

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CROWDSTRIKE, INC.,
Petitioner,

v.

GOSECURE, INC.,
Patent Owner.

IPR2025-00070
Patent 9,954,872 B2

Before NEIL T. POWELL, STACEY G. WHITE, and
GARTH D. BAER, *Administrative Patent Judges*.

POWELL, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

In this proceeding, CrowdStrike, Inc. (“Petitioner”) filed a Petition for *inter partes* review of claims 1–21 of U.S. Patent No. 9,954,872 B2 (Ex. 1001, “the ’872 patent”). Paper 1 (“Pet.”). In IPR2025-00068, Petitioner filed another petition seeking *inter partes* review of claims 1–21 of the ’872 patent. IPR2025-00068, Paper 1 (“68 Petition” or “68 Pet.”). In this proceeding, Petitioner advocated for and applied one construction of the ’872 patent claims’ recitation of “association.” Pet. 4–8, 13–74; Paper 3, 2. In the 68 Petition, Petitioner addressed the possibility of an alternative, narrower construction of “association,” arguing that, even under such a narrower construction, claims 1–21 of the ’872 patent are unpatentable. 68 Pet. 4–7, 18–79; Paper 3, 2. GoSecure, Inc. (“Patent Owner”) filed a Preliminary Response in both proceedings. Paper 7 (“Prelim. Resp.”); IPR2025-00068, Paper 7. With our authorization, in both proceedings, Petitioner filed a Preliminary Reply and Patent Owner filed a Preliminary Sur-Reply. Paper 9 (“Prelim. Reply”); Paper 10 (“Prelim. Sur-Reply”); IPR2025-00068, Papers 9, 10. We instituted *inter partes* review in both proceedings. Paper 15 (“Institution Decision” or “Dec.”); IPR2025-00068, Paper 13 (“68 Institution Decision”).

Patent Owner then filed a Request for Director Review, arguing that Petitioner did not need two petitions to challenge the ’872 patent’s claims. Paper 19. Acting Director Coke Morgan Stewart granted Director Review. Paper 25 (“Director Review Decision” or “DR Dec.”); IPR2025-00068, Paper 25.

The Director Review Decision vacated this proceeding’s Institution Decision and the 68 Institution Decision, remanding “to the Board panel to

determine which of the two proceedings, if any, to institute.” DR Dec. 4. Authorizing the parties to brief “how the Board should construe the term ‘association,’” the Director Review Decision instructed us to “consider the parties’ claim construction arguments in making [our] determination.” *Id.*

Patent Owner then filed a Brief on Remand. Paper 26 (“Patent Owner’s Remand Brief” or “PO Remand Br.”). And Petitioner filed a Response to Patent Owner’s Brief on Remand. Paper 27 (“Pet. Resp. Br.”).

Having reviewed the parties’ arguments, for the reasons explained below, we institute *inter partes* review in this proceeding. As explained in a decision issued concurrently in IPR2025-00068, we do not institute *inter partes* review in that proceeding.

B. The ’872 Patent

The ’872 patent “relates generally to systems and methods for protecting computer networks, including but not limited to systems and methods for analyzing malicious activities on a computer system in order to better protect the computer system from future malicious activity.”

Ex. 1001, 1:44–48. The ’872 patent discusses more details in connection with Figure 1, which is reproduced below.

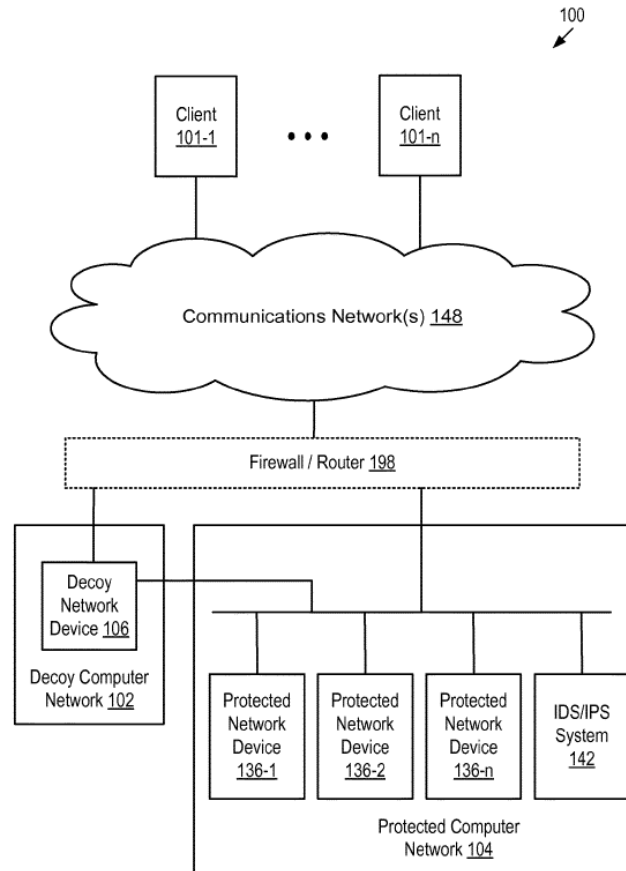


Figure 1

The '872 patent explains that “[Figure] 1 is a high-level block diagram illustrating an exemplary distributed computer system.” Ex. 1001, 3:26–28.

More specifically, Figure 1 shows distributed computer system 100, which “includes a decoy computer network 102, a communications network 148, and protected computer network 104.” Ex. 1001, 4:5–8. Additionally, client computers 101 may have access to decoy computer network 102 and protected computer network 104 via communications network 148. *Id.* at 4:13–24.

“Typically, the protected computer network 104 includes a firewall/router 198 to protect the protected network devices 136 and route network traffic to and from the protected network devices 136.” Ex. 1001, 4:30–33. “In some embodiments, the protected computer

network 104 also includes an IDS/IPS system 142 (intrusion detection and prevention system).” *Id.* at 4:37–39. IDS/IPS system 142 may use “fingerprints of unauthorized activities” to “prevent[] unauthorized activities matching the stored fingerprints by modifying the protected network devices 136 and/or the firewall/router 198.” *Id.* at 4:39–47.

“The decoy computer network 102 includes one more decoy network device(s) 106. The decoy network device 106 is a decoy system that is monitored to collect fingerprint data of unauthorized activities.”

Ex. 1001, 4:57–60. “In some embodiments, the decoy network device 106 is intentionally kept vulnerable to unauthorized or malicious activities (e.g., known security weaknesses may be intentionally left unfixed or other security components (e.g., firewalls) are intentionally not installed).”

Id. at 4:60–65. “The purpose of the decoy network device 106 is to allow attackers to attack the decoy network device 106, so that the pattern of attack can be monitored and analyzed to generate a fingerprint,” which can be used to forestall similar future attacks. *Id.* at 5:3–9. Along with other components, decoy network device 106 may include at least one virtual machine. *Id.* at 5:31–32, 59–61, 6:6–9, 6:24–28, Fig. 2.

The ’872 patent discusses a method that decoy network device 106 may perform in connection with Figures 6A–6C, which are reproduced below.

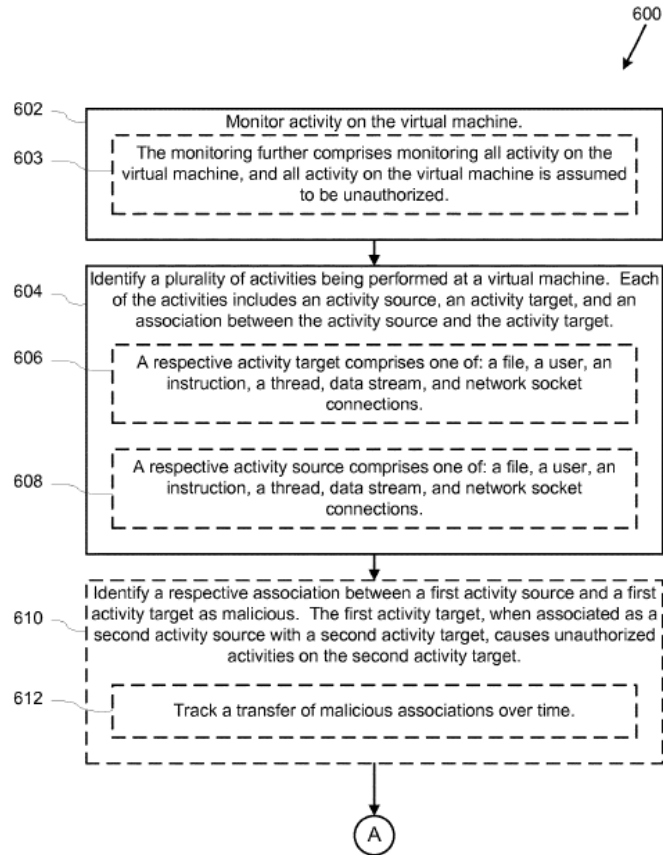


Figure 6A

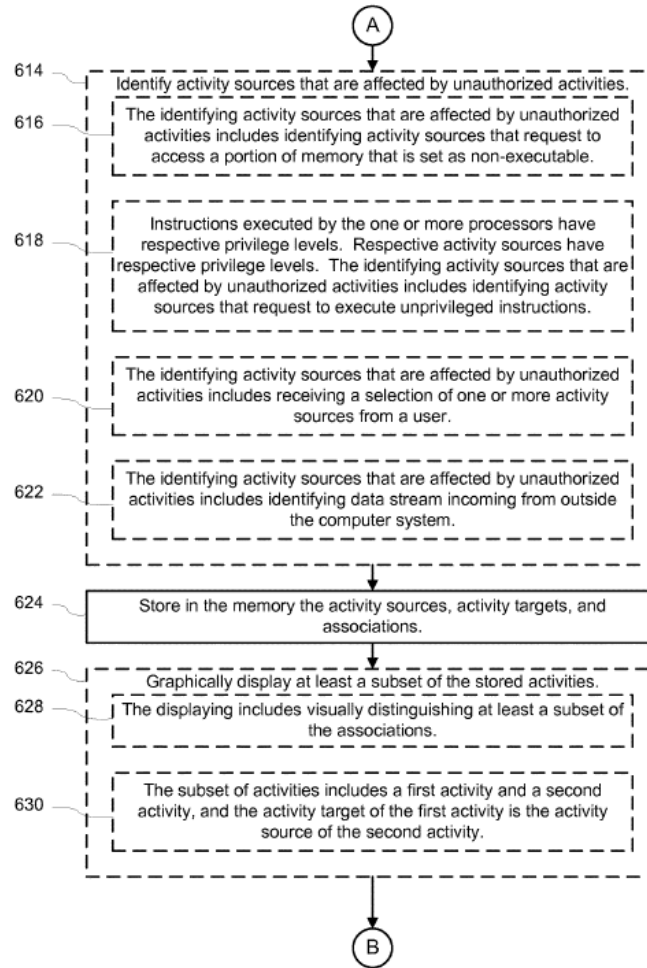


Figure 6B

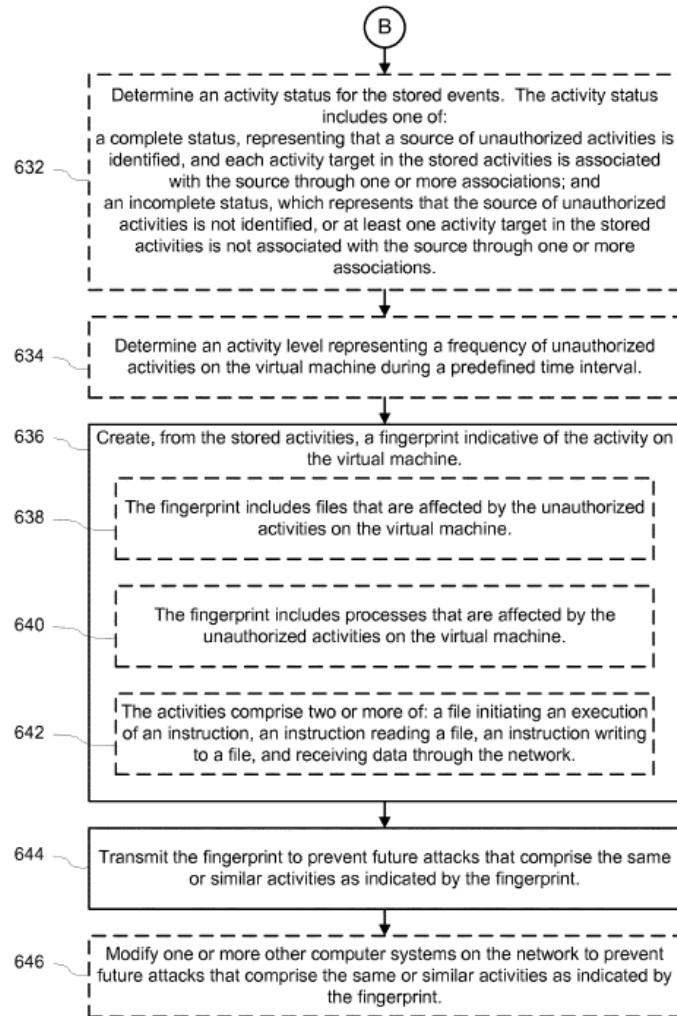


Figure 6C

The '872 patent explains that “[Figures] 6A-6C are flowcharts representing a method of identifying unauthorized activities on a computer system.”

Ex. 1001, 3:47–49.

In this method, “[t]he decoy network device monitors (602) activity on the virtual machine.” Ex. 1001, 15:7–8. Additionally, “[t]he decoy network device identifies (604) a plurality of activities being performed at the virtual machine. Each of the activities includes an activity source, an activity target, and an association between the activity source and activity target.” *Id.* at 15:25–29. In some instances, “the decoy network device

identifies (610) a respective association between a first activity source and a first activity target as unauthorized.” *Id.* at 15:48–50. For example, if a process involving a source and a target is identified as “performing unauthorized activities (e.g., corrupting data or writing malicious code),” a corresponding association “is determined to be malicious (i.e., unauthorized).” *Id.* at 15:53–67. The ’872 patent identifies multiple possible “association types,” including “malicious,” “malignant,” “benign,” and “remission.” *E.g., id.* at 12:53–55, 13:39–56.

After identifying activities that have been performed, “[t]he decoy network device stores (624) the activity sources, activity targets, and associations in its memory.” *Id.* at 16:56–57. The decoy network device also “creates (636) a fingerprint indicative of the activity on the virtual machine from the stored activities.” *Id.* at 18:4–6. The decoy network device may share the fingerprint:

The decoy network device transmits (644) the fingerprint to one or more protected network devices 136 to prevent future attacks that comprise the same or similar activities as indicated by the fingerprint. In some embodiments, the decoy network device transmits the fingerprint to the IDS/IPS system 142 to prevent future attacks that comprise the same or similar activities on one or more protected network devices 136.

In some embodiments, one or more other computer systems (e.g., protected network devices 136) on the network are modified (646) to prevent future attacks that comprise the same or similar activities as indicated by the fingerprint (e.g., in FIG. 1A, the IDS/IPS system modifies at least one of the protected network device(s) 136 to prevent future attacks that comprise the same or similar activities).

Ex. 1001, 18:44–58.

C. Illustrative Claims

Of the challenged claims, claims 1, 20, and 21 are independent. Each of claims 2–19 depends, directly or indirectly, from independent claim 1. Claim 1 is illustrative for our analysis herein and is reproduced below with certain reformatting:¹

1. [1(pre)] A computer implemented method of identifying unauthorized activities on a first computer system attached to a computer network, wherein the first computer system comprises one or more processors and memory, the method comprising:

[1(a)] monitoring activity on the first computer system;

[1(b)] identifying a plurality of activities being performed at the first computer system, wherein each of the activities includes an activity source, an activity target, and an association between the activity source and the activity target;

[1(c)] storing in the memory a data structure that identifies the activity sources, the activity targets, and the associations for the plurality of activities; and

[1(d)] transmitting to one or more computer systems other than the first computer system information identifying one or more of the activity sources, the activity targets, and the associations for preventing future attacks, to the one or more computer systems, associated with the one or more of the activity sources, the activity targets, and the associations.

Ex. 1001, 19:39–59.

¹ We have added the same labels that Petitioner uses to identify portions of claim 1. *See, e.g.*, Pet. 80.

D. Asserted Grounds

Petitioner asserts that claims 1–21 would have been unpatentable on the following grounds (Pet. 9):

Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)
1	1–6, 12, 15, 20, 21	103	Capalik ²
2	1–6, 12, 14, 15, 20, 21	103	Capalik, Goel ³
3	7–11, 14, 16, 18, 19	103	Capalik, Goel, King ⁴
4	13	103	Capalik, Goel, Pike ⁵
5	17	103	Capalik, Goel, Farley ⁶

II. ANALYSIS

Patent Owner argues that we should deny *inter partes* review in both IPR2025-00068 and this proceeding for multiple reasons. PO Remand Br. 1–10. With respect to claim construction, Patent Owner argues that (1) the 68 Petition is based on an incorrect construction of “association” and (2) Petitioner gamed our system, failing to comply with Rule 42.104(b)(3)’s requirement for a petition to “set forth: . . . [h]ow the challenged claim is to

² Alen Capalik, United States Patent Application Publication No. 2008/0016570 A1, published Jan. 17, 2008 (Ex. 1004, “Capalik”).

³ Ashvin Goel et al. “*Forensix: A Robust, High-Performance Reconstruction System*,” Proceedings of the 25th International Conference on Distributed Computing Systems Workshops, 2005 (Ex. 1005, “Goel”).

⁴ Samuel T. King, “*Analyzing Intrusions Using Operating System Level Information Flow*” (Ex. 1006, “King”).

⁵ Geoffrey Pike et al., U.S. Patent No. 8,819,822 B1, issued Aug. 26, 2014 (Ex. 1007, “Pike”).

⁶ Timothy P. Farley et al., U.S. Patent No. 7,089,428 B2, issued Aug. 8, 2006 (Ex. 1008, “Farley”).

be construed.” *Id.* at 1–6. Patent Owner also argues that we should discretionarily deny institution under 35 U.S.C. § 325(d). *Id.* at 6–10.

Addressing each of those issues, Petitioner responds that we should institute *inter partes* review in this proceeding, rather than in IPR2025-00068. Pet. Resp. Br. 1–10.

For the reasons explained in detail below, we find Petitioner’s position persuasive on each of the issues raised in the briefs filed after the Director Review Decision, and we institute *inter partes* review in this proceeding.

A. Construction of “Association”

At issue here, limitation 1(b) recites, in part, that “each of the activities includes an activity source, an activity target, and an *association* between the activity source and the activity target.” Ex. 1001, 19:46–49 (emphasis added). According to the Petition, we should “interpret[] the claimed ‘association’ as an **action** between the source and target,” rather than interpreting “association” “to more narrowly require characterizing whether the action, event or operation between an activity’s source and target is unauthorized.” Pet. 5–6.

Petitioner explains a number of ways that intrinsic evidence supports its proposed construction of “association.” Pet. 5–7. For example, Petitioner argues that the Specification uses “the term ‘associate’ interchangeably with the actions occurring between a source and a target,” indicating that an action between the source and the target is an “association” between them. *Id.* at 6–7 (citing Ex. 1001, 13:60–64). Petitioner also argues that the ’872 patent’s claim 19 further limits claim 1’s method by reciting that “the **association includes a type** that represents whether or not the activity source has modified the activity target to perform

the unauthorized activities.” *Id.* at 7 (quoting with emphasis Ex. 1001, 21:1–4). Under the doctrine of claim differentiation, this indicates that “association” does not necessarily include an association type, Petitioner argues. *Id.* Asserting that “[t]he specification consistently describes an ‘association type’ as a classification of the action between a source and a target as benign, malignant, or remission,” Petitioner argues that “the ‘association’ between a source and target is the action (e.g., event or operation) occurring between the source and target, and the ‘association type’ classifies that action as malignant, benign, etc.” *Id.* (citing Ex. 1001, 12:30–36, 12:32–56, 13:39–55).

Patent Owner agrees that we should construe “association” as not requiring characterization of an action as authorized or unauthorized. PO Remand Br. 1–3. Like Petitioner, Patent Owner argues that the ’872 patent’s claims and specification do not support construing “association” to require characterization of an action as authorized or unauthorized. *Id.* (citing Ex. 1001, 12:32–36, 13:34–56, 14:2).

Thus, the parties agree on the correct construction of “association.” And the parties persuade us to adopt their construction: “association” does not require any classification as authorized or unauthorized. Pet. 4–8; PO Remand Br. 1–3; Pet. Resp. Br. 1–2. This construction of “association” is the one applied in this Petition’s claim challenges, which comports with (1) our earlier determination that the Petition demonstrates a reasonable likelihood of prevailing and (2) Petitioner’s preference for this Petition over the 68 Petition. Pet. 4–8, 13–74; Dec. 10–22; Paper 3, 2; Pet. Resp. Br. 2, 5.

B. Rule 42.104(b)(3)

Patent Owner argues that Petitioner’s discussion of different possible constructions of “association” constitutes “gamesmanship” and does not

comply with Rule 42.104(b)(3)’s requirement that “the petition must set forth: . . . [h]ow the challenged claim is to be construed.”

We disagree. The Petition vies for a construction of “association” that does not require characterization of an action as unauthorized, providing significant reasoning and evidence to support such a construction. *E.g.*, Pet. 5–6 (“For a number of reasons, the intrinsic record supports interpreting the claimed ‘association’ as an **action** between the source and target.”); *id.* at 5 (“The instant petition applies the broader interpretation [(not requiring characterization of an action, event, or operation as unauthorized)], supporting such an interpretation as set forth below.”). This complies with Rule 42.104(b)(3)’s claim-construction requirements.

Petitioner also argued in the 68 Petition that even a narrower meaning of “association” would not render the ’872 patent’s claims patentable. 68 Pet. 4–7, 18–79. This is a proper alternative argument, not gamesmanship.⁷

C. 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 because, the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). The § 325(d) analysis employs a two-prong framework: (1) whether the prior art and arguments presented in the petition are the same or substantially the same as those previously presented to the Office; and (2) if so, whether the petitioner has demonstrated a material error by the Office in its prior consideration of those

⁷ Whether Petitioner should have filed one or two petitions to advance its alternative arguments presents a separate issue, which the Director Review Decision resolved.

prior art and arguments. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 7 (PTAB Feb. 13, 2020) (precedential). Recently, in *Ecto World, LLC and SV3, LLC v. RAI Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 (PTAB May 19, 2025) (precedential), the Office clarified certain considerations with respect to § 325(d).

In combination with Petitioner’s arguments and evidence that the ’872 patent’s claims 1–21 are unpatentable based on Capalik and other prior art, the Petition presented arguments that we should not deny institution under § 325(d). Pet. 74–75. Patent Owner’s Preliminary Response and Preliminary Sur-Reply argued that Petitioner failed to support its contentions that claims 1–21 are unpatentable. But the Preliminary Response and Preliminary Sur-Reply did not address § 325(d). *See generally* Prelim. Resp.; Prelim. Sur-Reply.

Following the Director Review Decision, Patent Owner’s Remand Brief raises § 325(d) arguments, contending that now we must consider those arguments in view of *Ecto World*. PO Remand Br. 6–10. Patent Owner asserts that “Capalik was previously presented to the Office based on its incorporation by reference into the ’872 patent and the disclosure, by the Applicant, of several Office Actions from that application.” *Id.* at 6. Explaining that *Ecto World* clarified that petitions for *inter partes* review must explain how the Examiner erred with respect to prior art already considered by the Office, Patent Owner asserts that the Petition did not do so. *Id.* at 6–7. Patent Owner also argues that Petitioner’s challenges of the ’872 patent’s claims are cumulative to prior art rejections from the ’872 patent’s prosecution history, suggesting that the Examiner did not err. *Id.* at 9. Also, asserting that “no fewer than 17 office actions from

prosecution of Capalik or its related applications (U.S. and international) were submitted in an IDS during prosecution of the '872 patent,” Patent Owner argues that the number of references submitted to the Office during the '872 patent’s prosecution history does not mitigate “Petitioner’s failure to show Examiner error.” *Id.* at 9–10.

Petitioner counters that we should not consider Patent Owner’s “belated attempt” to rely on § 325(d), adding that if we do, “the record shows Examiner error.” Pet. Resp. Br. 4. Petitioner asserts that the record reflects a failure of the Examiner to recognize that Capalik was even prior art, much less appreciate its disclosure. *Id.* at 5. Among other things, Petitioner argues that Capalik “includes specific teachings” missing from the prior art references the Examiner cited in a claim rejection in the '872 patent’s prosecution history. *Id.* (citing Ex. 1002, 52–53; Dec. 19–22; *Ecto World*, Paper 13 at 5).

For many reasons, these circumstances do not warrant denying institution under § 325(d). Prior to our Institution Decision, Patent Owner did not argue we should deny under § 325(d). *See generally* Prelim. Resp.; Pet. Resp. Br. 4. Patent Owner first raised § 325(d) while its Request for Director Review was pending, emailing the Office with a request to brief § 325(d) in view of *Ecto World*. Ex. 3101, 4–5. The Office did not grant that request. *Id.* at 1. Nor did the Director Review Decision authorize Patent Owner to brief § 325(d). It only authorized Patent Owner “to file a ten-page brief explaining how the Board should construe the term ‘association.’” DR Dec. 4. In sum, Patent Owner’s unauthorized § 325(d) arguments are waived.

Moreover, even if Patent Owner had not waived its § 325(d) arguments, we find Petitioner’s § 325(d) arguments more persuasive.

Specifically, we find Petitioner demonstrates Examiner error, as required in circumstances involving prior art previously considered by the Office.

Pet. 74–75; Pet. Resp. Br. 4–5; *Advanced Bionics*, IPR2019-01469, Paper 6 at 8–9.

As Petitioner notes, in the ’872 patent’s prosecution history, the Applicant traversed an obviousness rejection over Jiang and Aziz by arguing that Aziz does not teach claim 1’s limitation 1(d), which recites “transmitting to one or more computer systems other than the first computer system information identifying one or more of the activity sources, the activity targets, and the associations for preventing future attacks.” Ex. 1001, 19:53–56; Ex. 1002, 53; Pet. Resp. Br. 5. In the ensuing Notice of Allowance, the Examiner adopted that reasoning as the basis for allowing the claims: “applicant’s remark filed on November 06, 2017 with respect to arguments and amendment . . . point out and make clear the reason claims are patentable over the prior art of record.” Ex. 1002, 15.

According to the Petition, limitation 1(d), which the Examiner considered missing from the disclosures of Jiang and Aziz, is taught by Capalik. Pet. 30–34. For the reasons explained in the Institution Decision, the arguments and evidence entered so far weigh in favor of Petitioner’s position that Capalik discloses limitation 1(d). Dec. 19–22. This shows that the Examiner erred.⁸ See, e.g., *Ecto World*, Paper 13 at 5 (“[A] petitioner may argue that it satisfies the second part of *Advanced Bionics* because the asserted prior art . . . includes specific teachings that ‘impact the

⁸ To the extent the Petition’s § 325(d) discussion does not follow exactly the same form that *Ecto World* clarifies is correct, we disagree with Patent Owner’s suggestion that we should reject the Petition retroactively on that basis. See PO Remand Br. 6–7.

patentability of the challenged claims.’”) (quoting *Advanced Bionics*, Paper 6 at 8 n.9).

D. The Merits of Petitioner’s Claim Challenges

In our Institution Decision, after weighing the parties’ arguments and evidence, we determined that the Petition demonstrates a reasonable likelihood of establishing unpatentability of at least claim 1 of the ’872 patent as obvious over Capalik. *E.g.*, Dec. 16–22. Based on all of the arguments and evidence currently of record, we remain persuaded that the Petition demonstrates a reasonable likelihood of prevailing on at least claim 1 of the ’872 patent. Indeed, as discussed above in Section II.A, the parties’ agreement on the correct construction of “association” reinforces this determination.

III. CONCLUSION

In view of the foregoing, having determined that Petitioner has demonstrated a reasonable likelihood of establishing at least claim 1 of the ’872 patent is unpatentable, we institute trial as to all challenged claims on all grounds stated in the Petition

IV. ORDER

It is:

ORDERED that *inter partes* review of claims 1–21 of the ’872 patent is instituted on all grounds presented in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this decision.

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