

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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HUNTING TITAN, INC.,  
Petitioner,

v.

DYNAENERGETICS EUROPE GMBH,<sup>1</sup>  
Patent Owner.

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IPR2018-00600  
Patent 9,581,422 B2

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Before ANDREI IANCU, *Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office*, ANDREW HIRSHFELD, *Commissioner for Patents*, and SCOTT R. BOALICK, *Chief Administrative Patent Judge*.

BOALICK, *Chief Administrative Patent Judge*.

DECISION

Granting Patent Owner's Request for Rehearing

*37 C.F.R. § 42.71(d)*

Granting Patent Owner's Motion to Amend

*35 U.S.C. § 316(d)(1)*

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<sup>1</sup> Patent Owner's Updated Mandatory Notice Information, Paper 62, dated February 14, 2020, states that DynaEnergetics GmbH & Co. KG has been dissolved and DynaEnergetics Europe GmbH is the patent owner and real party in interest to this proceeding. Accordingly, we modify the original case caption to reflect that change. The parties shall use the modified caption for filings in this proceeding from this date forward.

## I. INTRODUCTION

Hunting Titan, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–15 of U.S. Patent No. 9,581,422 B2 (Ex. 1001, “the ’422 patent”). The Petition presented sixteen grounds of unpatentability based on theories of anticipation and obviousness, including a ground alleging that claims 1–15 are anticipated by U.S. Patent No. 9,689,223 B2 (Ex. 1002, “Schacherer”). DynaEnergetics Europe GmbH (“Patent Owner”) filed a Preliminary Response (Paper 9). The Board instituted trial on all grounds. Paper 10 (“Inst. Dec.”).

During the trial, Patent Owner filed a Motion to Amend presenting substitute claims 16–22. Paper 19. In response, Petitioner filed an Opposition to Patent Owner’s Motion to Amend. Paper 25 (“Pet. Opp. to Mot. Amend”). In the Opposition, Petitioner presented only obviousness arguments, without alleging that the proposed substitute claims were anticipated by the prior art of record. *See generally* Pet. Opp. to Mot. Amend. More specifically, Petitioner’s obviousness arguments addressed individual limitations of the proposed substitute claims, alleging that the limitations are taught by the prior art. Patent Owner filed a Reply to Petitioner’s Opposition, arguing, among other things, that Petitioner’s obviousness analysis did not specify combinations of prior art or demonstrate a motivation to combine the prior art. Paper 28 (“Reply”). Petitioner filed a Sur-Reply on Patent Owner’s Motion to Amend, arguing, among other things, that “the Board is tasked with determining whether the substitute claims are unpatentable by a preponderance of the evidence based on the entirety of the record.” Paper 33 (“Sur-Reply”), 6.

The Board issued a Final Written Decision finding the original claims are anticipated by Schacherer. Paper 42 (“Decision”). The Final Written Decision further denied Patent Owner’s Motion to Amend because the proposed substitute claims also were anticipated by Schacherer. *Id.* Specifically, the Final Written Decision determined that “Hunting Titan has carried its burden in demonstrating that th[e] proposed amendment does not overcome the anticipatory nature of Schacherer,” and noted that it “addresses only Hunting Titan’s anticipation challenge based on Schacherer, while rendering no findings or conclusions as to Hunting Titan’s numerous obviousness challenges.”<sup>2</sup> *Id.* at 28, 30.

Patent Owner requested rehearing and Precedential Opinion Panel (“POP”) review of the Board’s denial of the Motion to Amend. Papers 44, 45. The POP granted Patent Owner’s request for POP review to address the following issues:

- I. Under what circumstances and at what time during an *inter partes* review may the Board raise a ground of unpatentability that a petitioner did not advance or insufficiently developed against substitute claims proposed in a motion to amend?
- II. If the Board raises such a ground of unpatentability, whether the Board must provide the parties notice and an opportunity to respond to the ground of unpatentability before the Board makes a final determination.

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<sup>2</sup> In a footnote, and without further explanation, the Final Written Decision points out that the Board “find[s] persuasive” Petitioner’s argument that a particular modification to Schacherer would have been obvious as “within the purview of Schacherer and the general knowledge of a skilled artisan.” Decision 29 n.5.

Paper 46, 2 (citing Standard Operating Procedure 2 (“SOP 2”),<sup>3</sup> 3–7).

Petitioner and Patent Owner each filed an additional brief addressing the POP review issues (Paper 51, “Pet. Br.”; Paper 49, “PO Br.”), and each party filed a response (Paper 58, “Pet. Resp.”; Paper 57, “PO Resp.”).

Several amici curiae—Google LLC et al., High Tech Inventors Alliance, the American Intellectual Property Law Association, Askeladden L.L.C., and Unified Patents Inc.—filed briefs addressing the POP review issues.

Paper 52 (“Google Br.”); Paper 53 (“HTIA Br.”); Paper 54 (“AIPLA Br.”); Paper 55 (“Askeladden Br.”); Paper 56 (“Unified Patents Br.”)). An oral argument was held on February 18, 2020, and a transcript of the argument is included in the record. Paper 63 (“Tr.”).

Subsequent to oral argument, the Court of Appeals for the Federal Circuit issued its opinion in *Nike, Inc. v. Adidas AG*, 955 F.3d 45 (Fed. Cir. 2020). We authorized supplemental briefing from the parties to address the impact of *Nike* on this proceeding (Paper 64), and both Petitioner and Patent Owner submitted supplemental briefs. Paper 65 (“PO Supp. Br.”); Paper 66 (“Pet. Supp. Br.”).

We grant Patent Owner’s request for rehearing. We conclude that the Board may, in certain rare circumstances, raise a ground of unpatentability that a petitioner did not advance, or insufficiently developed, against substitute claims proposed in a motion to amend. We hold, however, that such circumstances are not present in this case and the Board should not have raised its own ground of unpatentability. Moreover, we find that the grounds that were raised by Petitioner in opposition to the Motion to Amend

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<sup>3</sup> Available at <https://go.usa.gov/xPMqx>.

are facially insufficient to support a finding of unpatentability. Accordingly, we grant Patent Owner's Motion to Amend.

## II. ANALYSIS

### A. *The Board's Ability to Raise New Grounds*

#### 1. May the Board raise a new ground?

We first address whether the Board may raise a ground of unpatentability that a petitioner did not advance, or insufficiently developed, against substitute claims proposed in a motion to amend. Paper 46, 2. Implicit in this issue is whether the Board has the ability to raise a ground of unpatentability beyond what the petitioner has raised or developed and, if so, under what circumstances *should* the Board do so. We conclude that the Board has the ability to raise a ground of unpatentability a petitioner has not advanced or has insufficiently developed, but *should* do so only under rare circumstances. Because those circumstances are not present here, the panel should not have raised a new ground in this case, as explained below.

35 U.S.C. § 316(d)(1) states that

During an inter partes review instituted under this chapter, the patent owner may file 1 motion to amend the patent in 1 or more of the following ways:

- (A) Cancel any challenged patent claim.
- (B) For each challenged claim, propose a reasonable number of substitute claims.

35 U.S.C. § 318 states, in part,

(a) Final Written Decision.—

If an inter partes review is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim

challenged by the petitioner and any new claim added under section 316(d).

(b) Certificate.—

If the Patent Trial and Appeal Board issues a final written decision under subsection (a) and the time for appeal has expired or any appeal has terminated, the Director shall issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent by operation of the certificate any new or amended claim determined to be patentable.

Petitioner argues that the Board should raise any ground of unpatentability with respect to amended claims that the record supports, noting that “[t]he Board has a duty to protect the public and should not blind itself to any ground of unpatentability supported by a preponderance of the evidence.” Pet. Br. 9; *see* Google Br. 3–7; HTIA Br. 5–8; Askeladden Br. 4–8. Patent Owner, on the other hand, argues that Congress has not given the Board the authority to independently examine the patentability of substitute claims proposed in a motion to amend. PO Br. 2, 5. Further, Patent Owner argues that “[b]y definition, substitute claims contain narrowing limitations not present in the original claims” and that a “patent owner cannot receive the required notice as to how the asserted art purportedly teaches the narrowing limitations—*via* the petition or otherwise—unless advanced by the petitioner.” PO Resp. 8. *See also* AIPLA Br. 3 (“the Board generally should not raise its own grounds of unpatentability in response to a motion to amend”).

The America Invents Act (“AIA”) established post-grant proceedings that are primarily adversarial. The Supreme Court has stated that AIA

proceedings are “similar to court proceedings.” *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2143 (2016). The Court noted that, “rather than create (another) agency-led, inquisitorial process for reconsidering patents, Congress opted for a party-directed, adversarial process,” that is “guided by a petition describing ‘each claim challenged’ and ‘the grounds on which the challenge to each claim is based.’” *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018). The Court further noted that “Congress chose to structure a process in which it’s the petitioner, not the Director, who gets to define the contours of the proceeding,” and that “the statute tells us that the petitioner’s contentions, not the Director’s discretion, define the scope of the litigation all the way from institution through to conclusion.” *Id.* at 1355–57.

Nevertheless, the Supreme Court has recognized that in “significant respects, inter partes review is less like a judicial proceeding and more like a specialized agency proceeding.” *Cuozzo*, 136 S. Ct. at 2143. Moreover, both *Cuozzo* and *SAS* addressed situations in which the Board evaluated grounds of unpatentability that differed from those the Petitioner raised against *original* claims that were present in the issued patent. The present case involves a new ground raised against new *substitute* claims proposed in a motion to amend. The ability to amend claims distinguishes AIA proceedings from other adversarial processes such as litigation in the district courts, or the International Trade Commission, as patentees cannot pursue claim amendments in those venues. Indeed, the Federal Circuit addressed this distinction in *Nike*, and concluded that “the Board should not be constrained to arguments and theories raised by the petitioner in its petition or opposition to the motion to amend. . . . Otherwise, were a petitioner not to oppose a motion to amend, the Patent Office would be left with no ability to

examine the new claims.” *Nike*, 955 F.3d at 51. As such, “the Board may sua sponte identify a patentability issue for a proposed substitute claim based on the prior art of record.” *Id.*

Patent Owner’s Supplemental Brief argues that, regardless of the Federal Circuit’s statements in *Nike*, it is the Supreme Court’s decision in *SAS* that controls the outcome of our decision. PO Supp. Br. 1. The Federal Circuit, however, made clear that it viewed the facts in *Nike* as distinguishable from *SAS*. As we note above, *SAS* involved original claims present in an issued patent, as did the other cases the *Nike* court distinguished, such as *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1373 (Fed. Cir. 2016). *Nike*, 955 F.3d at 51. By contrast, *Nike*, and the instant case, involve new amended claims that are not present in an issued patent. As the Federal Circuit has stated, “the Board’s authority with respect to new and amended claims” is different than with respect to originally issued claims, and “necessarily extends to other possible grounds of unpatentability.” *Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1352 (Fed. Cir. 2020). Accordingly, the Supreme Court’s ruling in *SAS* does not require that we disregard the Federal Circuit’s ruling in *Nike*.

We find that *Nike* resolves the question of whether the Board may advance a ground of unpatentability that a petitioner does not advance, or insufficiently developed, against substitute claims proposed in a motion to amend. The Board *may* do so.



2. Should the Board raise a new ground?

*Nike*, however, does not address the circumstances in which the Board *should* advance such a ground of unpatentability in relation to substitute claims proposed in a motion to amend. We conclude that only under rare circumstances should the need arise for the Board to advance grounds of unpatentability to address proposed substitute claims that the petitioner did not advance, or insufficiently developed, in its opposition to the motion.

Patent Owner acknowledges that when a “challenger ceases to participate in an IPR proceeding, [s]ection 317(a) expressly permits the Board to proceed to final judgment and justify any finding of unpatentability by reference to the evidence of record.” PO Br. 4 (citing *Cuozzo*, 136 S. Ct. at 2144). Patent Owner, however, argues that the Administrative Procedure Act (“APA”) “discourages administrative law judges (‘ALJs’)—including PTAB administrative patent judges—from exercising investigatory functions,” and “by developing its own arguments, the Board will inevitably extend its role beyond that of simply ‘presiding at hearings.’” PO Br. 8–9. *Accord* AIPLA Br. 5–10.

Petitioner and supporting amici, on the other hand, suggest that the Board has an obligation to raise its own grounds of unpatentability in any appropriate case, and to independently examine the patentability of every proposed substitute claim. Pet. Br. 9–12; Google Br. 3–7; HTIA Br. 5–8; Askeladden Br. 4–8. In its Supplemental Brief, Petitioner argues that *Nike* requires that “the Board must consider the entire record when determining invalidity, including prior art cited in the IPR.” Pet. Supp. Br. 1. Petitioner directs us to the *Nike* court’s reiteration of the holding in *Aqua Products* that “the Board may not ‘base its patentability determinations with respect to

amended claims solely on the face of the motion to amend, without regard to the remainder of the IPR record” and “[r]ather, the Board must consider the *entirety* of the record before it when assessing the patentability of amended claims.” *Id.* (citing *Nike*, 955 F.3d at 51) (quoting *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1325, 1296 (Fed. Cir. 2017)) (bolding and underlining omitted) (italics in *Nike*).

We are not persuaded that the statements identified by Petitioner in *Nike* mandate the broad rule Petitioner proposes, under which the Board is obligated to undertake an independent examination of every proposed substitute claim. This would require the Board to raise, develop, and resolve every possible argument supported by the evidence of record that an amended claim is unpatentable, even if the petitioner has never raised or sufficiently developed that argument in the record. The holding of *Nike* is that “the Board *may* sua sponte identify a patentability issue for a proposed substitute claim based on the prior art of record,” not that the Board *must* do so. *Nike*, 955 F.3d at 51 (emphasis added).

The sentence from *Nike* on which Petitioner relies says nothing to the contrary – it provides only that, “based on consideration of the entire record, the Board *must determine*” the patentability of the proposed substitute claim. *Id.* at 51–52 (emphasis added). This sentence simply recognizes that the Board is required to “issue a final written decision with respect to the patentability of . . . any new claim added under section 316(d).” 35 U.S.C. § 318(a). And “[i]t makes little sense *to limit the Board . . . to the petitioner’s arguments*” in assessing the patentability of such claims. *Nike*, 955 F.3d at 51 (emphasis added). However, nothing in *Nike* requires the

Board to raise and then address additional arguments, much less all possible arguments that the record could possibly support.

Furthermore, a rule mandating the Board to evaluate all possible arguments that may be supported by the evidence of record would not provide the parties with the appropriate incentives to participate in the adversarial process. Notably, adversarial briefing by the parties provides the basic framework for the amendment process in AIA trials. That is, the patent owner first proposes the substitute claims in its motion, and the petitioner then has the opportunity to raise grounds of unpatentability in opposition based on evidence and arguments. Therefore, the opposition to a motion to amend typically should guide the contours of the motion to amend patentability analysis.

Relying on the adversarial process to frame the issues for the Board properly places the incentives on the parties to identify the pertinent evidence and make the best arguments for their desired outcome. As the Supreme Court has explained:

In our adversary system, in both civil and criminal cases, in the first instance and on appeal, we follow the principle of party presentation. That is, we rely on the parties to frame the issues for decision. . . . [A]s a general rule, “[o]ur adversary system is designed around the premise that the parties know what is best for them, and are responsible for advancing the facts and arguments entitling them to relief.”

*Greenlaw v. United States*, 554 U.S. 237, 243–44 (2008) (quoting *Castro v. United States*, 540 U.S. 375, 386 (2003) (Scalia, J., concurring in part and concurring in the judgment) (alteration in original)). Underlying this reliance on the adversarial system is the notion that “[c]ounsel almost always know a great deal more about their cases than we do.” *United States v.*

*Samuels*, 808 F.2d 1298, 1301 (8th Cir. 1987) (Arnold, J., concurring in the denial of reh’g en banc) (“[Courts] do not, or should not, sally forth each day looking for wrongs to right. We wait for cases to come to us, and when they do we normally decide only questions presented by the parties.”).

Adopting Petitioner’s proposal, and obligating the Board to raise sua sponte any potential arguments of unpatentability in every case involving a motion to amend, would significantly diminish the incentives for a petitioner to fully and cogently explain its basis for concluding that the proposed substitute claims are unpatentable. This would also greatly undermine the efficiency of AIA proceedings. Such an approach would put the onus on the Board to develop arguments for the petitioner. *See Anderson v. Eppstein*, 59 USPQ2d 1280, 1287 (BPAI 2001) (quoting *United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991)); *Cisco Sys. Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12, 10 (PTAB Aug. 29, 2014) (informative) (quoting *DeSilva v. DiLeonardi*, 181 F.3d 865, 866–67 (7th Cir. 1999)).

Accordingly, the better approach, in most instances, is to rely on the incentives the adversarial system creates, and expect that the petitioner will usually have an incentive to set forth the reasons why the proposed substitute claims are unpatentable. In most circumstances, then, the Board need not raise its own arguments of unpatentability.

To be sure, there may be circumstances where the adversarial system fails to provide the Board with potential arguments for the unpatentability of the proposed substitute claims. As noted above, the Supreme Court in *Cuozzo* specifically addressed one such situation, in which the petitioner has ceased to participate in the proceeding altogether. *Cuozzo*, 136 S. Ct. at 2144. A similar situation may exist where a petitioner chooses not to oppose

the motion to amend. And even where both a petitioner and patent owner participate in the motion to amend process, there may be situations where certain evidence of unpatentability has not been raised by the petitioner, but is readily identifiable and persuasive such that the Board should take it up in the interest of supporting the integrity of the patent system, notwithstanding the adversarial nature of the proceedings. For example, a situation could arise where the record readily and persuasively establishes that substitute claims are unpatentable for the same reasons that corresponding original claims are unpatentable. There may be other situations as well, but we need not undertake to delineate them with particularity at present. Such situations are usually fact-specific and the Board can address them as they arise.

In sum, we determine that the Board *may* raise a ground of unpatentability that a petitioner did not advance, or insufficiently developed, against substitute claims in a motion to amend, but *should* only do so under rare circumstances.<sup>4</sup>

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<sup>4</sup> In its Supplemental Brief, Patent Owner argues that the Office lacks the ability to set standards for when the Board may sua sponte raise a ground of unpatentability, because the Supreme Court's decision in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842 (1984) prohibits such standard-setting. PO Supp. Br. 3–4. But *Chevron* addresses the question of whether a reviewing court should give deference to an agency's rulemaking, not the underlying question of whether an agency has the power to make rules. We do not understand *Chevron* to be any obstacle to the Office setting standards for when the Board, which is part of the Office, may exercise the power to sua sponte raise grounds of unpatentability, as *Nike* expressly permits.

*B. Notice of New Grounds*

We now turn to the issue of whether the Board must provide the parties notice of, and an opportunity to respond to, any ground of unpatentability the Board raises sua sponte. The parties and amici do not dispute that the Board needs to provide notice in that event—their dispute, instead, focuses on what form that notice must take. Pet. Br. 4–8; PO Br. 12–15; Google Br. 8–15; HTIA Br. 14–15; AIPLA Br. 13–15; Askeladden Br. 8–10; Unified Patents Br. 12–14. We, therefore, do not consider there to be any question that notice to the parties is indeed required. As Patent Owner points out, the APA requires that an agency must “timely inform[.]” the parties to a formal adjudication of “the legal authority and jurisdiction under which the hearing is to be held,” as well as “the matters of fact and law asserted.” 5 U.S.C. § 554(b)(2), (3) (2018) (portions quoted in PO Br. 12). Moreover, in *Nike* the Federal Circuit held that this requirement applies to a ground of unpatentability the Board raises with respect to proposed substitute claims that a petitioner has not advanced or sufficiently developed. *Nike*, 955 F.3d at 51; *see also id.* at 52 (“the notice provisions of the APA and our case law require that the Board provide notice of its intent to rely on [newly raised references] and an opportunity for the parties to respond before issuing a final decision relying on [those references].”).

Rather than contest whether the Board must provide notice, Petitioner’s primary argument is that a ground of unpatentability raised in the petition against original claims (for example, in the present case, the Schacherer anticipation ground) provides sufficient notice to a patent owner that the Board may apply the same ground against the newly-proposed substitute claims. Pet. Br. 4. We disagree.

As an initial matter, the proposed amended claims will include new limitations not found in the original claims, and the petition will not have set forth how the prior art meets those new limitations. Absent some explanation—from the petitioner when opposing a motion to amend or, in rare circumstances, the Board—of how the prior art allegedly meets the newly-added limitations, the patent owner cannot be said to have been given “notice and a fair opportunity to meet the grounds of rejection.” *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1080 (Fed. Cir. 2015).

In addition, Petitioner’s approach fails to balance the burdens on the parties properly, as it would require a patent owner to guess which grounds of unpatentability from the petition the Board may apply against the substitute claims and respond to them, while at the same time absolving the petitioner from addressing which grounds it believes are meritorious in view of the proposed amendment.

Thus, due process requires that a patent owner receive notice of how the prior art allegedly discloses the newly-added limitations of each proposed substitute claim, as well as a theory of unpatentability asserted against those claims. And the patent owner must have the opportunity to respond to those factual allegations and legal theories. Although we need not define every possible procedure that would be sufficient to provide the required notice and opportunity to respond, the Federal Circuit in *Nike* gave two examples. *Nike*, 955 F.3d at 54. Specifically, the court suggested that the Board could request “supplemental briefing from the parties regarding its proposed ground for unpatentability” or it could “request[] that the parties be prepared to discuss” the prior art in connection with the substitute claim at

an oral hearing. *Id.* The court opined that “either of these actions would satisfy the APA’s notice requirements.” *Id.*

*C. Application to the Instant Case*

1. Petitioner Failed to Adequately Advance or Develop an Anticipation Argument Against Proposed Substitute Claims 16–22

Petitioner argues that, at the very least, the Board here decided that the proposed substitute claims were both anticipated *and* rendered obvious by Schacherer, and that it raised the latter grounds in its Opposition to Patent Owner’s Motion to Amend. Pet. Br. 3–4. Alternatively, Petitioner points out that the Petition alleged anticipation by Schacherer (*id.* at 4), and, therefore, argues that the anticipation ground was not new. We disagree on both points.

Initially, we determine anticipation is the only ground of unpatentability fully analyzed in the Final Written Decision in relation to substitute claims proposed in the Motion to Amend. We acknowledge that the Final Written Decision states that “none of th[e] additional limitations renders the proposed substitute claims novel or non-obvious over the prior art of record,” and includes footnote 5, which references Petitioner’s assertions regarding an “obvious modification” to Schacherer’s disclosure. Decision 26, 29 n.5. Although the Final Written Decision might at best imply a finding of obviousness in relation to the proposed substitute claims, the Final Written Decision does not set forth a detailed obviousness analysis, such as an analysis of the *Graham* factors or the reason a person of ordinary skill in the art would have modified the prior art or combined references with a reasonable expectation of success. *See, e.g.*, Decision 30. This is true not only of the proposed substitute claims, but also of the original claims. In addition, the Final Written Decision concludes that Patent Owner’s



“proposed amendments do not overcome the anticipatory nature of Schacherer’s disclosure,” and, in dismissing Patent Owner’s Motion to Exclude as moot, the Final Written Decision states that “[o]ur decision today addresses only Hunting Titan’s anticipation challenge based on Schacherer, while rendering no findings or conclusions as to Hunting Titan’s numerous obviousness challenges.” *Id.* at 29, 30. Therefore, the Final Written Decision determines the proposed substitute claims are unpatentable based on an anticipation theory alone.

We further find that the anticipation theory discussed in the Final Written Decision was not advanced, much less sufficiently developed, by Petitioner against the proposed substitute claims. The record indicates that Petitioner never mentioned anticipation as a ground in its Opposition to the Motion to Amend. Nor did Petitioner do so in its Sur-Reply, despite Patent Owner’s observation in its Reply that, “[i]n striking contrast to the Petition’s heavy focus on assertions of anticipation, the instant challenge relies entirely on allegations of obviousness.” Reply 1 (footnote omitted). At the hearing, Petitioner admitted that focusing on obviousness, and not anticipation, was an intentional “tactical decision, to focus our arguments in the limited space we had.” Tr. 17:3–6.

Nor do we consider the action of Petitioner raising the ground of anticipation by Schacherer against the original claims in the Petition sufficient to also raise arguments regarding anticipation of the proposed substitute claims by Schacherer. Petitioner argues that “[t]he Board is not required to set out a bill of particulars naming every possible piece of evidence it might rely on, or every legal or factual issue that may arise.” Pet. Br. 4 (citing *Genzyme Therapeutic v. Biomarin Pharmaceutical*, 825

F.3d 1360, 1366–67 (Fed. Cir. 2016)). Petitioner further argues in its Supplemental Brief that *Nike* reaffirms this aspect of *Genzyme*. Pet. Supp. Br. 4. In *Genzyme*, however, the Board relied on references, raised by the petitioner in reply, to support its conclusion of unpatentability of challenged claims of the patent on a ground that was cited in the original Petition. *Genzyme*, 825 F.3d at 1366. As the *Nike* court pointed out, the parties in *Genzyme* both addressed the relevance of these references, and the patent owner “had ample notice that the references were in play as potentially relevant evidence and that the Board might well address the parties’ arguments regarding those references in its final written decisions.” 955 F.3d at 54 (quoting *Genzyme*, 825 F.3d at 1367).

In the present case, by contrast, the newly raised argument against the proposed amended claims is an entirely new theory of unpatentability and the evidence relied upon is applied against new claim limitations that did not exist at the time the Petition was filed. As discussed above, raising a ground of unpatentability in a petition against original claims in a patent does not provide a patent owner with sufficient notice that new arguments would be asserted using that same reference against new substitute claims proposed in a motion to amend. *See supra* § II.B. Accordingly, the anticipation ground based on Schacherer, which was raised only in the Petition with respect to the original claims, was not advanced, much less sufficiently developed, by Petitioner against proposed substitute claims 16–22.

## 2. Should the Board Have Raised the New Ground?

In view of our determination that Petitioner did not advance an anticipation ground based on Schacherer against proposed substitute claims 16–22, we now address whether the Board should have raised that ground

against the proposed substitute claims in the Final Written Decision. We conclude that, as a policy matter, the Board should not have raised the Schacherer anticipation ground. We do not find the circumstances of this case to qualify as one of the rare circumstances necessitating the Board to advance a ground of unpatentability that Petitioner did not advance or sufficiently develop.

Unlike *ex parte* reexamination, Congress intended for IPRs to be an adversarial process. *SAS*, 138 S. Ct. at 1355 (“rather than create (another) agency-led, inquisitorial process for reconsidering patents, Congress opted for a party-directed, adversarial process”). Patent challengers, therefore, have two distinct avenues for challenging patents before the Office—the adversarial approach of *inter partes* reviews, or the examination approach of *ex parte* reexamination. The systems should not be mixed within a single proceeding. In an IPR, with tight deadlines and limited opportunities for back-and-forth exchanges between the parties and the Office, the Board relies on the parties to bring the most relevant arguments and evidence to its attention.

Here, Petitioner did not bring the Schacherer anticipation ground to the Board’s attention. Indeed, under the unique facts of this case, Petitioner’s failure to raise the anticipation ground is particularly meaningful because Petitioner affirmatively chose not to raise this particular anticipation ground. Petitioner strategically chose to oppose the motion to amend on different grounds. Tr. 16:6–11 (“[W]e can’t rehash everything in the petition. . . . We’ve got a very small window of opportunity to make what we think are strong arguments. We did the best we could under the circumstances, and I think we did as well as any Petitioner can be expected

to do.”). Although Petitioner’s strategy was unsuccessful, an unsuccessful strategy alone does not reflect a failure of the adversarial process here that might otherwise support the Board’s decision to exercise its discretion to sua sponte raise a new ground of unpatentability.

Petitioner and supporting amici argue that, if the Board cannot raise the Schacherer anticipation ground in this case, the public interest will be harmed by the issuance of substitute claims that the USPTO knows to be unpatentable. Pet. Br. 9–12; Google Br. 4–7; HTIA Br. 9–14. We disagree. The public interest is preserved by a well-functioning adversarial system, which, in contrast to reexamination, is the basic set-up Congress envisioned for *inter partes* reviews. Besides, our holding today allows for the Office to step in if there is a clear failure in that system. In this case, however, the adversarial system has not failed—Petitioner vigorously prosecuted its case but made a tactical decision not to raise anticipation arguments. The public interest is not well-served by the Office filling in gaps intentionally left void by IPR petitioners. To the contrary, doing so would reduce incentives for petitioners to bring out the best arguments and would in the long run reduce the integrity of the patent system. The public interest is best served by the Office acting with humility and restraint, and deferring to those who come before the Board in these adversarial proceedings, who have the most at stake, and who surely know the record best.

More specifically, Petitioner here decided to bring an IPR and not a reexamination, therefore assuming to itself the expected role in an adversarial proceeding. And Petitioner is the primary party affected by the decisions it makes in this adversarial proceeding, including its failure to raise anticipation with respect to the amended claims at any time before the

panel. For example, Petitioner will bear the consequences of estoppel under 35 U.S.C. § 315(e) for failing to do so. But the estoppel of § 315(e) does not extend to other members of the public who are not real parties-in-interest or privies of the petitioner. Those parties are free to bring a subsequent challenge against the amended claims, if they deem appropriate, including their own petition for an *inter partes* review or a reexamination request. Petitioner’s arguments regarding a broad harm to the public caused by the issuance of the amended claims in this case are not convincing.

Nor do we agree that this case presents the potential for issuing substitute claims the Office “knows to be unpatentable.” Because the parties did not develop the record, the Office does not have sufficient information on the record of this case, as explained below, to make the requisite findings on anticipation.

Here, there is not the sort of readily identifiable and persuasive evidence of anticipation in the record that would justify the Board raising its own grounds of unpatentability. As one example, it is not clear that Schacherer discloses a detonator assembly contained entirely within the perforating gun housing, as required by the proposed claim amendments. Schacherer shows its selective firing module 32 and electrical detonator 38 housed inside connector 30, which is connected to—but not contained entirely within—outer housing 26. Ex. 1002, 6:37–41, Figs. 2, 4. And Petitioner does not contend otherwise—its opposition merely states that a person of skill in the art “would understand that the explosive assembly 20 in Schacherer *may* be located within the perforating gun housing.” Pet. Opp. to Mot. Amend 6 (emphasis added). This is far from sufficient. Though the Board decision interpreted Schacherer’s connector 30 to “act as a single

housing” with housing 26 (Decision 28), this interpretation is not clearly stated by Schacherer and does not rise to the sort of readily identifiable and persuasive evidence that would justify the Board stepping in to raise anticipation on its own.

### 3. Adequate Notice

Even if this were a case in which the Board should have raised anticipation on its own, the parties lacked adequate notice of such an issue with respect to the proposed amended claims. As discussed above, the mere fact that Petitioner asserted an anticipation ground of unpatentability against the original claims in the Petition based on Schacherer is not sufficient to provide notice of the same ground of unpatentability against the proposed substitute claims. *See supra* § II.B. Needless to say, raising a ground of unpatentability for the first time in a final written decision, after the parties have exhausted their ability to submit briefing and argument to the Board, does not provide sufficient notice of, and opportunity to respond to, such a ground.

The absence of adequate notice to the parties means the analysis of that issue in the Final Written Decision was not based on a fulsome development of the issue *by the parties*. *See Nike*, 955 F.3d at 54 (vacating a decision by the Board when the parties were not given notice that the Board would be relying on the cited prior art to teach a certain claim limitation). The panel below may have reached a different conclusion had it heard the parties’ views on whether Schacherer anticipates the proposed amended

claims, and we cannot endorse an analysis conducted without the parties having the opportunity to provide such input.<sup>5</sup>

#### 4. Remaining Obviousness Grounds of Unpatentability

As we indicate above (II.C.1), the panel stated that it made no findings as to obviousness with respect to the amended claims. In any event, we have reviewed Petitioner's arguments and cited evidence, and conclude that Petitioner has not set forth an adequate case of obviousness.

To establish obviousness, Petitioner must demonstrate that the differences between the claimed subject matter and the prior art are such that the subject matter as a whole would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, indicia of obviousness or non-obviousness, such as commercial success, long felt but unsolved needs, and failure of others. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). The obviousness inquiry further requires an analysis of “whether there was an

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<sup>5</sup> Neither do we think a remand to the original panel would be appropriate in order to supplement the record on anticipation at this stage of the proceedings. Such a remand would be based on an argument advanced in the first instance by the Board itself when, as we have found, it should not have done so. Because Petitioner had an opportunity to present this argument but chose not to, and it is Petitioner who bears the brunt of the consequences, we need not spend additional Board and party resources by extending this case further.

apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)).

Here, Petitioner does not set forth the obviousness grounds it purports to assert. Instead, Petitioner’s Opposition consists of a limitation-by-limitation recitation of where various prior art references allegedly disclose each limitation of the proposed substitute claims. *See, e.g.*, Pet. Opp. to Mot. Amend 4 (“A perforating gun housing is disclosed in the prior art references cited.”) (citing prior art references); *id.* at 7 (“A shell configured for housing the components of the detonator is disclosed in the prior art and obvious to a [person of ordinary skill in the art].”) (citing prior art references). Indeed, Petitioner never provides any specific statement of any ground of obviousness, such as “obvious over Schacherer alone” or “obvious over the combined disclosures of Schacherer and Lanclos.” Petitioner apparently leaves it to the Board to determine which combinations of prior art, if any, Petitioner intended to rely upon.

The obviousness grounds presented in the Opposition also are deficient in their treatment of the reasons why a person of ordinary skill would have modified or combined the prior art. With respect to proposed substitute claim 16, the independent claim, the Opposition only mentions a motivation to combine references in the context of a discussion about one particular limitation of the claim. *Id.* at 15 (stating that a person of skill in the art “attempting to practice the system taught by Lanclos’ repeated discussion of selective activation would be motivated to look to Lerche to find the necessary detail on the electronics and communications.”). At best,



this provides reasoning to support the combination of Lanclos and Lerche with respect to this claim limitation, but there is no discussion with respect to other claim limitations or other possible combinations of prior art.

Importantly, with respect to the newly-added limitations of the amended claim, Petitioner provides no discussion of a reason to combine or modify the prior art. *Id.* at 4–7.<sup>6</sup> Petitioner merely presents how one or more of the various asserted prior art references separately teaches the various limitations of proposed substitute claims 16–22. We decline to piece together Petitioner’s arguments to develop a persuasive theory of unpatentability. Accordingly, we determine that Petitioner has not provided a persuasive theory of obviousness.

### III. CONCLUSION

Although the Board may, in certain rare circumstances, raise a ground of unpatentability that a petitioner did not advance, or insufficiently developed, against substitute claims proposed in opposing a motion to amend, those circumstances are limited to situations in which the adversarial process fails to provide the Board with potential arguments of patentability with respect to the proposed substitute claims. Such circumstances could include, for example, where the petitioner has ceased to participate in the

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<sup>6</sup> With respect to one newly-added claim limitation, Petitioner asserts that a person of ordinary skill in the art would have understood “that the explosive assembly 20 in Schacherer *may* be located within the perforating gun housing.” Pet. Opp. to Mot. Amend 6 (emphasis added). To the extent that this can be interpreted as an argument that the person of ordinary skill in the art would have modified Schacherer to locate the explosive assembly within the perforating gun housing, it is insufficient. The mere fact that a prior art disclosure *may* be modified in a particular manner does not necessarily imply that the skilled artisan *would* have made such a modification.

proceeding or where certain evidence of unpatentability has not been raised by petitioner, but is readily identifiable and so persuasive that the Board should take it up in the interest of supporting the integrity of the patent system, notwithstanding the adversarial nature of the proceedings. This is not such a case.

We hold that the Board should not have raised its own ground of anticipation by Schacherer against the proposed substitute claims, and that the obviousness grounds that Petitioner purports to have raised are facially insufficient to support a finding of unpatentability.

Accordingly, we grant Patent Owner's Motion to Amend.

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Patent Owner's Request for Rehearing is granted;

ORDERED that the Final Written Decision with respect to the Motion to Amend is vacated; and

FURTHER ORDERED that the Motion to Amend is granted, as Petitioner has not proven by a preponderance of the evidence that proposed substitute claims 16–22 are unpatentable.

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