

NOTE: This disposition is nonprecedential.

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

BENNETT REGULATOR GUARDS, INC.,
Appellant

v.

ATLANTA GAS LIGHT CO.,
Cross-Appellant

2017-1555, 2017-1626

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2015-00826.

Decided: August 17, 2020

WAYNE D. PORTER, JR., Law Offices of Wayne D. Porter, Jr., Independence, OH, for appellant.

HOLMES J. HAWKINS, III, King & Spalding, LLP, Atlanta, GA, for cross-appellant. Also represented by RUSSELL E. BLYTHE.

Before LOURIE, CLEVINGER, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

Bennett Regulator Guards, Inc. appeals the Patent Trial and Appeal Board's final written decision holding all claims of U.S. Patent No. 5,810,029 unpatentable on anticipation and obviousness grounds, along with the Board's subsequent order sanctioning petitioner Atlanta Gas Light Company. Bennett specifically challenges the Board's claim constructions, its compliance with the Administrative Procedure Act, and the adequacy of its sanctions award. Atlanta Gas cross-appeals, seeking to overturn the sanctions award.

This case returns to us following the Supreme Court's decision in *Thryv, Inc. v. Click-To-Call Technologies, LP*, 140 S. Ct. 1367 (2020). Our original decision in this case vacated the Board's final written decision without reaching the merits of the Board's unpatentability determinations because we concluded that "the Board exceeded its authority and contravened § 315(b)'s time bar when it instituted Atlanta Gas's petition." *Bennett Reg. Guards, Inc. v. Atlanta Gas Light Co.*, 905 F.3d 1311, 1313 (Fed. Cir. 2018). The Supreme Court vacated our original decision and remanded for further consideration in light of *Thryv. Atlanta Gas Light Co. v. Bennett Reg. Guards, Inc.*, No. 18-999, 2020 WL 1978924 (U.S. Apr. 27, 2020).

Because *Thryv* precludes our review of the Board's "application of § 315(b)'s time limit," 140 S. Ct. at 1370, we now reach Bennett's challenge to the merits of the Board's final written decision. For the reasons that follow, we affirm the Board's determination that claims 1–8 of the '029 patent are unpatentable for anticipation and obviousness. And, as in our original decision, we decline to review the Board's nonfinal sanctions order and instead remand to the Board to quantify its sanctions award.

BACKGROUND

I

The '029 patent relates to natural gas distribution, specifically the pressure regulator valves that reduce the pressure of natural gas “from the relatively high level used in a distribution system to the relatively low pressure level used in a customer’s building.” '029 patent col. 1 ll. 5–9. The invention of the '029 patent seeks to prevent these valves from failing due to ice formation. *Id.* at col. 1 ll. 10–12. The disclosed “ice preventing device” includes a skirt that connects to and surrounds the vent tube of a pressure regulator valve. *Id.* at Abstract. The skirt includes a baffle that prevents rain or freezing rain from splashing upwardly into the passage of the vent tube of the pressure regulator valve. *Id.*

The '029 patent, now expired, includes eight claims. Claim 1 is illustrative:

1. A skirt assembly for reducing ice formation at an *outlet vent tube* from the atmospheric pressure chamber of a *diaphragm-type gas pressure regulator*, comprising:

a skirt receiver adapted to be operatively connected to said *vent tube*;

a skirt member defining an interior space and having an upper end opening connecting said *vent tube* to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and

baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound;

whereby ice formation tending to block said *vent tube* is inhibited.

Id. at col. 4 ll. 42–57 (emphases added to disputed claim terms). Independent claim 5 similarly recites a “skirt member” and “baffle means,” but further recites a “valve means” and a “skirt receiver means.” *Id.* at col. 4 l. 64 – col. 6 l. 8. The dependent claims further specify that the skirt member is formed of “a molded plastic material” (claims 2 and 6) that may be “electrically conductive plastic” (claims 3 and 7), and that the lower end opening of the device may be covered by “a screen element” (claims 4 and 8). *Id.* at col. 4 ll. 58–63, col. 6 ll. 9–14.

II

Atlanta Gas petitioned for inter partes review of all claims of the '029 patent. Atlanta Gas asserted that claims 1 and 5 are anticipated by Peterson '087,¹ and that all of the claims of the '029 patent would have been obvious over various combinations of Peterson '087 and Peterson '573,² Ferguson,³ Ohmae,⁴ and the prior art described in the '029 patent. The Board agreed, holding the challenged claims unpatentable on all grounds. *See generally Atlanta Gas Light Co. v. Bennett Reg. Guards, Inc.*, No. IPR2015-00826, 2016 WL 8969209 (P.T.A.B. Aug. 19, 2016) (*Decision*).

On July 1, 2016—after the oral hearing but before the Board’s final written decision issued—the parent entity of Atlanta Gas, AGL Resources, Inc., merged with a wholly owned subsidiary of Southern Company, the owner of several electric and gas utilities located across multiple states. On July 11, 2016, the surviving AGL Resources entity was

¹ U.S. Patent No. 2,620,087.

² U.S. Patent No. 3,012,573.

³ U.S. Patent No. 3,985,157.

⁴ U.S. Patent No. 4,957,660.

renamed Southern Company Gas. Atlanta Gas did not notify the Board of these events.

After the Board's final written decision issued, Bennett sought to terminate the IPR based on the failure of Atlanta Gas to timely update its mandatory notices to identify Southern Co. and Southern Co. Gas as real parties in interest. Following a conference call with the parties, the Board rejected Bennett's requested termination, but ordered Atlanta Gas to update its notices and allowed Bennett to file a motion for sanctions. Shortly thereafter, Atlanta Gas filed a notice identifying Southern Co. Gas as "not a new entity but rather a name change." J.A. 306–07. Atlanta Gas also identified Southern Co. "out of an abundance of caution." J.A. 307. Bennett then moved for sanctions, which Atlanta Gas opposed.

Addressing the sanctions motion, the Board found that Southern Co. Gas was a real party in interest, at least because its predecessor (AGL Resources) was. The Board further found that Southern Co. was also a real party in interest based on Atlanta Gas's identification of Southern Co. as a real party in interest in its updated notices. After finding that Bennett was harmed by Atlanta Gas's nondisclosure,⁵ the Board awarded Bennett its costs and fees incurred between the final written decision and the sanctions decision, but again declined to terminate the IPR and expunge the final written decision as Bennett had further

⁵ Notably, one member of the three-judge panel was obliged to recuse himself after Atlanta Gas identified Southern Co. as a real party in interest, and a new judge was added to the panel. The Board found that there was no risk of injustice to the parties, however, because the final written decision issued before the Board was made aware of the merger. Nevertheless, the reconstituted panel "considered the Final Written Decision anew and expressly adopt[ed] its findings and conclusions." J.A. 94.

requested. The Board did not quantify the amount of the awarded costs and fees; it instead authorized Bennett to file a motion identifying and explaining the specific amounts requested.

Bennett appeals the Board's final written decision and sanctions order. Atlanta Gas cross-appeals the sanctions order. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

On appeal, Bennett challenges the final written decision based on the Board's claim constructions and the Board's compliance with the Administrative Procedure Act. Both parties challenge the sanctions award. We address each issue in turn.

I

We begin with Bennett's claim construction challenge. We review *de novo* the Board's ultimate claim constructions and any supporting determinations based on intrinsic evidence. *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020) (citing *Knowles Elecs. LLC v. Cirrus Logic, Inc.*, 883 F.3d 1358, 1361–62 (Fed. Cir. 2018)). We review any subsidiary factual findings based on extrinsic evidence for substantial evidence. *Id.* (citing *Knowles*, 883 F.3d at 1362). Because the '029 patent is expired, the *Phillips* standard applies to the Board's constructions. *Apple Inc. v. Andrea Elecs. Corp.*, 949 F.3d 697, 707 (Fed. Cir. 2020) (citing *In re CSB-Sys. Int'l, Inc.*, 832 F.3d 1335, 1342 (Fed. Cir. 2016)).

On appeal, Bennett challenges the constructions of no fewer than ten claim terms. The essential issue, however, is whether the challenged claims are properly limited to a high-pressure, internally relieved regulator. For the following reasons, we agree with the Board that the '029 patent does not limit the scope of the invention, and by extension the claim terms at issue, to that particular type

of regulator. We also conclude that the Board reasonably declined to credit Bennett's proffered testimony, which at most establishes that the '029 patent uses a particular kind of regulator as an example.

Bennett contends that the Board was obligated to construe the claim terms narrowly in order to preserve the validity of the challenged claims because the '029 patent is expired, and the challenged claims may no longer be amended. We disagree. Claims are construed to preserve validity only if, "after applying all the available tools of claim construction . . . the claim is still ambiguous." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 911 (Fed. Cir. 2004); see also *Phillips v. AWH Corp.*, 415 F.3d 1303, 1327 (Fed. Cir. 2005) (en banc) ("While we have acknowledged the maxim that claims should be construed to preserve their validity, we have not applied that principle broadly, and we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction." (citation omitted)). Bennett also relies on *Athletic Alternatives, Inc. v. Prince Manufacturing, Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996), for the proposition that, given "an equal choice between a broader and a narrower meaning . . . the notice function of the claim [is] best served by adopting the narrower meaning." That case, however, does not disturb the general rule that "[c]laim terms should be given their plain and ordinary meaning to one of skill in the art at the relevant time and cannot be rewritten by the courts to save their validity." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1374 (Fed. Cir. 2014). With these principles in mind, we turn to the specific constructions at issue.

A

To start, Bennett identifies no ambiguity in the claim terms "diaphragm-type gas pressure regulator," "outside gas pressure regulator," and "valve means" that would support adopting its narrower constructions. With regard to

the means-plus-function term “valve means,” Bennett asserts that the Board erred by identifying the corresponding structure as “a conventional diaphragm-type gas pressure regulator,” which encompasses both internally relieved and non-relieved regulators. Appellant’s Br. 37–38 (quoting *Decision*, 2016 WL 8969209, at *10). But as the Board correctly found, the ’029 patent does not limit “valve means” to a particular type of regulator. *See, e.g.*, ’029 patent Abstract (describing invention as “for use with an outside gas pressure regulator”), *id.* at col. 2 ll. 52–62 (describing Figs. 1–4 as illustrating “a typical gas pressure regulator valve . . . with which the device of the present invention may be used”). So too with “diaphragm-type gas pressure regulator” and “outside gas pressure regulator,” which Bennett does not argue separately.

Bennett insists that “substantial intrinsic and extrinsic evidence” shows that the ’029 patent “disclosed and claimed only a Fisher S254 high pressure, internally relieved regulator located outdoors.” Appellant’s Br. 40–41. According to Bennett, “valve means” must therefore be construed to include the restrictions “high pressure,” “internally relieved,” and “located outdoors.” *Id.* at 40. We agree with the Board that the intrinsic record does not support Bennett’s proposed constructions. As an initial matter, the fact that some of these limitations, like “high pressure” and “outside,” are found in other sections of claim 5 does not suggest that “valve means” should also be so limited. The ’029 patent, furthermore, does not even reference a Fisher regulator, much less the specific, internally relieved Fisher S254 regulator that Bennett asks us to incorporate into the claims. Indeed, Bennett admits as much on reply. *See* Appellant’s Reply Br. 34 (“The [’]029 patent does not refer to the disclosed regulator by name, nor does it incorporate all information from Fisher product literature.”).

Undeterred by the intrinsic record, Bennett points to its proffered testimony that an ordinarily skilled artisan would have understood the ’029 patent to describe a Fisher

regulator—testimony that Bennett claims the Board credited. But the Board did not credit this testimony. Instead, the Board explained that, *even if* it credited Bennett’s proffered testimony, it “[a]t best” suggests that the ’029 patent uses the Fisher regulator as a nonlimiting example. *Decision*, 2016 WL 8969209, at *12. Bennett’s suggestion that “trustworthy extrinsic evidence” may be preferred over intrinsic evidence for claim construction purposes, furthermore, is incorrect as a matter of law. Appellant’s Reply Br. 31–32 (citing pre-*Phillips* cases); *see also Phillips*, 415 F.3d at 1317, 1324 (explaining that extrinsic evidence is “less significant than the intrinsic record” and that extrinsic evidence cannot “contradict claim meaning that is unambiguous in light of the intrinsic evidence” (citations omitted)). In any event, the Board was not required to accept conclusory and unsupported assertions that an ordinarily skilled artisan would have understood the disclosed regulator to be a specific Fisher model. *See, e.g., J.A. 540 ¶ 46* (named inventor declaring without support that “[o]ne skilled in the art would recognize that the gas regulator illustrated and described in the [’]029 patent . . . is an internally relieved Fisher S254 regulator”); *see also Phillips*, 415 F.3d at 1318 (“[C]onclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”); *TQ Delta, LLC v. Cisco Sys., Inc.*, 942 F.3d 1352, 1358 (Fed. Cir. 2019) (“Conclusory expert testimony does not qualify as substantial evidence.” (citations omitted)). Accordingly, we hold that the Board correctly declined to adopt Bennett’s proposed narrowing constructions of “diaphragm-type gas pressure regulator,” “outside gas pressure regulator,” and “valve means.”

B

Bennett also seeks a narrowing construction of “baffle means.” In particular, Bennett contends that the Board erred by not requiring “substantial space” between the baffle and the skirt to “permit high pressure gas to flow.” Appellant’s Br. 42–44. Bennett bases this assertion on the

specification's description of the baffle-skirt space as "substantial." *Id.* at 43 (citing '029 patent col. 4 ll. 5–8). Bennett also relies on its proffered testimony that the '029 patent describes a high-pressure, internally relieved regulator, in that such a regulator would require "substantial space . . . to permit high pressure gas to flow . . . out of the skirt." *Id.*

As with Bennett's earlier claim construction arguments, however, the intrinsic record does not support importing the narrowing limitations that Bennett seeks. Though the '029 patent does state that the baffle-skirt space is "substantial," '029 patent col. 4 ll. 5–8, the claims only require that the baffle be "spaced from the interior walls of said skirt to permit gas flow therearound," *id.* at col. 4 ll. 53–55 (claim 1), col. 6 ll. 4–6 (claim 5). Neither the specification nor the claims require a baffle-skirt gap of any particular size. Bennett's further contention that the reexamination history of the '029 patent shows that the Patent Office understood "small baffle-skirt space[s]" to be excluded from the scope of the claims is unavailing. Appellant's Br. 44. The reexamination record includes no substantive discussion of the "small baffle-skirt space" except for *Bennett's* own assertion that the "baffle" of the prior art extends "into the side wall"—i.e., the prior art has no space. J.A. 641–42. No inference about the size of the spacing in Bennett's device logically follows. Accordingly, we discern no error in the Board's construction of the "baffle means" term.

C

As to the claim terms "outlet vent tube," "vent tube," "outlet vent means," and "vent means," Bennett argues that the Board erred by failing to require a vent tube with a sufficiently large diameter and a downwardly facing end portion. Once again, the intrinsic record does not support incorporating Bennett's narrowing limitations. The plain claim language does not define the size of the tube or

specify a particular orientation. The specification discloses that the vent opening is “small.” ’029 patent col. 1 ll. 40–44. And though the patent shows a downward facing tube, it does not limit the orientation of the tube. *See, e.g., id.* at col. 1 ll. 55–56 (“the vent in the diaphragm housing is *usually* protected by a section of tubing (vent tube) that faces downwardly” (emphasis added)). The Board also credited evidence presented by Atlanta Gas showing that tubes with other orientations were known in the art, a finding that is supported by substantial evidence. We find no reversible error in the Board’s construction of these claim terms.

D

Finally, Bennett argues that the Board erred by failing to construe the “high pressure gas source” and “low pressure gas line” terms to require the specific pressures that Bennett proposed—e.g., from about 2–3 psi to about 125 psi for a high-pressure gas source. Instead, the Board construed the pair as relative terms, “such that the ‘high pressure gas source’ delivers gas at a pressure higher than a pressure at the ‘low pressure gas line.’” *Decision*, 2016 WL 8969209, at *12. We agree with the Board’s construction. The ’029 patent does not disclose Bennett’s proposed values, and in any event, the specification does not suggest that any of the disclosed pressures are limiting. *See* ’029 patent col. 1 ll. 15–16 (noting high pressure “around 80 psi” and low pressure “around 0.4 psi”); *see also id.* at col. 3 ll. 1–8 (again noting high pressure “around 80 psi”). Bennett’s extrinsic evidence, which includes the operating pressure ranges for the Fisher S254 regulator, does not compel a different result for the same reasons discussed above.

In sum, Bennett has failed to establish any intrinsic evidence for its narrowing constructions, and the Board reasonably declined to credit Bennett’s extrinsic evidence for the same. Based on the intrinsic evidence of record, we

agree with the Board's interpretation of these terms. We therefore affirm the Board's constructions of the disputed claim terms.

II

Next, Bennett alleges a litany of APA violations by the Board. We review the Board's decisions for compliance with the APA, which requires the Board to "make the necessary findings and have an adequate 'evidentiary basis for its findings,'" and further requires that the Board "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *In re NuVasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016) (first quoting *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002); then quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). "[W]e do not require perfect explanations," however, and "we will uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned." *Id.* at 1382–83 (quoting *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*, 419 U.S. 281, 286 (1974)).

Bennett specifically contends that the Board failed to fulfill the requirements of the APA because it: (1) held that Peterson '087 disclosed a vent that relieved both gas and air "without discussing Bennett's evidence"; (2) "did not analyze Bennett's evidence" that an outlet vent tube must have a large diameter "in order to accommodate the discharge of high pressure gas"; (3) "did not . . . discuss the evidence or arguments" regarding the necessary size of the baffle-skirt gap in the claimed invention; and (4) "did not discuss," particularly with regard to dependent claims 3 and 7, why one skilled in the art would use electrically conductive plastic (as disclosed by Ohmae) "to solve the fire

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and explosion problem . . . instead of using some other technique.” Appellant’s Br. 48–51.⁶

We are not persuaded by Bennett’s APA arguments. For the reasons that follow, we conclude that the Board adequately explained and supported its findings in view of the APA and our case law.

Bennett asserts that “a critical issue was whether Peterson [’087] disclosed an air vent for a non-relieved regulator.” Appellant’s Br. 49. The Board discussed that issue and credited Atlanta Gas’s evidence that Peterson ’087’s vent 20 may be a “relief vent,” and that a person of ordinary skill in the art would have understood a “relief vent” to vent gas. *Decision*, 2016 WL 8969209, at *13. In doing so, the Board expressly acknowledged Bennett’s argument that Peterson ’087 does not mention discharging gas through vent 20, and the Board explained that it was not persuaded by that argument. *Id.* (quoting J.A. 276). Bennett based its argument solely on the declaration of Gregory A. Bennett, a named inventor on the ’029 patent, who testified without support that Peterson ’087 uses “breather” and “relief vent” synonymously. *See* J.A. 276; J.A. 543 ¶ 61. The Board did not specifically discuss that particular testimonial evidence supporting Bennett’s argument, but the Board did explain that it found Bennett’s argument unpersuasive when it credited Atlanta Gas’s evidence. That is

⁶ On reply, Bennett adds that the Board also failed to adequately consider its evidence and argument regarding secondary considerations. *See* Appellant’s Reply Br. 42. Bennett did not present this argument in its opening brief, and it is therefore waived. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006) (“Our law is well established that arguments not raised in the opening brief are waived.” (citing *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1320–21 n.3 (Fed. Cir. 2005))).

enough. The Board need not expressly discuss every single bit of evidence proffered by the parties, so long as we can reasonably discern its path. *See NuVasive*, 842 F.3d at 1382–83; *see also Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 905 (Fed. Cir. 2018) (affirming where the Board’s obviousness determinations “flow[ed] directly from its rejection of [patent owner’s] arguments” and where its analysis was “commensurate with [patent owner’s] arguments”). We can do so here.

Bennett also alleges that the Board failed to analyze its evidence that an outlet vent tube must have a large diameter. Here too, the Board noted Bennett’s argument, but deemed it “unpersuasive” as both not in accordance with the proper construction of “outlet vent tube” and “outlet vent means,” and in conflict with the ’029 patent itself. *Decision*, 2016 WL 8969209, at *13. Because the Board correctly found that the claims do not require an internally relieved regulator, its statement that Bennett’s arguments are unpersuasive because they “rely on features that we do not find are required by the claims in accordance with the claim construction” is sufficient. *Id.* Furthermore, we agree with the Board that Bennett’s position conflicts with the ’029 patent itself, which describes “a *small* vent opening 30.” ’029 patent col. 3 ll. 28–31 (emphasis added). On appeal, Bennett now contends that vent 30 and vent 31 are different and serve different purposes, but the ’029 patent specifically explains that vent tube 31 extends from opening 30. *Id.* at col. 3 ll. 31–34. We discern no APA violation here.

Bennett similarly argues that the Board failed to discuss its evidence that the baffle-skirt gap of Peterson ’087 “proves that Peterson’s device was intended to vent only air.” Appellant’s Br. 49. But as the Board explained, the claims—which, as discussed above, are not limited to an internally relieved regulator—do not require “substantial space” to vent “high pressure’ gas.” *Decision*, 2016 WL 8969209, at *13. Once again, the Board acknowledged

Bennett's contrary argument, but did not agree. We find the Board's explanation sufficient.

Bennett also argues that the Board failed to address its evidence and argument that an ordinarily skilled artisan would not have been motivated to increase the size of the Peterson '087 baffle-skirt gap, and therefore would not have combined Peterson '087 with the internally relieved regulator of the admitted prior art. Bennett cites no supporting evidence for this argument, however. Indeed, Bennett admitted in its patent owner response that the prior art described in the '029 patent is not limited to an internally relieved regulator. J.A. 296 (“[O]ne skilled in the art at the time of the invention relying only on [the admitted prior art] . . . would not have known whether the disclosed regulator was internally relieved or non-relieved.”).

Lastly, Bennett contends that the Board failed to explain a motivation to use Ohmae's anti-static, conductive plastic in the proposed combination. We disagree. The Board credited Atlanta Gas's reasoning that Ohmae relates to an electrically conductive plastic molding, and that an ordinarily skilled artisan would have had a reason to combine Ohmae's teaching with the teachings of Peterson '087 and Ferguson. As the Board explained, such a person would have understood “the benefits of an antistatic material as the molded plastic for the skirt assembly, including reducing the likelihood of fire and explosions.” *Decision*, 2016 WL 8969209, at *16 (quoting J.A. 162). The Board also relied on Mr. Bennett's testimony that “at the time of invention, ‘static electricity was a big issue,’ but that concern has since ‘faded away,’” as confirmation that there was industry motivation to use antistatic material. *Id.* at *17 (quoting J.A. 1138). Bennett argues that the Board erred by considering Mr. Bennett's testimony because “whether the industry no longer has a concern . . . has nothing to do with how [Mr.] Bennett solved it in the first instance and whether such solution would have been obvious.” Appellant's Br. 50–51. But Bennett misreads the Board's

decision. The Board considered Mr. Bennett's testimony only for the point that static electricity had been a concern, which suggests that a person of ordinary skill in the art would have been motivated to make the combination. Bennett also alleges that none of the references discuss preventing fires and explosions, but as Atlanta Gas correctly responds, a motivation to combine need not be stated in the references themselves. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419–20 (2007).

For these reasons, we conclude that the Board's rationale is reasonably ascertainable and is supported by substantial evidence. Accordingly, we affirm.

III

Finally, we address the parties' challenges to the Board's sanctions order. We review the Board's award of sanctions for an abuse of discretion. *Cf. Midwestern Pet Foods, Inc. v. Societe des Produits Nestle S.A.*, 685 F.3d 1046, 1051 (Fed. Cir. 2012) (applying abuse of discretion standard to Trademark Trial and Appeal Board's sanctions award); *Woods v. Tsuchiya*, 754 F.2d 1571, 1582 (Fed. Cir. 1985) (noting that award of sanctions falls within the Board of Interference's discretion).

Bennett asserts that the Board properly awarded monetary sanctions but erred by failing to terminate the IPR, *see* Appellant's Br. 27–35, while Atlanta Gas urges that the Board erred by awarding sanctions at all, *see* Cross-Appellant's Br. 70–86. We do not resolve the sanctions question, however, because we lack jurisdiction to review the Board's unquantified, and thus non-final, order.

We have exclusive jurisdiction to review the Board's final decisions. *See* 28 U.S.C. § 1295(a)(4)(A). But our jurisdiction extends only to *final* decisions. *See In re Arunachalam*, 824 F.3d 987, 988 (Fed. Cir. 2016) (reading § 1295(a)(4) “to incorporate a finality requirement” (quoting *Loughlin v. Ling*, 684 F.3d 1289, 1292 (Fed. Cir.

2012))). Because the Board has not yet quantified its sanctions award, the award remains non-final and unappealable. See *Special Devices, Inc. v. OEA, Inc.*, 269 F.3d 1340, 1343 (Fed. Cir. 2001) (holding unquantified award of attorney fees is not a final decision); *View Eng'g, Inc. v. Robotic Vision Sys., Inc.*, 115 F.3d 962, 964 (Fed. Cir. 1997) (“[A] district court decision imposing Rule 11 sanctions is not final, and hence not appealable, until the amount of the sanction has been decided . . .”).

In rare cases, we exercise pendent jurisdiction to decide an issue not otherwise subject to review. We extend pendent jurisdiction only reluctantly, and only to issues “inextricably intertwined” with or necessary to resolution of issues already before the court. See *Swint v. Chambers Cnty. Comm’n*, 514 U.S. 35, 51 (1995) (providing standard for exercise of pendent jurisdiction). “[T]he circuits, including this one, are in general agreement that an unquantified award . . . does not usually warrant the exercise of pendent jurisdiction,” and we hold the exercise of pendent jurisdiction is not warranted here. *Orenshteyn v. Citrix Sys., Inc.*, 691 F.3d 1356, 1360 (Fed. Cir. 2012). The parties’ merits disputes ask whether the art identified by Atlanta Gas anticipates or renders obvious Bennett’s properly construed claims. In contrast, the parties’ challenges to the Board’s sanctions order implicate the Board’s power to issue sanctions and to accept late filings, 37 C.F.R. §§ 42.5, 42.12, and ask us to examine whether the Board erred by identifying Atlanta Gas’s parent company as a real party in interest under 35 U.S.C. § 312(a)(2) and 37 C.F.R. § 42.8(b)(1). As in *Orenshteyn*, “the finding of invalidity and the sanctions in the present case have different legal bases requiring different legal analyses.” 691 F.3d at 1360.

Atlanta Gas suggested at oral argument that the Board’s denial of Bennett’s requested remedy—termination—was a final decision subject to appeal, and that we should exercise pendent jurisdiction over the Board’s related decision to award a monetary sanction, even though

the amount of that sanction remains undetermined. *See* Oral Arg. at 15:20–16:55, <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2017-1555.mp3>. We disagree. Atlanta Gas’s formulation requires us to arbitrarily divide the Board’s sanctions order into two decisions—one relating to termination and one relating to a monetary award. We instead treat the Board’s order as a single decision addressing Bennett’s entire motion for sanctions, which requested both termination and compensatory sanctions. *See* J.A. 318. This comports with the Board’s discussion, *see* J.A. 92–93, and preserves judicial resources by confining all sanctions issues to a single appeal.

Accordingly, we decline to exercise pendent jurisdiction over the Board’s sanctions order, and we remand to the Board. On remand, the Board may, at its discretion, further consider its order given the outcome of this appeal. But until the Board quantifies any sanctions, we will not review its decision granting them.

CONCLUSION

We have considered the parties’ other arguments, and we do not find them persuasive. For the foregoing reasons, we affirm the Board’s unpatentability determinations and remand for the Board to quantify any sanctions.

AFFIRMED-IN-PART AND REMANDED

COSTS

No costs.