Trials@uspto.gov
571-272-7822

Paper 13
Date: July 11, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARISTA NETWORKS, INC.,
Petitioner,

v.

ORCKIT CORPORATION,
Patent Owner.

IPR2024-01238
Patent 8,830,821 B2

Before SCOTT R. BOALICK, *Chief Administrative Patent Judge*, KALYAN K. DESHPANDE, *Acting Deputy Chief Administrative Patent Judge*, and MICHAEL P. TIERNEY, *Vice Chief Administrative Patent Judge*.

DESHPANDE, *Acting Deputy Chief Administrative Patent Judge*.

DECISION
Delegated Director Review of
Decision Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.75

I. INTRODUCTION

Arista Networks, Inc. ("Petitioner") filed a Petition requesting *inter partes* review ("IPR") of claims 1–20 of U.S. Patent No. 8,830,821 B2 (Ex. 1001, "the '821 patent"). Paper 2 ("Petition" or "Pet."). Orckit Corporation ("Patent Owner") filed a Preliminary Response. Paper 6 ("Prelim. Resp."). Subsequent to the filing of the Petition and Preliminary Response, an *Inter Partes* Review Certificate was issued on February 13, 2025, which cancelled claims 1–13 and 17–20 of the '821 patent. *See* Ex. 3001. Therefore, only claims 14–16 remain at issue.

On March 25, 2025, the Patent Trial and Appeal Board ("Board") issued a Decision Denying Institution of *Inter Partes* Review. Paper 7 ("Dec." or "the prior Decision"). Petitioner filed a timely request for Director Review of the Board's Decision Denying Institution. Paper 8 ("DRR" or "Request"). Patent Owner filed an authorized response to the DRR. Paper 9 ("DRR Resp."). The Acting Director delegated review to a Delegated Review Panel ("DRP") to determine whether the Board misapprehended or overlooked any issue, including:

> (1) whether the Board's construction of the limitation "digital logic . . . configured to determine a probability of concurrent failure of said working entity and said protection entity" in claim 14 was correct;
>
> (2) whether the Board properly considered Petitioner's argument that Ashwood Smith teaches this limitation; and
>
> (3) if Ashwood Smith does teach this limitation, whether discretionary denial is warranted based on Patent Owner's arguments under 35 U.S.C. § 325(d).

Paper 10 ("DRP Order"), 2 (footnote omitted). Following the delegation, Petitioner filed an authorized Reply to Patent Owner's arguments under 35 U.S.C. § 325(d). Paper 12 ("Pet. DRR Reply.").

We have reviewed the relevant papers and exhibits of record in this proceeding. Upon review, we grant Director Review and vacate the Decision Denying Institution. Specifically, we determine that: (1) the Board's claim construction was incorrect; (2) under the correct construction, Petitioner has shown a reasonable likelihood that Ashwood Smith teaches limitation 14[d]; and (3) the exercise of discretion under § 325(d) is inappropriate in this case. We remand to the Board for further proceedings consistent with this Decision.

II. THE BOARD'S DECISION DENYING INSTITUTION

The Petition asserts that claim 14 would have been obvious over Doshi,[1] Guichard,[2] and Ashwood Smith.[3] Pet. 8. Independent claim 14 requires "digital logic configured to select said working entity and said protection entity from said plurality of transport entity descriptors, comprising: logic configured to determine a probability of concurrent failure of said working entity and said protection entity." Ex. 1001, 8:48–52 ("limitation 14[d]"). The Board determined that "Petitioner implicitly construes 'digital logic . . . configured to determine a probability of concurrent failure of said working entity and said protection entity' to require 'calculat[ing] the probability of concurrent failure of the paths.'"

[1] US 2004/0205239 A1, published Oct. 14, 2004 (Ex. 1005, "Doshi").
[2] Guichard et al., Definitive MPLS Network Designs, Cisco Press, Indianapolis, IN, 2005 (ISBN: 1-58705-186-9) (Ex. 1006, "Guichard").
[3] WO 2004/068799 A1, published August 12, 2004 (Ex. 1037, "Ashwood Smith").

Dec. 22 (citing Pet. 77). Under this claim construction, the Board determined that Petitioner had not shown that claim 14 would have been obvious because the combined teachings of Doshi, Guichard, and Ashwood Smith do not teach or suggest "digital logic . . . configured to determine a probability of concurrent failure of said working entity and said protection entity." *Id.* at 24 (referring to limitation 14[d]). Accordingly, the Board denied institution of *inter partes* review. *Id*.

III. ANALYSIS

1. Claim construction – "determine a probability of concurrent failure"

As previously mentioned, the Board determined that "Petitioner implicitly construes 'digital logic . . . configured to determine a probability of concurrent failure of said working entity and said protection entity' to require 'calculat[ing] the probability of concurrent failure of the paths.'" Dec. 22 (citing Pet. 77–78). The Board pointed to Petitioner's arguments that "a POSITA would look to Ashwood Smith's method of determining concurrent failure of two working paths . . . to *calculate* the probability of concurrent failure of the paths being considered by Doshi – a working path and a protection path" and that "Doshi *calculates* the cost for each [label switch pair] path" in order to find that Petitioner provided an implicit construction. *See id.* at 20–21 (citing Pet. 77–78) (emphasis added). The Board further determined that Petitioner's implicit construction was consistent with the '821 patent specification, "which discloses a simultaneous failure probability (SFP) function (Eq. 1) and SFP values calculated by a concurrent failure probability matrix." *Id.* at 22 (citing Ex. 1001, 3:44–47, 6:5–11, 6:39–40).

In its Request for Director Review, Petitioner argues that it did not implicitly construe the term "determine" to require "calculating," but instead applied the "ordinary and customary meaning" of the claims in the Petition. DRR 5 (citing Pet. 12). Petitioner acknowledges that it referred to "calculating probability," but argues this statement did "not amount to an implicit construction that determining requires calculating." *Id.* at 6. Petitioner further argues that its discussion of limitation 14[e] did not indicate that the term "determine" requires "calculation." *Id.* at 6–7 (citing Pet. 78).

We agree. Petitioner addresses the term "determine" when comparing Doshi's and Ashwood Smith's teachings to limitation 14[d]. *See* Pet. 74–78. Although Petitioner refers to "calculating" in its discussion of limitation 14[d], Petitioner uses "calculating" as an example of "determining" but not as a requirement. Accordingly, we do not agree that the Petitioner implicitly construed "determine" to require "calculating."

We next consider the proper scope of the term "determine." In its Request for Director Review, Petitioner argues that the plain meaning of "determine" does not require "calculating." DRR 7. Petitioner also argues that the Board erred by reading limitations from the '821 patent into the claims—specifically the SFP function (Equation 1). *Id.* at 7–8 (citing Dec. 22). For example, Petitioner argues that the '821 patent describes calculating SFP values using the SFP function (Equation 1) as an embodiment that "'may be' used in selecting pair of entities." *Id.* at 8 (citing Ex. 1001, 3:30–53, 6:5–11, 6:34–43).

We agree with Petitioner that the plain and ordinary meaning of the claim term "determine" does not require calculation.[4] Although the '821 patent specification describes one embodiment of calculating the probability of simultaneous failure (SFP) by applying a mathematical equation, it is improper to read this limitation into the claim so as to require "calculating." *See Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) ("We do not read limitations from the specification into claims."). Accordingly, we apply the plain and ordinary meaning of "determine" when considering Petitioner's merits arguments below.

2. Ashwood Smith

i. The Parties' Arguments

Petitioner asserts that Ashwood Smith teaches "determining the probability of concurrent failure of two paths" because "Ashwood Smith accounts for 'actual probability of failure at a common point' shared by two paths. . . and, '[i]f the common point is highly unlikely to fail,' it may 'allow working paths sharing that common point to also share a common segment on a backup path.'" Pet. 76–77 (citing Ex. 1037, 2:15–25, 7:2–13, 10:21–11:1; Ex. 1003 ¶ 260). Petitioner concludes that "Ashwood Smith demonstrates that a POSITA . . . would have understood that calculating such probability for two paths that share a common segment (e.g., are not strictly disjoint), would provide an additional layer of protection for a network by reducing the chance of simultaneous failure." *Id.* at 77 (citing Ex. 1037, 10:31–11:1; Ex. 1003 ¶ 261).

[4] Patent Owner acknowledges that "calculation" "is not a term a recited in the claims." DRR Resp. 4.

Patent Owner argues that "[a]t best, Ashwood Smith teaches the 'probability of failure at a common point shared by two or more working paths.'" DRR Reply 1 (citing DRR 9; Ex. 1037, 10:21–26). Patent Owner further argues that "the probability of failure at a *single point* in the network is not a probability of failure of an entire network path, let alone the probability of failure for two different paths as required by the claims." *Id.* at 2. Patent Owner adds that "[t]he claims recite the probability of concurrent failure, which may result from failures other than in such a shared node," for example when pairs of working and protection entities do not have common spans or nodes. *Id.* (citing Ex. 1001, 3:47–50).

ii. The Board's Analysis

The Board found that Ashwood Smith fails to teach "digital logic configured to *determine or calculate* the probability of failure at a common point." Dec. 23 (citing Pet. 66–69, 74–78) (emphasis added). The Board dismissed Petitioner's citation to Ashwood Smith's teaching of taking "into account the actual probability of failure at a common point shared by two or more working paths." *Id.* (citing Ex. 1037, 10:21–24). Instead, the Board found that "Petitioner overlooks Ashwood Smith's disclosure that the probability of failure at a common point is allocated (i.e., distributed, assigned, given out) by the data transport network operator." *Id.* (citing Ex. 1037, 11:4–6). Finally, the Board gave "little weight to Petitioner's witness Dr. Min's testimony" addressing Ashwood Smith because it was "not supported by an underlying factual basis." *Id.* (citing Ex. 1003 ¶¶ 234–237).

iii. Limitation 14[d]

We find that Ashwood Smith discloses a method of computing a backup path taking into account actual probability of failure at a common

point of a working path and a backup path. Ex. 1037, 2:15–25; 10:21–11:9. We compare Ashwood Smith's method to limitation 14[d] below.

First, Ashwood Smith's method of computing a backup path corresponds to the claimed "digital logic configured to." Second, Ashwood Smith discloses determining a probability of failure at a common point of two paths. Ex. 1037, 2:15–25; 10:21–11:9. Although we agree with the Board that Ashwood Smith does not expressly disclose *calculating* a probability of failure, the plain and ordinary meaning of "determine" includes Ashwood Smith's selection process for taking into account the actual probability of failure. This includes taking into account a probability of failure at a common point allocated by the data transport network operator as part of computing a selection process. *See* Dec. 23 (citing Ex. 1037, 11:4–6). That is, even if the network operator allocated the common point failure probability, Ashwood Smith's selection process would have taken into account the allocated probability of the common points in its determining actual probability of failure when selecting amongst a plurality of working paths. *See* DRR 12–13; *see* Ex. 1037, 2:15–25.

Third, we find persuasive that a failure at a single common point constitutes an example of concurrent failure, crediting the testimony of Dr. Paul Min. *See* Ex. 1003 ¶ 262. We do not agree with Patent Owner's argument that the claims require concurrent failure of "an entire network path composed of numerous different points" (*see* Prelim. Resp. 12; *see* DRR Resp. 2).

In conclusion, on this preliminary record, Petitioner demonstrate a reasonable likelihood that Ashwood Smith teaches or suggests limitation 14[d]. Accordingly, we vacate the Board's Decision and remand to the Board to reconsider its analysis in view of this DRP Decision.

3. 35 U.S.C. § 325(d)

Patent Owner argues that the Petition should be denied in view of similar arguments made in IPR2023-00402. *See* Prelim. Resp. 16–17. Patent Owner argues that Ashwood Smith is cumulative to Doshi and Xu, which were previously presented to the Office in IPR2023-00402. *Id.* at 17–18. Patent Owner, however, only compares Ashwood Smith to Doshi, arguing that both references describe selecting a backup or protection path to guard against failures in a communication network. *Id.*

Petitioner responds that Ashwood Smith was not previously presented to the Office, including in IPR2023-00402. Pet. DRR Reply 2–3. Petitioner argues that Ashwood Smith is not cumulative to Doshi or Xu because neither Doshi nor Xu teach "tak[ing] into account the actual probability of failure at a common point." *Id.* at 3. Petitioner concludes that "Ashwood Smith provides materially different teachings not found in Doshi or Xu and discretionary denial under § 325(d) is thus not appropriate." *Id.* at 4.

Under § 325(d), the Board determines: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if so, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 10 (PTAB Feb. 13, 2020) (designated precedential Mar. 24, 2020). Although Doshi and Guichard were previously presented in IPR2023-00402, Ashwood Smith was not previously presented. *See* IPR2023-00402, Paper 40, 56–67. Petitioner argues, and we agree it is reasonable likely, that Ashwood Smith discloses limitation 14[d], which the Board previously determined that Doshi, Guichard, and Xu did not disclose.

Pet. DRR Reply 2–3. Accordingly, Patent Owner's argument that Ashwood Smith is cumulative to Doshi and Xu is not persuasive and exercising discretion under 35 U.S.C. § 325(d) is inappropriate.

IV. CONCLUSION

We conclude that: (1) the Board's claim construction was not correct; (2) under the correct construction, Petitioner has shown a reasonable likelihood that Ashwood Smith teaches limitation 14[d]; and (3) the exercise of discretion under 35 U.S.C. § 325(d) is inappropriate. Accordingly, we vacate the Board's Decision, and remand to the Board for further proceedings consistent with this Decision.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Director Review is granted;

FURTHER ORDERED that the Board's Decision Denying Institution of *Inter Partes* Review (Paper 7) is vacated; and

FURTHER ORDERED that the case is remanded to the Board for further proceedings consistent with this Decision.

FOR PETITIONER:

Eliot Williams
Clarke Stavinoha
Jeremy Taylor
Brianna Potter
BAKER BOTTS L.L.P.
eliot.williams@bakerbotts.com
clarke.stavinoha@bakerbotts.com
jeremy.taylor@bakerbotts.com
brianna.potter@bakerbotts.com

FOR PATENT OWNER:

James T. Carmichael
Stephen McBride
Minghui Yang
CARMICHAEL IP, PLLC
jim@carmichaelip.com
stevemcbride@carmichaelip.com
mitch@carmichaelip.com