United States Court of Appeals for the Federal Circuit

ARTHREX, INC.,
Appellant

 \mathbf{v} .

SMITH & NEPHEW, INC., ARTHROCARE CORP., Appellees

UNITED STATES, Intervenor 2018-2140

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2017-00275.

Decided: May 27, 2022

Anthony P. Cho, Carlson, Gaskey & Olds, PC, Birmingham, MI, argued for appellant. Also represented by David Louis Atallah, Jessica E. Fleetham, David J. Gaskey. Also argued by Robert Kry, MoloLamken LLP, Washington, DC. Also represented by Jeffrey A. Lamken; Jordan Rice, Chicago, IL; Trevor Arnold, John W. Schmieding, Arthrex, Inc., Naples, FL.

CHARLES T. STEENBURG, Wolf, Greenfield & Sacks,

P.C., Boston, MA, argued for appellees. Also represented by RICHARD GIUNTA, TURHAN SARWAR, NATHAN R. SPEED; MICHAEL N. RADER, New York, NY; MARK J. GORMAN, Smith & Nephew, Inc., Cordova, TN.

Joshua Marc Salzman, Appellate Staff, Civil Division, United States Department of Justice, Washington, DC, argued for intervenor. Also represented by Brian M. Boynton, Courtney Dixon, Scott R. McIntosh; Sarah E. Craven, Daniel Kazhdan, Thomas W. Krause, Farheena Yasmeen Rasheed, Molly R. Silfen, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA.

Before Moore, *Chief Judge*, Reyna and Chen, *Circuit Judges*.

MOORE, Chief Judge.

Arthrex, Inc. appeals a Patent Trial and Appeal Board final written decision finding claims 1, 4, 8, 10–12, 16, 18, and 25–28 of U.S. Patent No. 9,179,907 unpatentable as anticipated. It also challenges a decision by the Commissioner for Patents denying Arthrex's request for the Director of the Patent and Trademark Office (PTO) to review the Board's decision and grant rehearing. We affirm.

BACKGROUND

In 2015, Arthrex sued Smith & Nephew, Inc. and ArthroCare Corp. (collectively, S&N) in the United States District Court for the Eastern District of Texas, alleging infringement of the '907 patent. Shortly before trial, S&N petitioned the Board for *inter partes* review (IPR), arguing certain claims of the '907 patent were anticipated. The Board instituted IPR and ultimately found that prior art anticipated claims 1, 4, 8, 10–12, 16, 18, and 25–28. *Smith & Nephew, Inc. v. Arthrex, Inc.*, IPR2017-00275, 2018 WL 2084866, at *1 (P.T.A.B. May 2, 2018).

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Arthrex appealed. It primarily challenged the Board's decision on the merits, but it also argued that the Board lacked constitutional authority to issue the agency's final decision. Arthrex reasoned that the Board could not issue final decisions because its Administrative Patent Judges (APJs) were not nominated by the President and confirmed by the Senate, as the Appointments Clause requires for principal officers. We agreed with Arthrex's constitutional challenge and held that the appropriate remedy was to (1) sever the statutory limitations on the removal of APJs and (2) remand for rehearing by a new panel of APJs. Arthrex, Inc. v. Smith & Nephew, Inc., 941 F.3d 1320, 1338, 1340 (Fed. Cir. 2019). We did not reach the merits of the Board's decision.

The Supreme Court vacated and remanded. *United States v. Arthrex, Inc.*, 141 S. Ct. 1970 (2021) (*Arthrex*). It agreed that because APJs are appointed by the Secretary of Commerce, rather than the President with the advice and consent of the Senate, they could not issue any "final decision binding the Executive Branch." *Id.* at 1985. The Court held, however, that the appropriate remedy was to (1) exempt the Director from 35 U.S.C. § 6(c), which precludes anyone but the Board from granting rehearing of a Board decision, and (2) "remand to the Acting Director for him to decide whether to rehear" the case. *Id.* at 1987.

On remand, Arthrex requested "rehearing by the Director." *Smith & Nephew, Inc. v. Arthrex, Inc.*, IPR2017-00275, Paper 39 at 1 (P.T.A.B. Aug. 27, 2021). The office of the Director was, however, vacant. As was the office of Deputy Director, which is "vested with the authority to act in the capacity of the Director in the event of [his] absence or incapacity." 35 U.S.C. § 3(b)(1). The responsibility of addressing Arthrex's request thus fell to the Commissioner under a standing directive known as Agency Organization Order 45-1. That order states, "If both the [Director] and the Deputy [Director] positions are vacant, the Commissioner for Patents . . . will perform the non-exclusive

functions and duties of the [Director]." U.S. Patent & Trademark Off., U.S. Dep't of Commerce, Agency Organization Order 45-1, at II.D (Nov. 7, 2016) (AOO 45-1). The Commissioner then denied rehearing and ordered that the Board's decision "is the final decision of the agency." *Smith & Nephew, Inc. v. Arthrex, Inc.*, IPR2017-00275, Paper 40 at 2 (P.T.A.B. Oct. 15, 2021).

Arthrex appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Ι

We first address Arthrex's challenge to the Commissioner's order denying rehearing. Arthrex argues it "never got the remedy the Supreme Court ordered" because "[n]o presidentially appointed, Senate-confirmed principal officer decided Arthrex's petition" for rehearing. Appellant's Supp. Br. 1. Specifically, it argues the Commissioner's exercise of the Director's authority to decide rehearing petitions violated (1) the Appointments Clause, U.S. Const., art. II, § 2, cl. 2; (2) the Federal Vacancies Reform Act (FVRA), 5 U.S.C. § 3345 et seq.; and (3) the Constitution's separation of powers, U.S. Const., art. II, § 3. We do not agree.

Α

The Appointments Clause requires all "Officers of the United States" to be appointed by the President with the advice and consent of the Senate. U.S. Const., art. II, § 2,

¹ The order refers to the Director and Deputy Director by their alternate titles of "Under Secretary of Commerce for Intellectual Property" and "Deputy Under Secretary of Commerce for Intellectual Property," respectively. For clarity, we use the titles of Director and Deputy Director.

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cl. 2. For "inferior Officers," however, the Appointments Clause authorizes Congress to dispense with joint appointment and vest appointment power "in the President alone, in the Courts of Law, or in the Heads of Departments." *Id.* Congress did just that with the Commissioner for Patents, empowering the Secretary of Commerce to unilaterally appoint him. 35 U.S.C. § 3(b)(2)(A).

Because the Commissioner for Patents is not a Presidentially appointed, Senate-confirmed (PAS) officer, he ordinarily may not "issue a final decision binding the Executive Branch." *Arthrex*, 141 S. Ct. at 1985. Arthrex argues the Commissioner violated this principle when he denied Arthrex's rehearing request and stamped the Board's decision as "the final decision of the agency." *Smith & Nephew*, IPR2017-00275, Paper 40 at 2.

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Although an inferior officer generally cannot issue a final agency decision, he may perform the functions and duties of an absent PAS officer on a temporary, acting basis. United States v. Eaton is instructive. 169 U.S. 331 (1898). After falling ill, the consul general to Siam, Sempronius Boyd, a PAS officer, unilaterally appointed Lewis Eaton, then a missionary, to the position of vice consul general. Id. at 331–32. Mr. Boyd then took a leave of absence, returning to his home in Missouri, where he later died. *Id.* at 332–33. In the period between Mr. Boyd's departure and his replacement's arrival, Mr. Eaton was required by law to "temporarily . . . fill the place[] of consul[] general," which he did. Id. at 336 (quoting Revised Statutes § 1674). The government, however, refused to pay Mr. Eaton for his services. It argued that Congress violated the Appointments Clause by authorizing the President to promulgate the consular regulations Mr. Boyd invoked to appoint Mr. Eaton. See id. at 343.

The Supreme Court rejected that argument. It held that an inferior officer "charged with the performance of the duty of [a] superior for a limited time, and under special and temporary conditions," need not be Presidentially appointed and Senate confirmed. *Id.* Otherwise, the Court reasoned, "every delegation of power to an inferior to perform under any circumstances or exigency the duties of a superior officer" would be void, "and the discharge of administrative duties would be seriously hindered." *Id. Eaton* thus teaches that the Appointments Clause allows an inferior officer to temporarily wield the powers of an absent PAS officer.

The Supreme Court reaffirmed *Eaton*'s holding in this very case. It cited *Eaton* with approval as "holding that an inferior officer can perform functions of [a] principal office on [an] acting basis." *Arthrex*, 141 S. Ct. at 1985 (citing *Eaton*, 169 U.S. at 343). And based on that understanding of *Eaton*, it distinguished the Board's APJs from early patent arbitrators and examiners, explaining that "they exercised their limited power under 'special and temporary conditions." *Id.* (quoting *Eaton*, 169 U.S. at 343). Consistent with *Eaton*, an inferior officer can temporarily perform functions of a principal officer on an acting basis.

Eaton is, moreover, consistent with the FVRA. Under the FVRA, if a PAS officer "dies, resigns, or is otherwise unable to perform the functions and duties of the office," an inferior officer may fill in for him "temporarily in an acting capacity." 5 U.S.C. § 3345(a)(1), (3). The Supreme Court alluded to this interim appointment mechanism when it ordered "a remand to the *Acting* Director for him to decide whether to rehear [S&N's] petition." *Arthrex*, 141 S. Ct. at 1987 (emphasis added). This further supports that an inferior officer may temporarily perform an absent PAS officer's duties without violating the Appointments Clause.

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This case is indistinguishable from *Eaton*. Like Mr. Eaton, the Commissioner was merely performing the functions and duties of the Director in the limited period

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between the former Director's departure and the current Director's arrival. See Eaton, 169 U.S. at 332–33. And he did so under a previous Director's standing directive, see AOO 45-1, at II.D ("If both the [Director] and the Deputy [Director] positions are vacant, the Commissioner for Patents . . . will perform the non-exclusive functions and duties of the [Director]."), which is akin to how Mr. Boyd "called to" Mr. Eaton "and asked him to take charge of the consulate and its archives." Eaton, 169 U.S. at 331–32. Eaton therefore counsels that the Commissioner's actions did not violate the Appointments Clause.

Arthrex argues that "only a [PAS] officer may issue final agency decisions that are not subject to review by any superior officer." Appellant's Supp. Br. 12. Adopting this argument, however, would require us to ignore the Supreme Court's prior decision in this case directing "a remand to the Acting Director for him to decide whether to rehear [S&N's] petition." Arthrex, 141 S. Ct. at 1987 (emphasis added); see also, e.g., 5 U.S.C. § 3345(a)(3) (providing that an Acting Director may be an inferior officer within the PTO). It would also require us to hold the FVRA facially unconstitutional insofar as it permits inferior officers to perform a PAS officer's duties in an acting capacity. See 5 U.S.C. § 3345(a)(1), (3). Lastly, this argument directly conflicts with Eaton's clear holding that an inferior officer may temporarily exercise a PAS officer's powers in his absence. See 169 U.S. at 343. We therefore reject the argument that only a PAS officer may issue final agency decisions in all circumstances.

We also reject Arthrex's argument that *Eaton* is inapposite because it addressed only "situations where *Congress* creates a mechanism for temporary appointments that permits the *President* to select the appointee." Appellant's Supp. Reply Br. 2. Arthrex misapprehends the facts of *Eaton* and of this case. The President never selected Mr. Eaton as vice consul general; Mr. Boyd did. *Eaton*, 169 U.S. at 331–32. Nor did Congress authorize the President

to appoint Mr. Eaton; rather, it authorized him to promulgate regulations providing for such appointments. See id. at 336 ("The president is authorized to . . . provide for the appointment of vice consuls . . . under such regulations as he shall deem proper" (quoting Revised Statutes Regardless, here, Congress did authorize the § 1695)). President to select the Commissioner to temporarily perform the Director's duties. That is because the Patent Act broadly empowers the President, acting through the Director, to delegate the Director's duties as he sees fit. See 35 U.S.C. § 3(b)(3)(B) ("The Director shall . . . delegate to [officers and employees] such of the powers vested in the Office as the Director may determine."); Patent and Trademark Office Efficiency Act, Pub. L. No. 106-113, § 4745, 113 Stat. 1501, 1501A-587 (1999) (codified at 35 U.S.C. § 1 note) (The Director "may delegate any of [his] functions . . . to such officers and employees . . . as [he] may designate."). This basis for distinguishing *Eaton* therefore lacks merit.

Nor are we persuaded by Arthrex's argument that this case is different from Eaton because the Commissioner was supposedly not performing the Director's duties "for a limited time." Appellant's Supp. Br. 16. The Commissioner's time in that role was, from the outset, limited to the period in which the Director and Deputy Director offices remained vacant. See AOO 45-1, at II.D. Arthrex concedes this. Appellant's Supp. Br. 16 ("Under the agency's delegation, Commissioner Hirshfeld serves indefinitely until a successor is appointed " (emphasis added)). It is immaterial that AOO 45-1 did not specify exactly how long the Commissioner's tenure would be, for neither did the temporary appointment in Eaton. See 169 U.S. at 331–32 (noting appointment was for period "during [Sempronius Boyd's] absence, and until the then expected arrival from the United States of Robert M. Boyd, whom Sempronius Boyd desired should act as consul general" but who had not yet qualified). Moreover, the Commissioner denied Arthrex's

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rehearing request on his 268th day performing the Director's duties, which is less than the 309 days the Supreme Court deemed acceptable in *Eaton*. See id. at 333–34. Finally, the Commissioner's stint as the Director's stand-in was always limited in that the President could have replaced him with an Acting Director at any time. See 5 U.S.C. § 3345(a)(2), (3). In light of this combination of facts, the Commissioner was performing the Director's duties "for a limited time, and under special and temporary conditions." Eaton, 169 U.S. at 343.

In sum, Arthrex's Appointments Clause challenge runs headlong into *Eaton* and the Supreme Court's prior decision in this case. We therefore conclude that the Commissioner's exercise of the Director's authority while that office was vacant did not violate the Appointments Clause.

В

Arthrex next argues the FVRA precluded the Commissioner from ruling on Arthrex's rehearing request and deprives the Commissioner's decision of any "force or effect." Because the FVRA applies only to non-delegable duties, and because deciding rehearing requests is a delegable duty, we hold that the FVRA does not apply here.

1

When a PAS officer dies, resigns, or is otherwise unable, the FVRA dictates who may temporarily perform his "functions and duties" in an acting capacity. 5 U.S.C. § 3345(a); see also 5 U.S.C. § 3348(d)(1)–(2) ("An action taken by any person who is not [appointed pursuant to the FVRA], in the performance of any function or duty of a vacant office to which [the FVRA applies,] shall have no force or effect" and "may not be ratified." (emphasis added)). Critically, the statute defines that term narrowly:

[T]he term "function or duty" means any function or duty of the applicable office that—

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- (A)
 - (i) is established by statute; and
 - (ii) is required by statute to be performed by the applicable officer (and only that officer); or

(B)

- (i)
- (I) is established by regulation; and
- (II) is required by such regulation to be performed by the applicable officer (and only that officer); and
- (ii) includes a function or duty to which clause (i)(I) and (II) applies, and the applicable regulation is in effect at any time during the 180-day period preceding the date on which the vacancy occurs.

5 U.S.C. § 3348(a)(2) (emphases added).

This statutory language is unambiguous: the FVRA applies only to functions and duties that a PAS officer alone is permitted by statute or regulation to perform. It does not apply to delegable functions and duties. Other circuits agree. Schaghticoke Tribal Nation v. Kempthorne, 587 F.3d 132, 135 (2d Cir. 2009) (holding the FVRA did not prohibit an inferior officer from performing a function of a PAS officer who had resigned because the agency's regulations permitted the PAS officer to delegate that function); Stand

Up for Cal.! v. U.S. Dep't of Interior, 994 F.3d 616, 622 (D.C. Cir. 2021) (observing FVRA applies to "exclusive duties").²

The legislative history, as is often the case, demonstrates the competing considerations that went into the statute's adoption. On one hand, the FVRA's sponsors expressed a desire for the law to apply in nearly all circumstances. One sponsor "hope[d] that the Senate would make the Vacancies Act 'so tight, so air-tight, that no department can find a crack or crevice anywhere through which to creep." S. Rep. No. 105-250, at 9 (1998) (quoting statement of Senator Robert Byrd). Likewise, another sponsor said the law was meant to "cover all situations when the officer cannot perform his duties." 144 Cong. Rec. 27,496 (1998) (statement of Senator Fred Thompson).

The Senate Committee on Governmental Affairs stated that "[t]he purpose of [the FVRA] is to create a clear and exclusive process to govern the performance of duties" in an acting capacity. S. Rep. No. 105-250, at 1. It also said, "The bill applies to all vacancies in Senate-confirmed positions in executive agencies with [only] a few express exceptions." *Id.* at 2; *see also id.* at 15–17 (describing exceptions). And it repeatedly rejected a narrow interpretation that agencies vested with general delegation authority were exempt from the FVRA. *See, e.g., id.* at 3–4.

On the other hand, commenting on the specific statutory provision at issue here, 5 U.S.C. § 3348(a)(2), the Committee stated:

The bill defines "function or duty" of the office as those functions or duties that (1) are established by

We acknowledge that these decisions are not binding on us and that *Stand Up*'s observation may be dictum. *See* 994 F.3d at 622 n.2 ("Appellants have not raised their FVRA claims on appeal"). Nevertheless, these cases support our interpretation.

statute and are required to be performed only by the applicable officer; (2) are established by regulation and are required to be performed only by the applicable officer; [or] (3) were established by regulation and were required to be performed only by the applicable officer at any time in the 180 days preceding the vacancy....

S. Rep. No. 105-250, at 17–18 (emphases added). The Committee elaborated, "The functions or duties of the office that can be performed only by the head of the executive agency are therefore defined as the *non-delegable* functions or duties of the officer...." *Id.* at 18 (emphasis added). And it clarified that "[d]elegable functions of the office could still be performed by other officers or employees." *Id.* It appears this was a compromise to address concerns that a broader definition could "cause an unintended shutdown of the Federal agency within which the vacancy exists due to administrative paralysis." *Id.* at 30–31. These competing narratives in the legislative history cannot alter the plain language of the statute that was adopted, which provides that the FVRA applies only to non-delegable functions and duties. 5 U.S.C. § 3348(a)(2).

Arthrex is correct that this reading of § 3348(a)(2) renders the FVRA's scope "vanishingly small." Oral Arg. at 4:58–5:13.³ The government readily admits that only "a very small subset of duties" are non-delegable. *Id.* at 37:21–37. The Department of Justice agrees: "Most, and in many cases all, the responsibilities performed by a PAS officer will not be exclusive." Guidance on Application of Fed. Vacancies Reform Act of 1998, 23 Op. O.L.C. 60, 72 (1999). Pertinent here, the government contends that the FVRA imposes no constraints whatsoever on the PTO because all the Director's duties are delegable. Oral Arg. at

³ Available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=18-2140_03302022.mp3.

36:44–53 (Q: "Are there any functions or duties that a Director at the PTO has that in your view are not delegable?" A: "No, I don't believe there are any."); *id.* at 38:38–57 ("When you ask the question whether . . . the FVRA imposes constraints as opposed to an affirmative grant of authority to President Biden as it pertains to the Patent and Trademark Office, I'd say no"). We find it disquieting that the government views the FVRA as impacting such a "very small subset of duties" and not impacting the PTO at all.

That does not, however, justify departing from the plain language of the statute. *N.C. Dep't of Transp. v. Crest St. Cmty. Council, Inc.*, 479 U.S. 6, 14 (1986) ("[I]f one must ignore the plain language of a statute to avoid a possibly anomalous result, the short answer is that Congress did not write the statute that way." (cleaned up)). Moreover, Congress chose the limiting language of § 3348(a)(2) knowing full well that "many [PAS officers] lack any meaningful statutory duties." S. Rep. No. 105-250, at 18. We can neither rewrite the statute nor supplant Congress' judgment.

Furthermore, adopting Arthrex's position would have significant consequences. Arthrex does not dispute S&N's assertion that, in the last decade alone, the PTO has issued more than 668,000 patents signed by an inferior officer filling in for the Director. Construing the FVRA to apply to delegable duties would call the validity of those patents into question. It would also cast doubt on all the IPR decisions the PTO issued during the Commissioner's tenure performing the Director's delegable functions. See 5 U.S.C. § 3348(d)(1) ("An action taken by any person who is not acting under section 3345, 3346, or 3347 . . . shall have no force or effect.").

The impacts of such a decision would, moreover, reverberate far beyond the PTO. The universe of delegable PAS-officer duties is expansive, potentially encompassing every Executive agency. Oral Arg. at 41:03–13 (noting there are

more than 1,000 PAS offices across the government); id. at 4:58–5:13 ("In the real world, every agency has general delegation authority, and it applies to the vast and overwhelming majority of the agency's functions."); Guidance on Application of Fed. Vacancies Reform Act of 1998, 23 Op. O.L.C. at 72 ("Most, and in many cases all, the responsibilities performed by a PAS officer will not be exclusive."). Indeed, when Congress "delegates authority to a federal officer or agency, subdelegation to a subordinate federal officer or agency is presumptively permissible absent affirmative evidence of a contrary congressional intent." Ethicon Endo-Surgery, Inc. v. Covidien LP, 812 F.3d 1023, 1031 (Fed. Cir. 2016) (quoting U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 565 (D.C. Cir. 2004)); see also Kobach v. U.S. Election Assistance Comm'n, 772 F.3d 1183, 1190–91 (10th Cir. 2014) ("Our sibling circuits that have spoken on this issue are unanimous in permitting subdelegations to subordinates, even where the enabling statute is silent, so long as the enabling statute and its legislative history do not indicate a prohibition on subdelegation." (collecting cases)). As between the exceedingly broad scope that Arthrex proposes and the exceedingly narrow scope that the plain text of § 3348(a)(2) demands, we must choose the latter.

Arthrex argues that our interpretation "read[s] § 3347(b) out of the statute entirely." Oral Arg. at 11:02–14. We do not agree. Section 3347(b) merely provides that a statute granting the head of an agency "general authority ... to delegate [his] duties" does not exempt the agency from the FVRA. Construing the FVRA to apply only to non-delegable duties does not render this provision superfluous. If, for example, Congress grants an agency head general delegation authority but specifies that certain duties are non-delegable, § 3347(b) makes clear that the FVRA still applies to those non-delegable duties. And if no statute or regulation precludes delegation of a specific duty, the FVRA would not apply for *that* reason, not because of a statutory grant of general delegation authority. We

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therefore reject Arthrex's argument that our reading of § 3348(a)(2) conflicts with § 3347(b).

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The plain language of the statute limits the scope of the FVRA to non-delegable functions and duties. The FVRA does not, therefore, restrict who may perform a PAS officer's delegable duties when he is absent.

2

Applying the statute to this case, we must determine whether reviewing rehearing requests is a delegable duty of the Director or a duty that the Director, and only the Director, must perform. In Arthrex, the Supreme Court held that the Director (or Acting Director) must have the ability to rehear decisions of the Board. 141 S. Ct. at 1987 ("If the Director were to have the 'authority to take control' of a PTAB proceeding, APJs would properly function as inferior officers." (quoting Go-Bart Importing Co. v. United States, 282 U.S. 344, 354 (1931)). It did not hold that the Director must rehear every Board decision, nor did it require the Director to issue a decision in response to every rehearing request. "To be clear, the Director need not review every decision of the PTAB. What matters is that the Director have the discretion to review decisions rendered by APJs." Id. at 1988. We conclude that under the Patent Act this discretion includes the discretion to delegate review of rehearing requests.

The Patent Act bestows upon the Director a general power to delegate "such of the powers vested in the [PTO] as the Director may determine." 35 U.S.C. § 3(b)(3)(B). There is nothing in the Patent Act indicating that the Director may not delegate this rehearing request review function. Arthrex identifies no statute, regulation, or other law that limits the Director's delegable duties or suggests that rehearing requests are not delegable.

Arthrex cites 35 U.S.C. § 6(c), which provides that "[o]nly the Patent Trial and Appeal Board may grant

rehearings." On its face, the statute does not even permit the Director to grant rehearing, much less assign that authority exclusively to him. The Supreme Court, however, held that § 6(c) "cannot constitutionally be enforced to the extent that its requirements prevent the Director from reviewing final decisions rendered by APJs." *Arthrex*, 141 S. Ct. at 1987. "The Director accordingly may review final [Board] decisions" notwithstanding § 6(c). *Id.*⁴ The Supreme Court held that the Director *may* review final Board decisions. That is all the Appointments Clause requires, that the Director have the option to review, if she so chooses, a final Board decision. That the Appointments Clause requires that a PAS have review authority does not mean that a principal officer, once bestowed with such authority, cannot delegate it to other agency officers.

Given the language of the statute, the Director's general grant of delegation authority, and the absence of any language suggesting that rehearing requests must be reviewed by the Director and only the Director, we conclude that, for purposes of the FVRA, the duty to decide rehearing requests is delegable. Arthrex argues that the Director's general delegation authority cannot alone satisfy the FVRA. Appellant's Supp. Reply Br. 7–8. According to Arthrex, Congress enacted § 3347(b) of the FVRA specifically to foreclose this argument. *Id.* (citing, *e.g.*, S. Rep. No. 105-250, at 17). There are two problems with Arthrex's

⁴ Arthrex argues that after the Supreme Court's decision, § 6(c) now "permits the Director—and only the Director—to exercise a unilateral power to review Board decisions." Appellant's Supp. Br. 22. But § 6(c) contains no such limitation. The statute permits the Board to grant rehearing, and the Supreme Court's *Arthrex* decision concluded that the Director may also grant rehearing. Nothing in § 6(c) permits the Director (and only the Director) to rule on rehearing requests.

argument. First, § 3347(b) does not actually apply to the Director at all. It provides that the general delegation authority of "the head of an Executive agency" is not a basis to evade the FVRA. (Emphasis added). Because the PTO is a subagency of the Department of Commerce, see 35 U.S.C. § 1(a), it is not an "Executive agency" under the FVRA. See 5 U.S.C. § 105 ("For the purpose of this title, 'Executive agency' means an Executive department, a Government corporation, and an independent establishment."); 5 U.S.C. § 101 (listing the Department of Commerce as an Executive department). Second, even when there exists general delegation authority, Congress can still exempt specific duties or functions and thereby require those to be performed by the PAS officer. We are not, therefore, relying upon the Director's general delegation authority alone in holding that the FVRA does not apply here. Rather, our decision rests on the absence of any statute or regulation or law permitting only the Director to decide rehearing requests.

We hold that the Commissioner's order denying Arthrex's rehearing request on the Director's behalf did not violate the FVRA. The FVRA does not restrict who may perform the delegable functions and duties of an absent PAS officer. And the Director's authority to decide requests for rehearing Board decisions is delegable.⁵

C

Arthrex next contends that by exercising the Director's authority, the Commissioner violated the Constitution's separation of powers. We do not agree.

⁵ The government argues that there are no non-delegable duties of the Director. This decision is limited to a determination that the Director's authority to review rehearing requests is a delegable duty. As that is the only power at issue in this case, we go no broader.

The Constitution requires the President to "take Care that the Laws be faithfully executed." U.S. Const., art. II, § 3. "That power, in turn, generally includes the ability to remove executive officials." Seila Law LLC v. Consumer Fin. Prot. Bureau, 140 S. Ct. 2183, 2197 (2020). Without removal power, it would be "impossible for the President ... to take care that the laws be faithfully executed." *Id.* at 2198 (alteration in original) (quoting Myers v. United States, 272 U.S. 52, 164 (1926)). Except in limited circumstances not pertinent here, Congress cannot restrict the President's removal power. See id. at 2191–92. So, for example, a statute that prohibits the President from removing a PAS officer except for "inefficiency, neglect of duty, or malfeasance in office" is an unconstitutional encroachment upon Executive power. Id. at 2192–93 (quoting 12 U.S.C. § 5491(c)(3)).

Arthrex argues that because the Commissioner is removable only for "misconduct or nonsatisfactory perfor-U.S.C. § 3(b)(2)(C), the Constitution's 35 separation of powers precludes him from performing the Director's duties. This argument has no merit. Although the President must have cause to remove the Commissioner from that position, he needs no cause to remove the Commissioner from his role as the Director's temporary stand-in. Arthrex concedes that the FVRA provides a mechanism for the President to name an Acting Director "with the stroke of a pen" and that "there is simply no burden associated with doing that." Oral Arg. at 22:31–23:02; see 5 U.S.C. § 3345(a)(2), (3) (authorizing the President to simply "direct" another PAS officer or a senior employee of the agency "to perform the functions and duties of the vacant office temporarily in an acting capacity"). Because the President has unfettered power under the FVRA to strip the Commissioner of his temporary PAS-officer authority, the Commissioner's exercise of that authority does not violate the Constitution's separation of powers.

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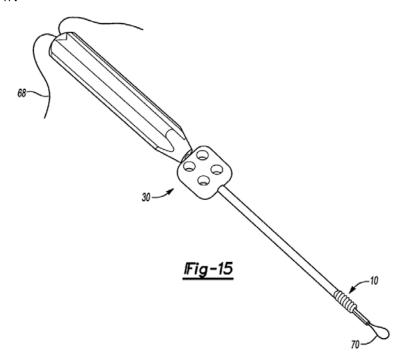
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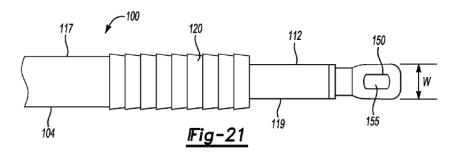
Turning to the merits, Arthrex challenges the Board's finding that prior art anticipated claims 1, 4, 8, 10–12, 16, 18, and 25–28 of the '907 patent. It also contends the Board lacked statutory authority to determine the validity of Arthrex's priority claim during IPR. Because substantial evidence supports its anticipation finding, and because it has the authority to resolve priority issues during IPR, we affirm the Board's decision.

Α

The '907 patent discloses a surgical device for attaching soft tissue to bone without requiring the surgeon to tie suture knots to secure the suture or tissue. See '907 patent at 1:43–48. The device comprises an "eyelet" through which the surgeon threads the suture. See id. at 1:51–53. The eyelet may be a flexible "suture loop 70," as shown below:



Id. at 5:51–59; Fig. 15. Alternatively, the eyelet may be a rigid "implant 150... formed of a transparent polymer material":



Id. at 7:4–10; Fig. 21.

Claim 1 is representative. Appellant's Br. 13. Pertinent to this appeal, it recites "an eyelet" generically, thereby encompassing both of the above embodiments:

1. A suture securing assembly, comprising:

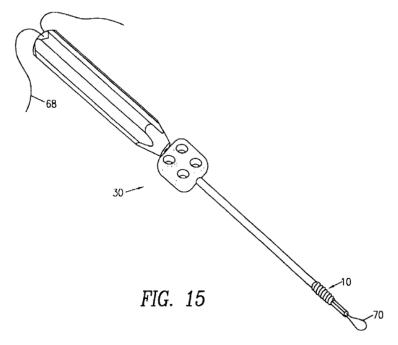
an inserter including a distal end, a proximal end, and a longitudinal axis between the distal end and the proximal end;

a first member including *an eyelet* oriented to thread suture across the longitudinal axis, the first member being situated near the distal end of the inserter, the first member being configured to be placed in bone; and

a second member situated near the distal end of the inserter, the second member being moveable by a portion of the inserter relative to the first member in a distal direction toward the eyelet into a suture securing position where the second member locks suture in place.

'907 patent at claim 1 (emphasis added).

The Board found claim 1 anticipated by U.S. Patent Publication No. 2002/0013608 (ElAttrache). Smith & Nephew, Inc. v. Arthrex, Inc., IPR2017-00275, 2018 WL 2084866, at *4–5 (P.T.A.B. May 2, 2018) (Board Decision). ElAttrache is the 2002 publication of an earlier Arthrex patent application, Application No. 09/886,280. ElAttrache at [21]. It discloses the same flexible eyelet embodiment as the '907 patent:



Id. at Fig. 15.

Before the Board, Arthrex agreed that ElAttrache would anticipate the challenged claims if it were prior art but argued that ElAttrache is not, in fact, prior art. *Board Decision* at *1. It reasoned that the '907 patent claims

⁶ The Board also found claim 1 anticipated by International Patent Publication No. WO 02/21999 A2 (Martinek). *Id.* at *5–6. Because we affirm the Board's decision based on ElAttrache, we need not address Martinek.

priority to the '280 application through a series of intervening continuation, continuation-in-part, and divisional applications. Arthrex contended the effective filing date of the challenged claims is the filing date of the '280 application, which was before ElAttrache's publication date.

The Board rejected that argument. It found that one of the intervening applications, Application No. 10/405,707, lacks any written description of the flexible eyelet embodiment encompassed by the generic eyelet claimed in the '907 patent and, thus, cuts off the '907 patent's priority claim. Board Decision at *7. The Board reasoned that although the '707 application incorporates the '280 application by reference, id. at *11–12, it criticizes the '280 application's "flexible loop configuration" and purports to "overcome [its] disadvantages" using a "fixed aperture," see id. at *8-9 (quoting '707 application, ¶¶ 5–7). Because of that criticism, the Board found that a skilled artisan would have understood the '707 application to do away with flexible eyelets and require rigid eyelets. Id. at *9-11. Accordingly, the Board concluded that the effective filing date of the challenged claims is the filing date of the application that issued as the '907 patent, well after ElAttrache's publication date. *Id.* at *4.

В

"[T]o gain the benefit of the filing date of an earlier application under 35 U.S.C. § 120, each application in the chain leading back to the earlier application must comply with the written description requirement of 35 U.S.C. § 112." Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1571 (Fed. Cir. 1997) (citing In re Hogan, 559 F.2d 595, 609 (CCPA 1977)). That means each application in the chain must "reasonably convey[] to those skilled in the art that the inventor had possession of the [later-claimed] subject matter as of the filing date." Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (first citing Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555,

1563 (Fed. Cir. 1991); and then citing *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983)). "Sufficiency of written description is a question of fact, reviewed for substantial evidence." *Gen. Hosp. Corp. v. Sienna Biopharms., Inc.*, 888 F.3d 1368, 1371 (Fed. Cir. 2018) (citing *Inphi Corp. v. Netlist, Inc.*, 805 F.3d 1350, 1354 (Fed. Cir. 2015)).

Substantial evidence supports the Board's finding that the '707 application lacks written description of flexible eyelets and, thus, the generic eyelet claim limitation. The '707 application's only mention of flexible eyelets is in the background section. There, it credits the '280 application's overall technique as an improvement but strongly criticizes its use of a flexible eyelet because it "impedes sliding of the suture":

Although the ['280 application's] technique provides an improved method of graft fixation to bone, the flexible loop configuration at the end of the driver disadvantageously *impedes sliding of the suture or graft* which is fed through the suture loop. In addition, because the cannulated driver of [the '280 application] is provided with a flexible loop at its distal end, *placement of the suture or graft at the bottom of the blind hole or socket and the cortical bone must be approximated*, thus sometimes necessitating additional removal, tapping and insertion steps to ensure full insertion of the plug or screw into the blind hole or socket. This, in turn, may abrade the adjacent tissue and/or damage the bone or cartilage.

'707 application, ¶ 5 (emphases added). Aside from this critique, the '707 application is completely silent about flexible eyelets.

And to "overcome the disadvantages" of flexible eyelets, the '707 application exclusively discloses an eyelet with a "fixed aperture" rather than a flexible loop. Id. ¶ 7. Unlike flexible eyelets, this allows the suture to "freely slide"

through the aperture," which in turn "allow[s] precise advancement and guiding of the plug or screw into the blind hole or socket." Id. ¶ 29. The application stresses the importance of this feature, noting that the invention covers "an aperture of any configuration of any geometrical shape, as long as it . . . allows the captured suture to freely slide within the aperture." Id. ¶ 33 (emphasis added).

Based on these disclosures, S&N's expert testified that a skilled artisan would have understood the '707 application to require a rigid eyelet. He explained that because the '707 application mentions a flexible evelet "only for purposes of criticizing it and emphasizing the need for an alternative approach that allows suture to slide freely," a skilled artisan would have understood that free sliding is "essential to the purported invention" and that flexible eyelets are "contrary to the invention's stated purpose." J.A. 2324, § 125; J.A. 2323, § 123. This testimony and the disclosures of the '707 application are substantial evidence upon which the Board could find that the '707 application lacks written description of generic eyelets encompassing flexible eyelets, as claimed by the '907 patent. See Tronzo v. Biomet, Inc., 156 F.3d 1154, 1159 (Fed. Cir. 1998) (holding substantial evidence did not support finding that parent application provided written description of laterclaimed genus encompassing any shape where it "tout[ed] the advantages of [a] conical shape," mentioned other shapes only in reciting the prior art, and "specifically distinguishe[d] the prior art as inferior"); see also Bilstad v. Wakalopulos, 386 F.3d 1116, 1125 (Fed. Cir. 2004) (explaining that *Tronzo* is an "exception[] to the general rule that disclosure of a species provides sufficient written description support for a later filed claim directed to the genus").

Arthrex argues the Board failed to give effect to the '707 application's incorporation of the entire '280 application by reference. According to Arthrex, this broad incorporation by reference compels a finding that the '707

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application provides written description support for flexible eyelets because there is no dispute that the '280 application discloses one. The Board, however, considered the '707 application's incorporation by reference and found it did not outweigh the evidence that the '707 application relies entirely on rigid eyelets. *Board Decision* at *11–12. Because the '707 application denigrates flexible eyelets and exclusively describes alternatives to overcome their disadvantages, we cannot say the Board's finding was unreasonable.

Arthrex further argues that the '707 application adequately describes generic evelets because it discloses "the function of threading suture," which is "tied to" flexible eyelets. Appellant's Br. 49. To be sure, the disclosure of a function may provide written description of a known structure for performing that function if the function and structure are "sufficiently correlated" to one another. Amgen, Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1332 (Fed. Cir. 2003). If, however, the specification derides a particular structure and seeks to replace it with alternatives that ostensibly perform its function better, a reasonable person could find that the specification lacks written description for that structure. The Board's finding that the '707 application does not adequately describe generic eyelets that encompass flexible evelets is supported by substantial evidence, as is its determination that ElAttrache is anticipatory prior art.

C

Lastly, there is no merit to Arthrex's argument that the Board lacked statutory authority to decide whether the '707 application meets the written description

requirement. Arthrex argues that because the scope of an IPR is limited to "ground[s] that could be raised under section 102 or 103," 35 U.S.C. § 311(b), the Board could not address the written description requirement of § 112. Section 311(b), however, merely dictates the grounds on which an IPR petition may be based, not the issues that the Board may consider to resolve those grounds. S&N complied with § 311(b) by asserting invalidity grounds under § 102. And because Arthrex argued that ElAttrache is not prior art by claiming priority to the '280 application, the Board needed to determine whether the '707 application satisfied the written description requirement. See In re NTP, Inc., 654 F.3d 1268, 1279 (Fed. Cir. 2011) (holding "priority can be considered and determined during reexamination proceedings," which are governed by similar statutory language).8 The Board therefore did not exceed its authority.

⁷ Although the government contends Arthrex forfeited this argument, we exercise our discretion to address it. *See Singleton v. Wulff*, 428 U.S. 106, 121 (1976) ("The matter of what questions may be taken up and resolved for the first time on appeal is one left primarily to the discretion of the courts of appeals, to be exercised on the facts of individual cases.").

⁸ Compare 35 U.S.C. §§ 301, 302 ("Any person at any time may file a request for reexamination by the Office of any claim of a patent on the basis of any prior art [consisting of patents or printed publications bearing on the patentability of that claim].") with 35 U.S.C. § 311(b) ("A petitioner in an inter partes review may request to cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.").

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CONCLUSION

Arthrex does not persuade us that the Commissioner violated the Appointments Clause, the FVRA, or the Constitution's separation of powers in denying Arthrex's rehearing request. Nor does it identify reversible error in the Board's decision that ElAttrache anticipated the challenged claims of the '907 patent. Accordingly, we affirm.

AFFIRMED

Costs

The parties shall bear their own costs.

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