

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARISTA NETWORKS, INC.,
Petitioner,

v.

ORCKIT CORPORATION,
Patent Owner.

IPR2024-01239
Patent 10,652,111 B2

Before KRISTEN L. DROESCH, MATTHEW J. McNEILL, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

DOUGAL, *Administrative Patent Judge*.

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

I. INTRODUCTION

Petitioner, Arista Networks, Inc., requests that we institute an *inter partes* review challenging the patentability of claims 1–54 (the “challenged claims”) of U.S. Patent 10,652,111 B2 (Ex. 1001, “the ’111 patent”). Paper 2 (“Petition” or “Pet.”). Patent Owner, Orckit Corp., argues that the request should be denied based on our discretion. Paper 6 (“Preliminary Response” or “Prelim. Resp.”).

Applying 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we institute an *inter partes* review.¹

A. Related Matters

The parties identify the following related district court litigation: *Orckit Corp. v. Cisco Systems, Inc.*, No. 2:22-cv-00276 (E.D. Tex.); *Orckit Corporation v. Arista Networks, Inc.*, No. 1:23-cv-00821 (D. Del.); and *Orckit Corporation v. Juniper Networks, Inc.*, No. 1:23-cv-00822 (D. Del.). Pet. 1–2; Paper 3, 1.

The parties identify the following related matters before the USPTO: IPR2023-00554; IPR2024-00037; IPR2024-00895; and *Ex Parte* Reexam. No. 90/015,261. *Id.* at 1–2; Pet. 2.

II. DISCRETION UNDER 35 U.S.C. § 314(A)

Patent Owner contends the Board should exercise its discretion to deny institution under 35 U.S.C. § 314. Prelim. Resp. 14. Patent Owner does not analyze the facts under any established framework for exercising our discretion. *See id.* at 14–19. Rather, Patent Owner argues that our discretion

¹ Our findings and conclusions at this stage are preliminary, and thus, no final determinations are made.

on whether to institute is broad, and highlights aspects of different cases addressing the issue. *Id.*

The primary basis for Patent Owner’s argument is the fact that the ’111 patent has been subject to previous *inter partes* reviews filed by other parties.² *Id.* at 14–19. A related fact—not fully addressed by Patent Owner—is that Patent Owner has staggered-in-time its suits alleging infringement of the ’111 patent against different parties. Patent Owner sued Cisco Systems in July 2022, but waited a year to separately file suit against Juniper Networks and Petitioner. IPR2023-00554, Ex. 1010; IPR2024-00037, Paper 2.

Patent Owner was not obligated to sue Petitioner at the same time that it sued Cisco Systems. Similarly, Petitioner was under no obligation to request to join Cisco System’s earlier filed *inter partes* review. *See* Prelim. Resp. 16. Rather, as acknowledged by Patent Owner, Petitioner waited to file the present *inter partes* review until the last day allowed under statute. *Id.* at 15, 17. Based on the circumstances before us, we do not agree with Patent Owner that it would be appropriate to enforce a deadline on Petitioner that is earlier than the deadline outlined by statute. *See id.* at 16.

Patent Owner argues that it would be an injustice to them, if we did not exercise our discretion to deny institution because they have already been through an *inter partes* review that Petitioner was able to observe. *Id.* at 15–18. However, Patent Owner does not sufficiently address why it would be fair to Petitioner to deny Petitioner the opportunity to challenge the

² The joined proceeding of IPR2023-00554 and IPR2024-00037 is the only proceeding to have addressed the merits of the ’111 patent. In IPR2024-00895, we exercised our discretion to deny institution of Juniper Networks’ second petition without addressing the merits.

validity of the '111 patent before the Board. Such one-sided analysis is unconvincing.

Patent Owner's sole point of argument is that Petitioner was able to observe the prior *inter partes* reviews before filing the present case. *Id.* at 15–19. But again, this is largely a result of Patent Owner choosing to stagger the filing of its infringement suits. IPR2023-00554 was filed five months before Patent Owner filed suit against Petitioner, which then started the one-year deadline for Petitioner to request an *inter partes* review. 35 U.S.C. § 315(b).

For all of the above reasons, we decline to exercise our discretion to deny institution.

III. BACKGROUND ON THE PATENT AND PETITION

A. The '111 Patent

The '111 patent is titled “Method and System for Deep Packet Inspection in Software Defined Networks.” Ex. 1001, code (54). Deep Packet Inspection (“DPI”) is a technique for examining network communications that can be used to extract data patterns from a data communication channel. *Id.* at 1:21–25. The extracted data patterns are useful for a variety of purposes, including network security and data analytics. *Id.*

A software defined network (“SDN”) is a networking architecture that provides for centralized management of the nodes in a network, as opposed to the distributed architecture utilized by conventional networks. *Id.* at 1:30–38. For example, a SDN may utilize a controller to manage network nodes such as vSwitches. *Id.* SDN-based architectures typically decouple the data forwarding (*e.g.*, data plane) from control decisions (*e.g.*, control

plane), such as routing, resources, and other management functionalities. *Id.* at 1:39–49. The decoupling may allow the data plane and the control plane to operate on different hardware, in different runtime environments, and/or operate using different models. *Id.*

Figure 1 shows a method for DPI in an SDN.

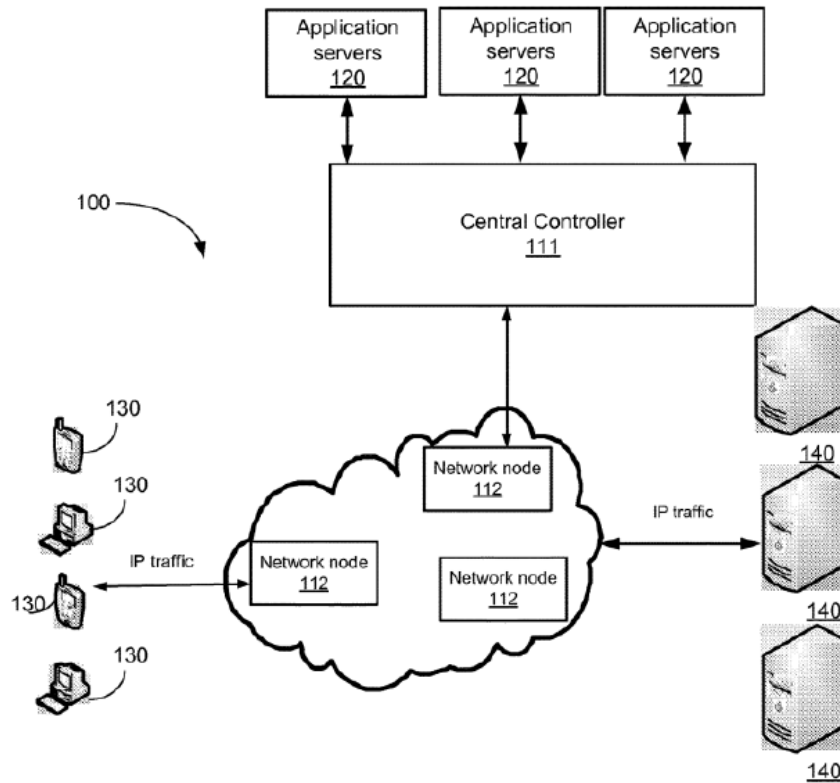


FIG. 1

In Figure 1, above, a network system 100 includes a controller 111 “configured to perform deep packet inspection on designated packets from designated flows or TCP sessions” by “instruct[ing] each of the network nodes 112 which of the packets and/or sessions should be directed to the controller 111 for packet inspections.” *Id.* at 4:5–11. The network node may be instructed to either redirect the packet to controller 111 or send the packet to the destination server 140. *Id.* For example, the controller may send a “probe” instruction to a network node such that, when the network node

receives a packet that matches a “packet-applicable criterion,” the network node will “mirror” (i.e., send) some or all of the packet to a security component for inspection. *Id.* at 2:3–44.

B. Illustrative Claim

Of the challenged claims, 1 and 32 are independent. Claim 1 is illustrative:

1. A method for use with a packet network including a network node for transporting packets between first and second entities under control of a controller that is external to the network node, the method comprising:

sending, by the controller to the network node over the packet network, an instruction and a packet-applicable criterion;

receiving, by the network node from the controller, the instruction and the criterion;

receiving, by the network node from the first entity over the packet network, a packet addressed to the second entity;

checking, by the network node, if the packet satisfies the criterion;

responsive to the packet not satisfying the criterion, sending, by the network node over the packet network, the packet to the second entity; and

responsive to the packet satisfying the criterion, sending the packet, by the network node over the packet network, to an entity that is included in the instruction and is other than the second entity.

Ex. 1001, 10:52–11:4.

C. Evidence

Petitioner's grounds of unpatentability rely on the following evidence:

Name	Patent Document	Exhibit
Lefebvre	US 10,097,452 B2 (Oct. 9, 2018)	1005
Chua	US 9,264,301 B1 (Feb. 16, 2016)	1006
Rash	US 9,813,447 B2 (Nov. 7, 2017)	1007

Name	Non-Patent Literature	Exhibit
RFC 793	<i>RFC: 793, Transmission Control Protocol, DARPA Internet Program Protocol Specification</i> (Sept. 1981)	1015

D. Asserted Grounds

Petitioner asserts the following grounds of unpatentability (Pet. 13), supported by the declaration of Dr. Paul Min (Ex. 1002):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–6, 9–15, 18, 19, 21–36, 41, 42, 44–54	103	Lefebvre, Chua
7, 8, 37, 38	103	Lefebvre, Chua, Rash
16–20, 39–43	103	Lefebvre, Chua, RFC 793

IV. ANALYSIS

A. Legal Standards

Petitioner bears the burden to demonstrate unpatentability. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). At this preliminary stage, we determine whether the information presented in the Petition shows a reasonable likelihood that Petitioner would prevail in establishing that at least one of the challenged claims would have been obvious over the proposed combinations of prior art. *See* 35 U.S.C. § 314(a).

A claim is unpatentable as obvious under 35 U.S.C. § 103 “if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before . . . invention to a person having ordinary skill in the art.”

B. Level of Ordinary Skill in the Art

The level of skill in the art for a person of ordinary skill in the art (“POSITA”) is defined in the Petition as:

a bachelor’s degree in computer science, computer engineering, or an equivalent field, and two years of professional experience, and . . . a working knowledge of hardware and software for packet-switched networking. A person with less or different education but more relevant practical experience, or vice versa, may also meet this standard.

Pet. 16 (citing Ex. 1002 ¶¶ 51–54). As Patent Owner does not contest this level of skill, we analyze the Petition from the perspective of this POSITA.

C. Claim Construction

We construe the claims in accordance with the ordinary and customary meaning as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b).

No terms need to be expressly construed at this time.

D. 35 U.S.C. § 103 – Lefebvre and Chua

Petitioner argues that the combination of Lefebvre and Chua renders obvious claims 1–6, 9–15, 18–19, 21–36, 41–42, and 44–54. Pet. 22–63. Patent Owner does not address this, or any other ground of unpatentability presented in the Petition. *See* Prelim. Resp.

For the reasons expressed below, we determine that Petitioner has established a reasonable likelihood of showing that claim 1 is unpatentable over the combination of Lefebvre and Chua.

1. *Claim 1*

Petitioner provides extensive argument and discussion of claim 1, supported by citations to Lefebvre and Chua, as well as to their declarant's testimony. *See* Pet. 22–39. For example, Petitioner identifies that Lefebvre teaches a software defined network in the form of a packet network with the same structure as laid out in claim 1 with a network node (102, 104, 106) for transporting packets between first and second entities (120, 122, 124, 126) under control of a controller that is external to the network node. *Id.* at 28–31 (citing e.g., Ex. 1005, 1:13–21, 4:41–47, 6:26–28, Fig. 1); *see also id.* at 23. Petitioner argues that Chua teaches a similarly designed software defined network. *Id.* at 23–24, 31–32. Petitioner further notes that Lefebvre and Chua “both describe SDNs, and both describe DPI [(Deep Packet Inspection)] as one type of service in an SDN.” *Id.* at 24 (citing Ex. 1002 ¶ 100; Ex. 1005, 1:28–38; Ex. 1006, 10:48–52, 15:4–9, 16:30–33, 31:48–50, Fig. 9 (step 402)).

Petitioner also provides an extensive discussion of the reasons to combine Chua with the system of Lefebvre, such as due “to Chua’s more detailed teachings regarding actions an SDN controller takes in response to information from security-related services like DPI.” *Id.* at 25 (citing Ex. 1002 ¶ 102); *see also, e.g., id.* at 24–26 (discussing reasons to combine). Petitioner also provides a detailed discussion of how the combined teachings of Lefebvre and Chua teach the method steps of claim 1. *Id.* at 32–39; *see also* Ex. 1002 ¶¶ 115–136.

We have reviewed the Petition and supporting evidence and determine that the Petition demonstrates a reasonable likelihood that Petitioner would prevail in showing that claim 1 unpatentable over the combination of Lefebvre and Chua.

2. *Claims 2–6, 9–15, 18–19, 21–36, 41–42, 44–54*

Having determined that Petitioner has established a reasonable likelihood of showing that claim 1 is unpatentable, it is unnecessary to address claims 2–6, 9–15, 18–19, 21–36, 41–42, and 44–54 at this time.³

E. 35 U.S.C. § 103 – Lefebvre and Chua with Rash or RFC 793

Having determined that Petitioner has established a reasonable likelihood of showing that claim 1 is unpatentable, it is unnecessary to address these additional grounds of unpatentability.

V. CONCLUSION

For the foregoing reasons, there is a reasonable likelihood that Petitioner will prevail with respect to at least one claim. We therefore institute trial.

VI. ORDER

It is ORDERED that:

Inter partes review of all challenged claims of U.S. Patent 10,652,111 B2 is instituted; and

Trial starts on the entry date of this decision. 35 U.S.C. § 314(c).

³ As noted previously, Patent Owner does address any of the grounds of unpatentability presented in the Petition. *See* Prelim. Resp.

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