00370
Patent 7,593,400 B2

Before KRISTEN L. DROESCH, NATHAN A. ENGELS, and
CHRISTOPHER L. OGDEN, *Administrative Patent Judges*.

ENGELS, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Dell Technologies, Inc., Dell Inc., and Cisco Systems, Inc. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–20 of U.S. Patent No. 7,593,400 B2 (Ex. 1001, “the ’400 patent”). Patent Owner Corrigent Corporation filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition and any response thereto shows “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the Petition and the evidence of record, we determine the Petition fails to establish a reasonable likelihood that Petitioner would prevail in showing the unpatentability of any of the challenged claims, and we do not institute *inter partes* review.

A. *Real Parties-in-Interest*

Petitioner identifies Dell Technologies Inc., Dell Inc., and Cisco Systems, Inc. as the real parties-in-interest. Pet. 2. Patent Owner identifies itself as the sole real party-in-interest. Paper 5, 2.

B. *Related Matters*

The parties state that the ’400 patent is involved in the following district court cases: *Corrigent Corp. v. Cisco Systems, Inc.*, No. 6:22-cv-396 (W.D. Tex.); *Corrigent Corp. v. Dell Technologies Inc.*, No. 1:22-cv-496 (D. Del.); and *Corrigent Corp. v. Arista Networks, Inc.*, No. 1:22-cv-497 (D. Del.). Pet. 2–3; Paper 5, 2.

C. Illustrative Claim

Of the challenged claims, claims 1 and 11 are independent claims.

Claim 1 is copied below with bracketed labels added to reflect those referenced in the parties' briefs.

1[pre] A method for communication, comprising:

- 1[a] configuring a network node having a plurality of ports, and at least first and second line cards with respective first and second ports, to operate as a distributed media access control (MAC) bridge in a Layer 2 data network;
- 1[b] configuring a link aggregation (LAG) group of parallel physical links between two endpoints in said Layer 2 data network joined together into a single logical link, said LAG group having a plurality of LAG ports and a plurality of conjoined member line cards;
- 1[c] providing for each of said member line cards a respective forwarding database (FDB) to hold records associating MAC addresses with ports of said plurality of ports of said network node;
- 1[d] receiving a data packet on an ingress port of said network node from a MAC source address, said data packet specifying a MAC destination address on said Layer 2 data network;
- 1[e] conveying, by transmitting said data packet to said MAC destination address via said first port, said received data packet in said network node to at least said first line card for transmission to said MAC destination address;
- 1[f] if said MAC destination address does not appear in said FDB, flooding said data packet via one and only one LAG port of said plurality of LAG ports;
- 1[g] checking said MAC source address of the data packet against records in said FDB of said first line card; and

1[h] if said FDB of said first line card does not contain a record of an association of said MAC source address with said ingress port, creating a new record of said association, adding said new record to the FDB of said first line card, and sending a message of the association to each member line card of said plurality of member line cards.

D. Alleged Grounds of Unpatentability

Petitioner asserts that claims 1–26 would have been unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1, 3, 6, 11, 13, 16	103 ¹	Smith ²
1–3, 11–13	103	Smith, Ishimori ³
1, 4–7, 10, 11, 14–17, 20	103	Smith, Ishimori, Edsall ⁴
8, 9, 18, 19	103	Smith, Ishimori, Zelig ⁵
9, 19	103	Smith, Ishimori, Zelig, 802.1Q ⁶

Pet. 5. Petitioner also supports its challenge with a Declaration of Dr. Nicholas Bambos, Ph.D. Ex. 1003.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining the level of skill in the art, we consider the type of problems encountered in the art, the prior art solutions to those problems, the

¹ The '400 patent was filed before the Leahy-Smith America Invents Act (“AIA”) revisions to 35 U.S.C. § 103 became effective. Therefore, we apply the pre-AIA version of § 103; however, our analysis would be the same under the AIA version of the statute.

² US 2005/0198371 A1; published Sept. 8, 2005. Ex. 1004.

³ JP 2005-86668 A; published Mar. 31, 2005. Ex. 1005.

⁴ US 6,735,198 B1; issued May 11, 2004. Ex. 1006.

⁵ US 2004/0133619 A1; published July 8, 2004. Ex. 1007.

⁶ IEEE Standard 802.1Q; IEEE Standards for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks; IEEE-SA Standards Board; Dec. 8, 1998. Ex. 1008.

rapidity with which innovations are made, the sophistication of the technology, and the educational level of active workers in the field. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *Orthopedic Equip. Co. v. U.S.*, 702 F.2d 1005, 1011 (Fed. Cir. 1983).

Petitioner contends a person of ordinary skill in the art at the time of the invention would have had “a degree in electrical engineering or a similar discipline, with at least two years of relevant industry or research experience (or additional education).” Pet. 9 (citing Ex. 1003 ¶ 17). Petitioner also states that relevant experience would include a working understanding of networking systems, including distributed bridges, MAC forwarding tables, LAG groups, and virtual LAN services and that a lack of professional experience can be remedied by additional education, and vice versa. Pet. 9 (citing Ex. 1003 ¶ 17).

Patent Owner does not address the level of ordinary skill in its Preliminary Response. For the purposes of this Decision, we apply Petitioner’s level of ordinary skill, which is consistent with the level reflected by the ’400 patent and the asserted prior art.

B. Claim Construction

We construe claims using the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc) and related cases. See 37 C.F.R. § 42.100(b) (2022). Under that precedent, the words of a claim are generally given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *Phillips*, 415 F.3d at 1312–13.

Neither party proposes any express claim constructions. Pet. 7–8; Prelim. Resp 4. At this stage, we determine it is unnecessary to expressly construe any terms. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

C. Discretionary Denial Under 35 U.S.C. § 314

Because we deny the Petition on its merits, we do not reach the issue of discretionary denial.

D. “receiving a data packet on an ingress port of said network node from a MAC source address, said data packet specifying a MAC destination address on said Layer 2 data network”

Independent claims 1 and 11 both recite “receiving a data packet on an ingress port of said network node from a MAC source address, said data packet specifying a MAC destination address on said Layer 2 data network.” Addressing that claim language, Petitioner provides the annotated version of Smith’s Figure 3, copied below. Pet. 22–23.

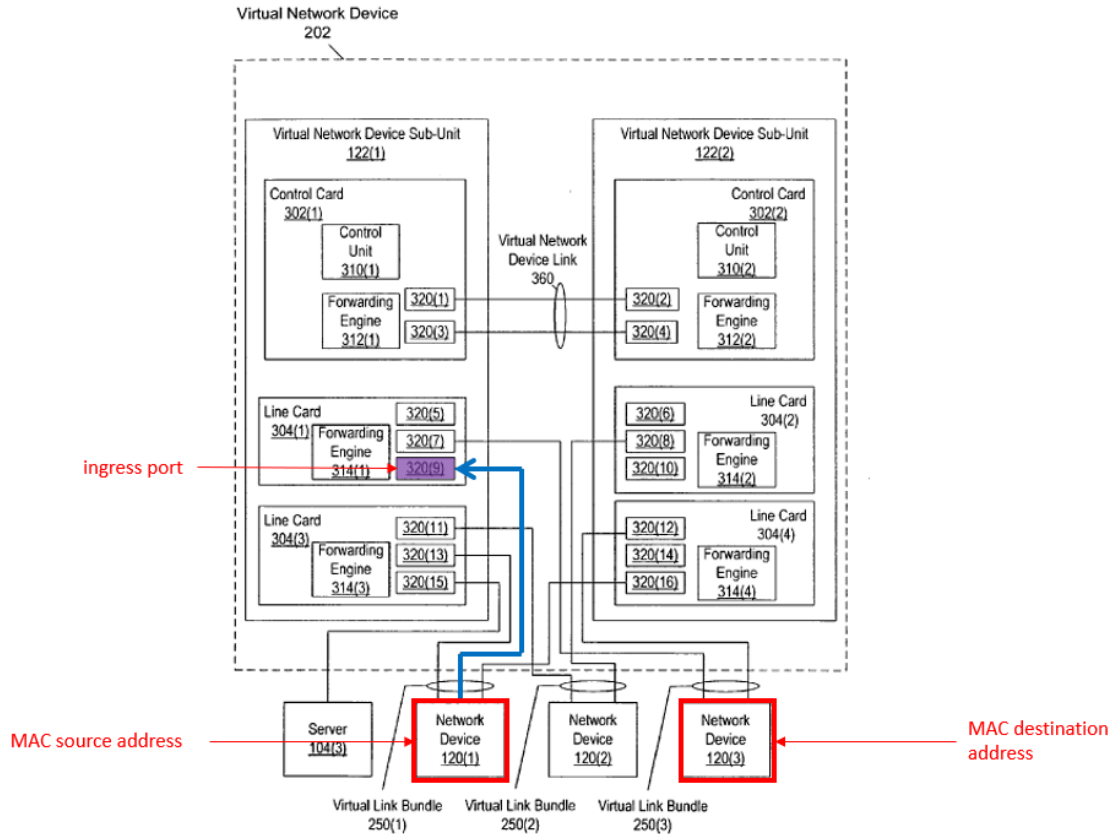


FIG. 3

Pet. 23. Petitioner’s annotated version of Figure 3 depicts a virtual network device 202 that includes two virtual network device sub-units 122(1) and 122(2), each coupled to network devices 120(1)–120(3). Ex. 1004 ¶ 43. Virtual network device sub-unit 122(1) includes line card 304(1) having an interface 320(9). Ex. 1004 ¶ 47. Petitioner’s annotated version of Figure 3 labels network device 120(1) as “MAC source address,” network device 120(3) as “MAC destination address,” and interface 320(9) as “ingress port.” Pet. 23.

According to Petitioner, Smith teaches “receiving a data packet on an ingress port (*e.g.*, interface 320(9)) of said network node (*e.g.*, virtual network device 202) from a MAC source address (*e.g.*, network device 120(1)).” Pet. 23. Petitioner also states “Smith further discloses this

data packet has a ‘destination logical identifier,’ such as the MAC destination address of network device 120(3).” Pet. 23 (citing Ex. 1004 ¶¶ 60, 62).

Patent Owner argues, and we agree, that Petitioner has not shown that Smith’s “destination logical identifier” is a MAC destination address, as claimed. Prelim. Resp. 6–9. Smith uses the phrase “destination logical identifier” only once, in paragraph 60, stating: “For example, whenever virtual network device sub-unit 122(2) receives a packet from a local network device, client, or server and *that packet’s destination logical identifier identifies an uplink interface bundle*, virtual network device sub-unit 122(2) sends the packet from a local uplink interface within the identified uplink interface bundle.” Ex. 1004 ¶ 60 (emphasis added). Smith also describes “logical identifiers” in paragraph 53, stating: “Within virtual network device 202, each interface in the same interface bundle is assigned the same logical identifier. For example, interfaces 320(13), 320(9), and 320(16) are each assigned the same logical identifier.” Ex. 1004 ¶ 53. And in paragraph 54, Smith explains that logical identifiers can be associated with MAC addresses:

The association between a packet and a particular logical identifier can be used by forwarding engines within virtual network device 202 to route and forward packets to and from network devices 120(1)–120(3). For example, when a packet from a sending device (e.g., a client coupled to network device 120(1)) is received via uplink interface 320(13), virtual network device sub-unit 122(1) can learn that the sending device’s MAC (Media Access Control) address is “behind” uplink interface 320(13) by associating the MAC address with the logical identifier of uplink interface 320(13). . . . Based on the

association, packets addressed to that MAC address will be sent from an uplink interface having the associated logical identifier.

Ex. 1004 ¶ 54.

Thus, Smith does not disclose, teach, or suggest that the destination logical identifier is a MAC address, as Petitioner alleges. *See* Pet. 23 (stating “Smith further discloses this data packet has a ‘destination logical identifier,’ such as the MAC destination address of network device 120(3).”); *see also* Ex. 1003 ¶ 111 (stating “Smith further discloses that this data packet has a ‘destination logical identifier.’ The MAC destination address could be network device 120(3), for example.”). Nor has Petitioner shown that the inclusion of a destination logical identifier in Smith’s data packet otherwise “specifies” an associated MAC destination address.

Accordingly, Petitioner has not adequately shown that Smith satisfies limitations 1[d] and 11[d]. Each of Petitioner’s asserted grounds relies on Smith for limitations 1[d] and 11[d] and therefore each ground includes the same deficiencies. *See* Pet. 30–31, 35–38, 40, 45–46, 55, 60, 63. Petitioner, therefore, has not demonstrated a reasonable likelihood that it will prevail in showing that at least one claim of the ’400 patent is unpatentable.

III. CONCLUSION

For the reasons set forth above, we are not persuaded that the Petition establishes a reasonable likelihood that Petitioner would prevail in its challenge to any of claims 1–20 of the ’400 patent. Accordingly, we do not institute an *inter partes* review.

IV. ORDER

In consideration of the foregoing, it is hereby ordered that the Petition is *denied*, and no trial is instituted.

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FOR PETITIONER:

Stuart Rosenberg
Ryan Iwahashi
GIBSON, DUNN & CRUTCHER LLP
srosenberg@gibsondunn.com
riwahashi@gibsondunn.com

FOR PATENT OWNER:

James R. Nuttall
Katherine D. Cappaer
Thomas Yebernetsky
Christopher A. Suarez
STEPTOE & JOHNSON LLP
nuttall@steptoe.com
kcappaert@steptoe.com
tyeburnetsky@steptoe.com
csuarez@steptoe.com