Paper 9 Date Entered: March 22, 2023

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KEYSIGHT TECHNOLOGIES, INC., Petitioner,

v.

CENTRIPETAL NETWORKS, INC., Patent Owner.

IPR2022-01421 Patent 10,681,009 B2

Before KEVIN F. TURNER, BRIAN J. McNAMARA, and STACEY G. WHITE, *Administrative Patent Judges*.

TURNER, Administrative Patent Judge.

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

I. INTRODUCTION

A. Background

Keysight Technologies, Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") to institute an *inter partes* review of claims 1–30 (the "challenged claims") of U.S. Patent No. 10,681,009 B2 (Ex. 1001, "the '009 Patent"). Centripetal Networks, Inc. ("Patent Owner") timely filed a Preliminary Response (Paper 7, "Prelim. Resp.") contending that the Petition should be denied as to all challenged claims.

After considering the Petition, the Preliminary Response, and the evidence of record, we exercise our discretion under 35 U.S.C. § 325(d) to deny institution of *interpartes* review.

B. Real Party-in-Interest

Petitioner identifies itself as the sole real party-in-interest. Pet. 2. Patent Owner identifies itself as the sole real party-in-interest. Paper 3, 1.

C. Related Proceedings

The Petition states that the '009 Patent is asserted in the following litigation: *Centripetal Networks, Inc. v. Keysight Technologies, Inc.*, 2:22-cv-00002 (E.D. Va.) (filed Feb. 1, 2022). Pet. 2.

The '009 Patent is related to U.S. Patent 9,674,148 ("the '148 Patent"), where Patent Owner acknowledges that latter patent to be "the great-grandparent of the '009 Patent." Prelim. Resp. 1 n.2. Given that the chain of applications includes only continuation applications, the '009 and '148 Patents have a common disclosure. Ex. 1001, code (63). We determined claims 1–20 of the '148 Patent to be unpatentable in an *inter* partes review proceeding (IPR2018-01454, "'148 Patent IPR") in a Final

Written Decision (Ex. 2001, "the '148 FWD"), where that decision was affirmed by the Court of Appeals for the Federal Circuit. *See* Ex. 1018.

D. The '009 Patent

The '009 Patent discloses methods and systems for protecting a secured network. Ex. 1001, code (57). The '009 Patent discloses that "[n]etwork protection devices (e.g., firewalls) implement rules with respect to packet-switched network traffic entering or leaving the networks they protect." Ex. 1001, 1:24–26. The '009 Patent details that multiple, consecutive rule sets may be implemented on those network protection devices, and conventionally, "[n]etwork protection devices may require time to switch between rule sets" and that "[a]s rule sets increase in complexity, the time required for switching between them presents obstacles for effective implementation." *Id.* at 1:38–41. The time required for switching between rulesets may introduce a problem because "while implementing a new rule set, a network protection device may continue processing packets in accordance with an outdated rule set" which "may exacerbate . . . the effect of the network attack." *Id.* at 1:45–50.

The '009 Patent seeks to remedy this problem by having processors within a network protection device configured to "cease processing packets and may cache any unprocessed packets," while the network protection device is being reconfigured. *Id.* at code (57), 2:14–17, Fig. 3A. The '009 Patent details that "the faster [the] network protection device 100 can switch" to processing packets in accordance with the desired rule set during an attack, "the greater the likelihood that the effects of the attack may be mitigated." *Id.* at 9:16–20. The '009 Patent also details that "preprocess[ing of] multiple rule sets prior to their implementation [can] thereby enable

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network protection device 100 to perform fast rule swapping between rule sets." *Id.* at 5:17–21.

E. Illustrative Claim

As noted above, Petitioner challenges claims 1–30, with claims 1, 14, 18, and 22 being independent claims. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method comprising:

preprocessing, by a network protection device, a first rule set by performing operations on the first rule set, prior to the first rule set being implemented on the network protection device, to optimize performance of the network protection device;

configuring the network protection device to process packets in accordance with the preprocessed first rule set after preprocessing the first rule set;

receiving, a plurality of packets after configuring the network protection device to process packets in accordance with the preprocessed first rule set;

processing, by the network protection device, a first portion of the plurality of packets in accordance with the preprocessed first rule set;

preprocessing, by the network protection device, a second rule set by performing operations on the second rule set, prior to the second rule set being implemented on the network protection device, to optimize performance of the network protection device;

signaling the network protection device to process packets in accordance with the second rule set; and

responsive to the signaling:

ceasing processing of one or more packets by the network protection device;

caching the one or more packets;

reconfiguring the network protection device to process packets in accordance with the preprocessed second rule set;

signaling completion of reconfiguration to process packets in accordance with the preprocessed second rule set; and

responsive to signaling the completion of the reconfiguration,

processing the one or more cached packets by the network protection device in accordance with the preprocessed second rule set,

wherein the operations performed on the first rule set and the second rule set include at least one of:

merging two or more rules within the first rule set or the second rule set into one rule;

separating one or more rules within the first rule set or the second rule set into two or more rules; or

reordering one or more rules within the first rule set or the second rule set.

Ex. 1001, 10:46-11:23.

F. Prosecution History of the '009 Patent

Patent Owner asserts that the "[p]rosecution of the '009 Patent proceeded simultaneously with the '148 Patent IPR, and the claims were drafted to specifically recite that the preprocessing steps occur (1) prior to implementation and (2) to optimize the performance of the network protection." Prelim. Resp. 14 (citing Ex. 1020, 112–124). This change in the claims can be seen in Petitioner's comparison chart of the claims of the '009 and '148 Patents. *See* Ex. 1010. The patent application (U.S. Patent Appl. No. 16/744,341) that matured into the '009 Patent was filed January 16, 2020. Ex. 1001, codes (21), (22). The Final Written Decision of the related patent (the '148 FWD) was submitted to the Examiner of the patent

application through an Information Disclosure Statement filed on April 9, 2020, and subsequently acknowledged. Ex. 1020, 155, 223. The Examiner issued a Corrected Notice of Allowability on April 29, 2020, and included the following reasons for allowance:

the prior art fails to teach the combination of elements as put forth in the claims with respect to specific types of preprocessing performed on the rule set in combination with the details regarding the signaling to switch to the second rule set in particular that in response to this signaling the system starts to cache the packets such that they may be processed by the second rule set and not either dropped or processed under the first rule set.¹

Id. at 253. The '009 Patent issued on June 9, 2020. Ex. 1001, code (45).

G. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims of the '009 Patent based on the following grounds under 35 U.S.C. § 103, relying on the Declaration from Dr. Doug W. Jacobson (Ex. 1003). Pet. 3–4, 9–68.

¹ We note that the claim limitation of "preprocessing, by a network device, a first rule set and a second rule set," was discussed in the acknowledged decision ('148 FWD 6–8), as was caching of packets while reconfiguring the network device (*id.* at 19–20).

References	Basis 35 U.S.C. §	Claims Challenged
Roese ² , Golnabi ³ , Huima ⁴ , Hayter ⁵	103	1-5, 8-24, 26-30
Roese, Golnabi, Huima, Hayter, Esbensen ⁶	103	6, 7, 25

II. DISCUSSION

A. Discretion Under 35 U.S.C. § 325(d)

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech.*, *Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an IPR proceeding."); 35 U.S.C. § 314(a) (2018). Pursuant to 35 U.S.C. § 325(d), in determining whether to institute an *inter partes* review, "the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office." In evaluating arguments under § 325(d), we use

[a] two-part framework: (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

² U.S. Patent Publication No. 2006/0048142 A1 (filed Sept. 2, 2004) (published Mar. 2, 2006) (Ex. 1005, "Roese").

³ K. Golnabi et al., *Analysis of Firewall Policy Rules Using Data Mining Techniques*, 2006 IEEE/IFIP Network Operations and Management Symposium, NOMS 2006, 10th IEEE/IFIP, 305–315 (2006) (Ex. 1008, "Golnabi").

⁴ U.S. Patent Publication No. 2004/0015905 A1 (filed Oct. 26, 2001) (published Jan. 22, 2004) (Ex. 1006, "Huima").

⁵ U.S. Patent No. 7,320,022 B2 (filed July 25, 2002) (issued Jan. 15, 2008) (Ex. 1007, "Hayter").

⁶ U.S. Patent No. 5,226,141 (filed Nov. 18, 1991) (issued July 6, 1993) (Ex. 1009, "Esbensen").

presented to the Office; and (2) if either condition of first part of the framework is satisfied, 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 8 (PTAB Feb. 13, 2020) (precedential). See also Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (listing factors to consider in evaluating the applicability of § 325(d)).

Petitioner asserts that "substantially the same art or arguments were not previously presented to the Office." Pet. 7. Petitioner further asserts that the prosecution history of the '009 Patent "does not include any indication that the Examiner considered any of the Golnabi, Huima, Hayter, and Esbensen prior art references in connection with the claims of the '009 Patent or addressed them in any fashion." *Id.* at 8. Petitioner also asserts that the '148 FWD was "among hundreds of other references" submitted for the Examiner's consideration, such that the arguments provided in the instant Petition were not presented to the Examiner. Id. Petitioner also cites to several of our prior decisions that Petitioner asserts to show that when a reference was neither applied against claims nor discussed by the examiner, it does not weigh in favor of exercising our discretion. Id. Lastly, Petitioner asserts that because step one of Advanced Bionics is not met, we need not consider step two, and also asserting that "it is not possible for Petitioner to show how the examiner would have erred if he might have considered them," since the Examiner is alleged to have not considered the same art and arguments. *Id.* at 9.

Patent Owner asserts that we should deny institution because, during prosecution of the '009 Patent, Patent Owner's IDS disclosing the '148 FWD presented to the Examiner the same art and arguments as those advanced in the Petition, and the Petition contains no allegation of error material to patentability. Prelim. Resp. 6. Patent Owner argues that the first prong of the *Advanced Bionics* framework is satisfied where an examiner signs an IDS indicating that the art and arguments were considered. *Id.* at 7–8 (citing *Palo Alto Networks, Inc. v. Centripetal Networks, Inc.*, IPR2021-01270, Paper 10 at 13–14 (PTAB Jan. 24, 2022) (denying institution because the examiner's signature on the IDS indicated that the examiner had considered the previous IPR petitions including the same art and arguments)).

As discussed above, the '148 FWD was submitted to the Examiner, and was acknowledged. Ex. 1020, 155, 223. Patent Owner also provides a table illustrating that Petitioner's arguments in the instant Petition are the same or substantially the same as those found in the '148 FWD. *See* Prelim. Resp. 8–10. Having reviewed Patent Owner's table comparing the grounds of unpatentability discussed in the '148 FWD with the grounds of unpatentability in the instant Petition, we are persuaded that the same or substantially same combinations of references and arguments are being proffered in both.

Patent Owner also argues that the prior Board decisions cited by Petitioner (Pet. 8), with respect to whether an Examiner discussed a particular reference, come from cases that predate the precedential *Advanced Bionics* framework. Prelim. Resp. 11. We agree with Patent Owner that *Advanced Bionics* makes clear that previously presented art includes art that

was provided via an Information Disclosure Statement (IDS). *See Advanced Bionics*, Paper 6 at 7–8. Patent Owner also asserts that Petitioner has the burden of affirmatively demonstrating that the Office committed material error in issuing the challenged patent, and the Petition makes no allegation of error by the Office. Prelim. Resp. 12 (citing Pet. 9).

We are not persuaded by Petitioner's assertion that, because the first prong of the *Advanced Bionics* test is met, Petitioner was not required to address the second step of the test. Patent Owner disclosed the '148 FWD to the Examiner in an IDS and the Examiner acknowledged it. Under these circumstances, it was incumbent on Petitioner to demonstrate that the Office erred in a manner material to patentability of the challenged claims. Instead, Petitioner cabined its arguments to the Examiner not having considered the art and arguments. As the Examiner acknowledged the IDS disclosing the '148 FWD and Petitioner did not plead material error, it is appropriate for us to exercise our discretion under 35 U.S.C. § 325(d) to deny institution, without further reaching the merits.

III. CONCLUSION

For the foregoing reasons, we determine it appropriate to exercise our discretion under 35 U.S.C. § 325(d) to deny institution of *interpartes* review of the '009 Patent.

IV. ORDER

ORDERED that the Petition is denied as to the challenged claims of the '009 Patent; and

FURTHER ORDERED that no *inter partes* review is instituted.

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