

**United States Court of Appeals
for the Federal Circuit**

CENTRIPETAL NETWORKS, LLC,
Appellant

v.

**PALO ALTO NETWORKS, INC., CISCO SYSTEMS,
INC., KEYSIGHT TECHNOLOGIES, INC.,**
Appellees

**JOHN A. SQUIRES, UNDER SECRETARY OF
COMMERCE FOR INTELLECTUAL PROPERTY
AND DIRECTOR OF THE UNITED STATES
PATENT AND TRADEMARK OFFICE,**
Intervenor

2023-2027

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in Nos. IPR2022-
00182, IPR2022-01151, IPR2022-01199.

Decided: October 22, 2025

PAUL D. CLEMENT, Clement & Murphy, PLLC, Alexan-
dria, VA, argued for appellant. Also represented by JOSEPH
DEMOTT, MATTHEW ROWEN; MATTHEW JAMES DOWD,
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ton, DC.

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MARK CHRISTOPHER FLEMING, Wilmer Cutler Pickering Hale and Dorr LLP, Boston, MA, argued for appellees. Cisco Systems, Inc. also represented by HEATH BROOKS, Washington, DC; GARY M. FOX, New York, NY; THEODORE M. FOSTER, Haynes and Boone, LLP, Denver, CO; DEBRA JANECE MCCOMAS, DAVID L. MCCOMBS, Dallas, TX; ANGELA M. OLIVER, Washington, DC.

BRIAN JAMES SPRINGER, Civil Division, United States Department of Justice, Washington, DC, argued for intervenor. Also represented by BRIAN M. BOYNTON; PETER J. AYERS, KAKOLI CAPRIHAN, ROBERT J. MCMANUS, FARHEENA YASMEEN RASHEED Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA.

DOUGLAS HALLWARD-DRIEMEIER, Ropes & Gray LLP, Washington, DC, for appellee Palo Alto Networks, Inc. Also represented by JAMES RICHARD BATCHELDER, ANDREW T. RADSCH, East Palo Alto, CA.

GERARD M. DONOVAN, Reed Smith LLP, Washington, DC, for appellee Keysight Technologies, Inc. Also represented by JONAH D. MITCHELL, San Francisco, CA.

Before MOORE, *Chief Judge*, HUGHES and CUNNINGHAM,
Circuit Judges.

CUNNINGHAM, *Circuit Judge*.

Centripetal Networks LLC (“Centripetal”) appeals from a final written decision by the Patent Trial and Appeal Board in an *inter partes* review (“IPR”) of U.S. Patent No. 9,917,856, holding claims 1, 24, and 25 of the ’856 patent unpatentable as obvious. *Palo Alto Networks, Inc. v. Centripetal Networks, Inc.*, No. IPR2022-00182, 2023 WL 5033832, at *2, *25 (P.T.A.B. May 23, 2023) (“*Merits Decision*”). Apart from its arguments on the

merits, Centripetal argues that the Board’s decision was tainted by the belated recusal of an administrative patent judge (“APJ”) only after institution of the IPR. *See Palo Alto Networks, Inc. v. Centripetal Networks, Inc.*, No. IPR2022-00182, Paper 55 at 6–22 (P.T.A.B. Feb. 3, 2023) (“*Recusal Decision*”).¹ While we see no reversible error in the Board’s recusal analysis, we vacate the Board’s final written decision for failure to adequately consider evidence of copying and remand for further proceedings.

I. BACKGROUND

Centripetal owns the ’856 patent, titled “Rule-Based Network-Threat Detection for Encrypted Communications.” ’856 patent; *Merits Decision* at *3. It is directed to methods and systems for detecting network threats in encrypted communications. *Merits Decision* at *3; *see, e.g.*, ’856 patent, Abstract; ’856 patent at col. 25 ll. 14–49.

In November 2021, Palo Alto Networks, Inc. (“Palo Alto Networks”) petitioned for *inter partes* review of claims 1, 24, and 25 of the ’856 patent. *Recusal Decision* at 2; J.A. 353–410. With a panel consisting of APJs McNamara, Moore, and Amundson, the Board instituted *inter partes* review. J.A. 118–209; *see Recusal Decision* at 3–4. In June 2022, Centripetal requested rehearing of the institution decision by either the Board panel or the Precedential Opinion Panel. *Recusal Decision* at 3; J.A. 4509–19; *see* J.A. 347. The same month, Cisco Systems, Inc. (“Cisco”) and Keysight Technologies, Inc. (“Keysight”) filed substantively identical petitions to that of Palo Alto Networks and sought joinder. J.A. 7091–7167; J.A. 7215–28; J.A. 8809–71; J.A. 9218–34; J.A. 348–49; *see Recusal*

¹ Because this decision is not reported, citations in this opinion are to the version of the decision included in the Joint Appendix. *See* J.A. 61–83. For example, *Recusal Decision* at 1 is found at J.A. 61.

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Decision at 4; Appellant’s Br. 18; Appellees’ Br. 14. On December 6, 2022, the Precedential Opinion Panel declined to take up Centripetal’s rehearing request. *Recusal Decision* at 3; J.A. 6272–73.

By September 29, 2022, Centripetal became aware of APJ McNamara’s ownership of between \$1,001 and \$15,000 in Cisco stock. *Recusal Decision* at 21 (citing J.A. 6367); see J.A. 6372–73 (2014 public financial disclosure report disclosing APJ McNamara’s ownership of Cisco shares). On December 30, 2022, Centripetal filed a motion seeking recusal of the entire panel and vacatur of the institution decision, contending that APJ McNamara’s stock ownership “cast a shadow over the entire panel of judges in this IPR.”² J.A. 6360; see J.A. 6344–64; *Recusal Decision* at 3. On January 4, 2023, the Board panel (still including APJ McNamara) denied the rehearing request and granted the institution and joinder requests related to Cisco’s and Keysight’s IPR petitions. *Recusal Decision* at 4; J.A. 210–342; J.A. 6627–40. Nonetheless, APJ McNamara withdrew from the Board panel the next day. *Recusal Decision* at 4; J.A. 6650–52; see J.A. 347. He explained that the governing regulations did not require his recusal because he had no interest exceeding \$15,000 but contended that his withdrawal would “reduce the number of issues and simplify the briefing.” *Recusal Decision* at 4 (quoting J.A. 6652). APJ Amundson also withdrew, similarly indicating that Centripetal’s motion “lack[ed] merit” but that his withdrawal would simplify the issues. J.A. 6702; see *Recusal Decision* at 4. APJ Moore did not withdraw.

² Centripetal also argued that APJ McNamara’s receipt of retirement payments from his prior law firm raised conflicts concerns. J.A. 6352; see *Recusal Decision* at 11–13. Centripetal has abandoned that argument on appeal. See generally Appellant’s Br.

After two new APJs were assigned to the case, the new panel denied Centripetal's motion for vacatur. *Recusal Decision* at 2. The decision noted that APJ McNamara's participation occurred while "Cisco was not a party to th[e] proceeding," and that "the value of the holdings falls well below the \$25,000 threshold" that executive branch regulations imposed for matters impacting non-parties. *Id.* at 11. The Board held that Centripetal's "argument that APJ McNamara's participation in this case ran afoul of executive-branch ethics regulations [was] frivolous," and threatened sanctions if "further baseless arguments" were raised. *Id.* at 13–14 (internal quotation marks and citation omitted). The Board further held that Centripetal's due process rights were not violated, noting the expertise of the Office of Government Ethics ("OGE") and its factual determination that interests of below \$15,000 for parties and \$25,000 for affected non-parties were "too remote or too inconsequential to affect the integrity of the services of employees." *Recusal Decision* at 16 (quoting 5 C.F.R. § 2635.402(d)(1)); see 5 C.F.R. § 2640.202(a)–(b). The Board independently denied the recusal motion as untimely, highlighting that Centripetal "sat on" the conflict for more than three months and that the facts suggested that Centripetal "was waiting to see if the original panel would issue a favorable decision on the [rehearing] motion" or if it would "receive a favorable decision from the Supreme Court." *Recusal Decision* at 21–22. Centripetal subsequently petitioned this court for a writ of mandamus directing the Board to vacate the institution decisions. *In re Centripetal Networks, LLC*, No. 2023-127, 2023 WL 3477282, at *1 (Fed. Cir. May 16, 2023). We denied the petition. *Id.* at *2.

On May 23, 2023, the Board issued a final written decision holding claims 1, 24, and 25 unpatentable as obvious. *Merits Decision* at *2, *25. Centripetal timely appealed.

II. STANDARD OF REVIEW

A judge’s failure to recuse is reviewed for abuse of discretion. *Shell Oil Co. v. United States*, 672 F.3d 1283, 1288 (Fed. Cir. 2012). Whether a party forfeited an argument by failing to timely raise it is also reviewed for abuse of discretion. *Odyssey Logistics & Tech. Corp. v. Stewart*, 130 F.4th 973, 979–80 (Fed. Cir. 2025). The court must set aside the Board’s decision if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Veritas Techs. LLC v. Veeam Software Corp.*, 835 F.3d 1406, 1413 (Fed. Cir. 2016) (quoting 5 U.S.C. § 706(2)(A)). “We review the Board’s legal conclusions de novo and its fact findings for substantial evidence.” *Game & Tech. Co. v. Wargaming Grp. Ltd.*, 942 F.3d 1343, 1348 (Fed. Cir. 2019).

III. DISCUSSION

Centripetal contends that the Board’s final written decision must be vacated because APJ McNamara recused belatedly after the IPRs were instituted. Appellant’s Br. 28–39. Centripetal also raises a number of purported deficiencies with the Board’s decision on the merits. Appellant’s Br. 40–59. We begin by addressing our jurisdiction and then the recusal issue before turning to the merits of the appeal.

A.

We start by addressing the issue of our jurisdiction over this case. We “may not rule on the merits of a case without first determining that [we] ha[ve] jurisdiction.” *Sinnochem Int’l Co. v. Malaysia Int’l Shipping Corp.*, 549 U.S. 422, 430–31 (2007). We normally have jurisdiction over appeals from the Board under 28 U.S.C. § 1295(a)(4)(A). However, the America Invents Act “renders ‘final and non-appealable’ the ‘determination by the Director whether to institute an *inter partes* review under this section.’” *Thryv, Inc. v. Click-To-Call Techs., LP*, 590 U.S. 45, 52 (2020)

(quoting 35 U.S.C. § 314(d)). Section 314(d) “bars review at least of matters ‘closely tied to the application and interpretation of statutes related to’ the institution decision.” *Id.* at 53 (quoting *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 275 (2016)). The Supreme Court has reserved judgment on “the precise effect of § 314(d) on appeals that implicate constitutional questions” or “that depend on other less closely related statutes.” *Cuozzo*, 579 U.S. at 275; *see id.* (declining to “categorically preclude review of a final decision where . . . there is a due process problem with the entire proceeding” or where there are “shenanigans”). In the absence of Supreme Court guidance, we have held that § 314(d) does not bar review of several such statutes, such as estoppel and joinder provisions. *See Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1050 (Fed. Cir. 2017); *Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020).

Centripetal’s recusal challenge does not turn on the “interpretation of statutes related to the Patent Office’s decision to initiate inter partes review.” *Cuozzo*, 579 U.S. at 275. Instead, it turns on the interpretation of ethics rules that are “not limited to the institution stage,” *Credit Acceptance*, 859 F.3d at 1050, and a constitutional challenge relevant to the entire proceeding. *See* Appellant’s Br. 28–39. Thus, it fits neatly into the categories of cases over which we have exercised jurisdiction. Indeed, this case is not the first time we have encountered, and exercised jurisdiction over, a conflict-of-interest challenge to Board institution procedures. *See Mobility Workx, LLC v. Unified Patents, LLC*, 15 F.4th 1146, 1150–56 (Fed. Cir. 2021). Thus, we hold that we have jurisdiction to hear this appeal.

B.

We turn now to the recusal challenge. As an initial matter, the Board did not abuse its discretion in holding Centripetal’s recusal motion to be untimely. *See Recusal*

Decision at 21–22. In the analogous context of Article III judge recusal motions, we have noted that despite “[t]here being no statute or rule limiting the time within such motion may be filed,” denying a recusal motion is appropriate “when the circumstances . . . are such that a grant of the motion would produce a result inequitable, unjust, and unfair.” *Polaroid Corp. v. Eastman Kodak Co.*, 867 F.2d 1415, 1418–19 (Fed. Cir. 1989).³ We have explained that “[t]he refusal of courts to ‘start over’ has rested not on the mere passage of time, but on the events that had occurred and the balancing of equity/fairness considerations in deciding whether to expunge those events from history’s pages.” *Id.* at 1419. Accordingly, we have noted that even a three-month delay can render a recusal motion untimely when a party sits on the relevant information while prosecuting other motions. *Id.* (citing *United States v. Kelley*, 712 F.2d 884, 887–88 (1st Cir. 1983)).

The Board did not abuse its discretion in holding that the circumstances here would make the grant of a recusal motion inequitable. The Board highlighted that Centripetal was aware of APJ McNamara’s public disclosures more than three months before the filing of its recusal motion

³ *Polaroid* applied First Circuit law, but made clear that its determination did not rest on a unique characteristic of First Circuit law and noted that this timeliness requirement exists in the vast majority of circuits. 867 F.2d at 1419; see also *Kolon Indus. Inc. v. E.I. DuPont de Nemours & Co.*, 748 F.3d 160, 169–170 (4th Cir. 2014) (collecting cases and noting that the overwhelming majority view of circuits is that there is an inherent timeliness requirement in 28 U.S.C. § 455). Moreover, we have recognized on several occasions that the “principles animating” district court procedural rules “can be a useful guide” for examining the Board’s procedures. *Odyssey*, 130 F.4th at 978; see, e.g., *Facebook*, 973 F.3d at 1334.

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and emphasized that Centripetal waited until after it had received an unfavorable decision on both its motion for rehearing and its petition for writ of certiorari to raise its recusal concerns. *Recusal Decision* at 22. While Centripetal contends that its delay was justified because it “spent this time researching the conflict and requesting additional financial disclosures from the Department of Commerce,” Appellant’s Br. 37, it concedes that the disclosures it received in September 2022 “made clear that a conflicted APJ was on the instituting panel.” Appellant’s Reply Br. 10. Having “know[n] of a ground for disqualification” since then, Centripetal was not “permitted to wait and decide [whether it] like[d] subsequent treatment that [it] receive[d]” on its pending motions. *Polaroid*, 867 F.2d at 1419 (citation omitted).

Moreover, the unique setup of the Board heightens the need to raise conflicts at the first opportunity. The Board faces a compressed timeline: It must issue its institution decision within three months of the patent owner’s preliminary response. 35 U.S.C. § 314(b)(1). For Keysight’s petition that deadline was January 6, 2023, a mere four workdays after the recusal motion was filed. *See* J.A. 8657; J.A. 9524. Thus, the Board did not abuse its discretion in holding that the circumstances of this case would make the grant of a recusal motion inequitable and untimely.

C.

While the Board’s untimeliness finding serves as an independent ground for affirming the Board’s rejection of Centripetal’s recusal motion, Centripetal’s recusal argument also fails on the merits. Government officers and employees are ordinarily prohibited from participating in matters in which they have a financial interest. 18 U.S.C. § 208(a). However, the Office of Government Ethics is empowered to promulgate regulations exempting from ethics rules financial interests that are “too remote or too inconsequential to affect the integrity of the services” of

executive branch employees. 18 U.S.C. § 208(b)(2). OGE has done so, promulgating 5 C.F.R. § 2635.402(d),⁴ which states, in relevant part, that executive branch employees “may be permitted to participate in a particular matter where the otherwise disqualifying financial interest is the subject of a regulatory exemption,” and identifying “part 2640, subpart B of this chapter” as the source of such regulatory exemptions that are “based on [OGE’s] determination that particular interests are too remote or too inconsequential.” 5 C.F.R. § 2635.402(d). In turn, 5 C.F.R. § 2640.202(a) affirmatively states that “[a]n employee may participate in any particular matter involving specific parties in which the disqualifying financial interest arises from the ownership by the employee” of securities issued by entities affected by the matter if the securities are publicly traded and the “aggregate market value of the holdings of the employee . . . in the securities of all entities does not exceed \$15,000.” *See also* 5 C.F.R. § 2640.202(b) (setting a \$25,000 de minimis exception for matters affecting nonparties). There is no dispute that, at all times, APJ McNamara’s stock holding was under \$15,000. *See* J.A. 6373; J.A. 6651 n.1 (noting that the “value of the stock is less than 0.04% of the value of the assets reported on the financial disclosure”).

Centripetal argues that 5 C.F.R. § 2640.202 is a mere criminal safe harbor and that 5 C.F.R. §§ 2635.101 and 2638.102 set out a more stringent standard executive

⁴ Several of the regulations discussed were revised after the Board issued its final written decision. *See Legal Expense Fund Regulation*, 88 Fed. Reg. 33799 (May 25, 2023); *Modernization Updates to Standards of Ethical Conduct for Employees of the Executive Branch*, 89 Fed. Reg. 43686 (May 17, 2024). Unless otherwise specified, we refer to and cite the versions of these regulations that were in effect while this case was ongoing before the Board.

branch employees must follow.⁵ Appellant’s Br. 29–30. Section 2635.101 sets out “general principles” that apply “[w]here a situation is not covered by the standards set forth in this part.” 5 C.F.R. § 2635.101(b); *see, e.g., id.* § 2635.101(b)(2) (“Employees shall not hold financial interests that conflict with the conscientious performance of duty.”). Thus, rather than raising the standard set forth in 5 C.F.R. §§ 2635.402 and 2640.202, 5 C.F.R. § 2635.101 merely acts as a catch-all and a general principle that “form[s] the basis” for the more specific standards in those provisions. Similarly, 5 C.F.R. § 2638.102 sets out a “fundamental principle that public service is a public trust,” and states that “[a]s provided in the Standards of Conduct at part 2635 of this chapter, employees must . . . avoid losing impartiality or appearing to lose impartiality in carrying out official duties.” Thus, it is clear from the text of the regulations that 5 C.F.R. § 2640.202 is not a mere criminal safe harbor.

Centripetal also argues that APJ McNamara violated 5 C.F.R. §§ 2635.501 and 2635.502 by failing to recuse. Appellant’s Br. 29–31. Section 2635.501 states that “[u]nder § 2635.502, unless he receives prior authorization, an employee should not participate in a particular matter involving specific parties which he knows is likely to affect the financial interests of a member of his household” if “a reasonable person with knowledge of the relevant facts would question his impartiality in the matter.”

⁵ Because it does not affect our ultimate disposition regarding the recusal issue, we assume without deciding that these regulations are enforceable. *But see* 5 C.F.R. § 2635.106(c) (“A violation of this part or of supplemental agency regulations, as such, does not create any right or benefit, substantive or procedural, enforceable at law by any person against the United States, its agencies, its officers or employees, or any other person.”).

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5 C.F.R. § 2635.501. In turn, 5 C.F.R. § 2635.502 states that where “a reasonable person with knowledge of the relevant facts [would] question his impartiality in the matter, the employee should not participate in the matter unless he has informed the agency designee of the appearance problem and received authorization from the agency designee.”

Centripetal’s argument with respect to 5 C.F.R. §§ 2635.501 and 2635.502 fails because these regulations do not apply to an employee’s own financial holdings. Section 2635.501 provides an overview of the subpart and section 2635.502 concerns “[p]ersonal and business relationships,” 5 C.F.R. § 2635.502, and are directed to conflicts relating to financial interests of “member[s] of his household” or “person[s] with whom he has a covered relationship,” not an employee’s own financial interests. 5 C.F.R. § 2635.502(a); *see, e.g.*, 5 C.F.R. § 2635.502(b), Examples 1–5 (discussing different hypothetical scenarios involving personal or business relationships). By contrast, 5 C.F.R. § 2640.202 governs the specific situation at issue here—ownership of publicly owned securities by the employee. Indeed, the note accompanying 5 C.F.R. § 2635.501 states that “when an employee’s official duties impact upon the employee’s own financial interests . . . the standards set forth in subparts D or F of this part apply and only a statutory waiver or exemption, as described in §§ 2635.402(d) and 2635.605(a), will enable the employee to participate in that matter.” 5 C.F.R. § 2635.501 Note. The note also expressly indicates that the “authorization procedures in § 2635.502(d) may not be used” when considering an employee’s own financial interests, and that instead “the application of one of the exemptions set forth in subpart B of part 2640 of this chapter,” which would include the *de minimis* exception in 5 C.F.R. § 2640.202, “constitutes a determination that the interest of the Government in the employee’s participation outweighs” the

appearance of impropriety concern.⁶ *Id.* Thus, on their face, 5 C.F.R. §§ 2635.501 and 2635.502 do not cover an employee’s own financial holdings. Instead, §§ 2635.402 and 2640.202 address this situation. Because APJ McNamara at all times complied with those regulations, he did not violate the executive branch ethics rules.

D.

Independent of its argument regarding the executive branch ethics rules, Centripetal contends that its fundamental due process rights were violated and that it was treated unfairly. Appellant’s Br. 25, 28–35. Centripetal argues that (1) the Board’s language was improperly harsh, *id.* at 28–29, 31–32; (2) APJs should be held to the same standards as Article III judges, because of the heightened need for impartiality, *id.* at 32–34; and (3) because the Patent and Trademark Office (“PTO”) has enacted guidance that future similar conflicts should give rise to recusal, to be fair such guidance should be retroactive, *id.* at 34–35. We disagree on all counts.

⁶ When 5 C.F.R. § 2635.501 was amended, this language was expressly moved from the note to § 2635.501(b)(3). 5 C.F.R. § 2635.501(b)(3) (2025); see *Modernization Updates to Standards of Ethical Conduct for Employees of the Executive Branch*, 88 Fed. Reg. 10774, 10776 (Feb. 21, 2023) (noting that Section 2635.501 was “restructure[d] . . . to organize the current text and the text of the current Note into new paragraphs” and that “[n]o substantive change is intended”). The new version of the regulation also states that “[a]n applicable waiver or exemption under part 2640 of this chapter also authorizes an employee’s participation in particular matters that would otherwise be restricted by § 2635.502.” 5 C.F.R. § 2635.501(b)(3) (2025).

The Board did not violate Centripetal’s due process rights by criticizing the merits of its recusal arguments. Centripetal focuses on the Board’s description of Centripetal’s “argument that APJ McNamara’s participation in this case ran afoul of ‘executive-branch ethics regulations’” as “frivolous” and the Board’s characterization of Centripetal’s delay as “highly inappropriate.” *Recusal Decision* at 13, 22; *see* Appellant’s Br. 28. Having reviewed the Board’s decision, we disagree; the Board’s statements merely reflect its candid, independent judgment of the arguments raised and the circumstances of the case. We certainly do not conclude that the Board’s statements show this case to be one of the rare cases where “opinions formed by the judge[s] on the basis of facts introduced or events occurring in the course of the current proceedings . . . display a deep-seated favoritism or antagonism that would make fair judgment impossible.” *Liteky v. United States*, 510 U.S. 540, 555 (1994). Thus, the Board did not violate Centripetal’s due process rights by criticizing its arguments.

The Board did not violate Centripetal’s due process rights by declining to apply the ethics rules for Article III judges to APJs. *See Recusal Decision* at 20–21. While proceedings before APJs may have many of the trappings of Article III proceedings, the two are subject to separate statutory and regulatory schemes. *Compare* 28 U.S.C. § 455 (applying only to Article III judges and magistrate judges), *with* 5 C.F.R. § 2640.102(b) (defining “employee” as “an officer or employee of the executive branch of the United States, or of any independent agency of the United States”). Centripetal provides no support for the proposition that the statutory ethics rules for Article III judges are coextensive with constitutional due process. *Compare Gibson v. Berryhill*, 411 U.S. 564, 579 (1973) (“[T]hose with *substantial* pecuniary interest in legal proceedings should not adjudicate these disputes.” (emphasis added)), *with* 28 U.S.C. § 455(d) (defining a disqualifying “financial interest” as a

“legal or equitable interest, however small”), and 5 C.F.R. § 2635.402(d)(1) (indicating that the de minimis exception implemented by OGE is “based on its determination that particular interests are too remote or too inconsequential to affect the integrity of the services of employees”). Centripetal does not identify either a statutory or constitutional provision that would require the exact same ethics rules for Article III judges and APJs with respect to disqualifying financial interests.⁷

Centripetal argues that it is unfair that the PTO has now directed Board management “to avoid empaneling cases to judges who hold stock or bonds . . . in any of the disclosed parties or real parties in interest, *regardless of the dollar value*.” Appellant’s Br. 34 (citing *Memorandum from Katherine K. Vidal, Under Sec’y of Commerce for Intellectual Prop. & Dir. of the USPTO, to the Members of the Patent Trial & Appeal Bd. & the Trademark Trial & Appeal Bd.* at 2 (Sep. 22, 2023) (“*Memorandum*”), <https://perma.cc/4FJQ-B69C>). However, that guidance is (1) explicitly not retroactive, *Memorandum* at 4; (2) “separate from existing ethics standards,” *id.* at 3; and (3) pursuant to the Director’s authority “to set policy and to designate panels of the [Board].” *Id.* at 2. We are aware of no due process principle that prohibits an agency from imposing stricter procedural rules that only apply prospectively. *Cf. Gen. Motors Corp. v. Romein*, 503 U.S. 181, 191 (1992) (“Retroactive legislation presents problems of unfairness that are more serious than those posed by prospective legislation, because it can deprive citizens of legitimate expectations and upset settled transactions.”).

⁷ In *Centripetal Networks, Inc. v. Cisco Systems, Inc.*, 38 F.4th 1025, 1033–34 (Fed. Cir. 2022), we held that a district court judge was disqualified from further proceedings in the case under 28 U.S.C. § 455 because of stock ownership in a party. Section 455 does not apply to APJs.

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Accordingly, Centripetal has not shown that its due process rights were violated by the PTO only prospectively imposing its new procedure.

E.

Even if Centripetal’s recusal motion were timely and meritorious, it would still not justify vacatur. “[M]andatory recusal does not require mandatory vacatur.” *Shell Oil Co. v. United States*, 672 F.3d 1283, 1293 (Fed. Cir. 2012). Instead, courts apply a three-factor test to determine whether any error was harmless: (1) “the risk of injustice to the parties in the particular case;” (2) “the risk that the denial of relief will produce injustice in other cases;” and (3) “the risk of undermining the public’s confidence in the judicial process.” *Liljeberg v. Health Servs. Acquisition Corp.*, 486 U.S. 847, 864 (1988); *see also Centripetal Networks, Inc. v. Cisco Sys., Inc.*, 38 F.4th 1025, 1034 (Fed. Cir. 2022) (“*Cisco*”). Here, each of those factors weighs against vacatur.

The risk of injustice to the parties in this case is low. Centripetal’s delay in raising recusal concerns, *see* Section III.B, *supra*, also decreases the risk of injustice to them. *See Cisco*, 38 F.4th at 1034–35. Moreover, the institution decision at issue was issued before Cisco became involved in the litigation. J.A. 118–209. Centripetal received a final written decision on the merits by three disinterested judges, including two judges who were never on the panel with APJ McNamara. *See generally Merits Decision*. To the extent that Centripetal argues that APJ McNamara should have recused before voting on the joinder motion, Centripetal has not demonstrated any prejudice from Cisco joining as an “understudy” to Palo Alto Networks and

making no new arguments.⁸ *See* J.A. 270–71 (conditioning Cisco’s joinder on it not raising new evidence, arguments, or unpatentability grounds). Moreover, because we ultimately vacate the final written decision on the merits, the Board will have another opportunity to consider this case. Accordingly, Centripetal has not demonstrated any prejudice requiring vacatur.

The risk of injustice in other cases is similarly low. As noted above, the PTO has changed its assignment methodology to prevent cases like this one from reoccurring. *See Memorandum*. While there remains the general interest in “encouraging a judge or litigant to more carefully examine possible grounds for disqualification and to promptly disclose them when discovered,” *Liljeberg*, 486 U.S. at 868, the PTO’s change in rules decreases the risk of injustice in other cases.

The public confidence factor also does not support vacatur. APJ McNamara properly disclosed his financial information and then recused following the discovery of a potential conflict. *See* J.A. 6372–73; J.A. 6650–52. Centripetal’s theory of harm is simply too attenuated; it requires that APJ McNamara have been biased while deciding institution of the Palo Alto Networks IPR based on a relatively small stock holding in Cisco, a non-party at the time; that he then influenced the non-conflicted APJ Moore; that APJ Moore then overcame the two disinterested APJs who later joined the case; and that this chain of events ultimately tainted the entire proceeding. *Cf. Williams v. Pennsylvania*, 579 U.S. 1, 16 (2016) (“Allowing an appellate panel to reconsider a case without the participation of the interested member will permit judges to probe

⁸ Centripetal concedes that Cisco and Keysight filed substantively identical petitions and motions for joinder and raises no challenge as to Keysight’s participation in the case. *See* Appellant’s Br. 18.

lines of analysis or engage in discussions they may have felt constrained to avoid in their first deliberations.”). Nor does Centripetal present evidence showing that there is a common problem of APJs improperly influencing other APJs by using overly harsh language in their prudent recusal decisions, or that the public is deeply concerned about APJs having sat on a panel with a conflicted judge before that judge recused.⁹ *Cf. Cisco*, 38 F.4th at 1038–39 (noting the “increasingly common problem” of, and the public outcry over, judges presiding over cases while they or

⁹ Contrary to Centripetal’s assertion that “an entirely new panel of APJs is . . . necessary,” Appellant’s Br. 36, a recused judge’s conflict does not infect the remaining panel members. We note that in the analogous Article III setting, when a panel member recuses himself midway through a case, it is standard practice in many courts to replace only the recused judge as the Board did here. *See, e.g., Fed. Cir. R. 47.11* (“If a judge of a panel that has heard oral argument or taken under submission any appeal, petition, or motion is unable to continue with consideration of the matter because of . . . recusal, the remaining judges will determine the matter if they are in agreement and no remaining judge requests the designation of another judge.”); D.C. Cir. *Handbook of Practice and Internal Procedures* X.D (When “a judge discovers the basis for recusal only after the case has been scheduled before a particular panel . . . a replacement judge is assigned to hear the case on that date.”); 5th Cir. *Rules and Internal Operating Procedures* at 47 (“If a judge recuses, . . . he or she immediately notifies the other members of the panel, and arrangements are made for a substitute judge.”); 1st Cir. *Internal Operating Procedure* VII.D (A case may be assigned to a panel including a particular judge “where a case has been assigned to a panel, but the subsequent recusal of a judge . . . makes it appropriate to transfer the case . . . to find a replacement judge.”).

their family members hold stock in parties). Thus, none of the relevant factors indicate that vacatur is justified based on recusal concerns.

F.

Turning to the merits of the appeal, we conclude that the Board erred by not properly considering evidence of copying. Before the Board, Centripetal indicated that “the district court” in *Cisco* “found that the ’856 Patent had been copied by Cisco.” J.A. 4680. Centripetal also introduced into the record some of the evidence from the *Cisco* litigation. That evidence includes (1) testimony that Centripetal executives met with Cisco in 2016 and presented information about the ’856 patent, J.A. 4937–44 at 1215:13–1222:25; (2) testimony regarding internal Cisco communications showing that Cisco intended to study Centripetal’s patents, J.A. 4849–50 at 1128:8–1129:5; and (3) expert testimony contending that Cisco plausibly copied Centripetal’s technology, J.A. 3523–24 at 3223:7–3224:16.

The Board did not discuss any of this evidence in its final written decision. Instead, it noted that the district court’s decision had been vacated and stated that it was “not in a position to evaluate the entirety of the litigation record, weigh witness testimony, and make a factual finding about copying.” *Merits Decision* at *24. The Board did not have to go searching throughout the entire litigation record to find the evidence of copying, but it had an obligation to consider the specific evidence that was put before it. *See Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1539 (Fed. Cir. 1983) (“Enroute to a conclusion on obviousness, a court must not stop until *all* pieces of evidence on that issue have been fully considered and each has been given its appropriate weight. . . . It is error to exclude that evidence [on secondary considerations] from consideration.”); *Knoll Pharm. Co. v. Teva Pharms. USA, Inc.*, 367 F.3d 1381, 1385 (Fed. Cir. 2004) (“The so-called ‘objective’ criteria must always be considered and given whatever weight

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is warranted by the evidence presented.” (citation omitted)). Because the Board failed to properly consider evidence of copying, we vacate and remand for the Board to conduct the proper analysis in the first instance.

IV. CONCLUSION

We vacate the Board’s final written decision and remand to the Board for further proceedings consistent with this opinion. At oral argument, Appellees expressly stated that they did not object to a new panel of APJs hearing this case if remanded. *See* Oral Arg. 48:45–49:10.¹⁰ Given this concession, on remand, the Director should consider whether to assign this case to new APJs.

VACATED AND REMANDED

COSTS

No costs.

¹⁰ Available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-2027_02062025.mp3.