

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

OPEC ENGINEERING CO., LTD. d/b/a OPECMAC, INC.,
Petitioner,

v.

BERKENHOFF GmbH,
Patent Owner.

Case IPR2019-01090
Patent RE44,789 E

Before CHRISTOPHER L. CRUMBLEY, CHRISTOPHER M. KAISER,
and AVELYN M. ROSS, *Administrative Patent Judges*.

KAISER, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

INTRODUCTION

A. Background

OPEC Engineering Co., Ltd. d/b/a OPECMAD E, Inc. (“Petitioner”) filed a Revised Petition (Paper 6, “Pet.”) requesting an *inter partes* review of claims 1 and 10–14 of U.S. Patent No. RE44,789 E (Ex. 1001, “the ’789 patent”). Berkenhoff GmbH (“Patent Owner”) filed a Preliminary Response (Paper 10, “Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

After considering the Petition, the Preliminary Response, and the evidence of record, we conclude that it is appropriate to exercise the discretion available under 35 U.S.C. §§ 314(a) to deny institution. Accordingly, we do not institute an *inter partes* review.

B. Related Matters

The parties identify *Berkenhoff GmbH v. Opec Engineering Co., Ltd.*, Case No. 1:18-cv-01873 (N.D. Ill.), as a case related to this one. Pet. 2–3; Paper 8, 2.

C. The Asserted Grounds of Unpatentability

Petitioner contends that claims 1 and 10–14 of the ’789 patent are unpatentable based on the following grounds (Pet. 22–73):¹

¹ Petitioner also relies on a Declaration from Dr. Dana J. Medlin. Ex. 1010.

Statutory Ground	Basis	Challenged Claim(s)
§ 102	Briffod2 ²	1
§ 103(a)	Briffod2	1
§ 103(a)	Briffod2 and Groos ³	1
§ 103(a)	Briffod2, Groos, and Briffod1 ⁴	1 and 10–14
§ 103(a)	Briffod2, Groos, and Tominaga ⁵	1 and 10–14

D. The '789 Patent

The '789 patent, titled “Wire Electrode and Process for Producing a Wire Electrode, Particular [sic] for a Spark Erosion Process,” reissued on March 4, 2014. Ex. 1001, at [45], [54]. It is a reissue of U.S. Patent No. 6,447,930, which issued on September 10, 2002. *Id.* at [64]. The '789 patent “relates to a wire electrode and to a process for producing a wire electrode, especially for the spark erosion process.” *Id.* at 1:18–20. According to the patent, “[w]ire electrodes for the spark erosion process are produced, as a rule, with a high-strength core” that is “made from brass or” from “a steel nucleus . . . surrounded by a copper or brass layer.” *Id.* at 1:27–31. “To increase the cutting capacity of wire electrodes of this type, a sheath layer, [which] consists, as a rule, of zinc or a zinc alloy, is coated onto these [cores].” *Id.* at 1:32–34. The '789 patent notes that “[v]ery good cutting capacities have been achieved with wire electrodes provided with a

² Briffod, US 5,196,665, issued Mar. 23, 1993 (Ex. 1003, “Briffod2”).

³ Groos et al., US 4,935,594, issued June 19, 1990 (Ex. 1012, “Groos”).

⁴ Briffod et al., US 4,341,939, issued July 27, 1982 (Ex. 1011, “Briffod1”).

⁵ Tominaga et al., US 4,686,153, issued Aug. 11, 1987 (Ex. 1002, “Tominaga”).

pure zinc coating,” but the cutting capacity “decreases when tall workpieces are to be cut,” because “the pure zinc of the sheath layer evaporates rapidly,” forcing the electrode to cut “with its core material” instead of with its sheath material. *Id.* at 1:34–42.

A prior-art solution to this problem was to make the sheath from “homogeneous beta brass” instead of pure zinc. *Id.* at 1:43–47. Electrodes with this type of sheath are “relatively cost-intensive to produce,” and it is easy for the production process to result in “the presence also of alpha and/or gamma brass in the sheath layer in addition to the beta brass.” *Id.* at 1:47–59. The ’789 patent describes avoiding this problem by making “sheath layers consisting essentially of homogeneous gamma or epsilon brass.” *Id.* at 1:63–2:4.

E. Illustrative Claim

Claims 1 and 10–14 of the ’789 patent are challenged. All the challenged claims are independent. Claim 1 is illustrative; it recites:

A wire electrode comprising a core and a sheath formed directly on said core, said core consisting of copper, a copper/zinc alloy having an alpha fraction or having an outer layer consisting of copper or a copper/zinc alloy phase and said sheath having an outermost layer consisting of a copper/zinc alloy consisting of a gamma phase.

Ex. 1001, 3:44–49.

ANALYSIS

A. Claim Construction

In an *inter partes* review, we construe claim terms in an unexpired patent “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution

history pertaining to the patent,” as the claims would be construed “in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b) (2018). Only terms which are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner proposes construing eight claim terms: “sheath,” “alpha phase,” “beta phase,” “gamma phase,” “epsilon phase,” “outer,” and “outermost.” Pet. 17–19. Petitioner also proposes definitions for several other terms that do not appear in the challenged claims. *Id.* at 19–21. In addition, Petitioner proposes what it refers to as seven separate possible “structural meanings” of claim 1 of the ’789 patent without suggesting that we proceed with any one of those interpretations in particular. *Id.* at 12–17. Patent Owner proposes construing only “sheath” and “outermost layer,” and Patent Owner disagrees with Petitioner’s proposed construction of those terms. Prelim. Resp. 11–17.

For the reasons discussed below, we conclude that we need not construe any term in order to determine whether to institute trial, so we do not construe any terms expressly.

B. Multiple-Reference Obviousness Grounds

Petitioner argues that claim 1 of the ’789 patent would have been obvious over the combination of Briffod2 and Groos, that claims 1 and 10–14 would have been obvious over the combination of Briffod2, Groos, and Briffod1, and that claims 1 and 10–14 would have been obvious over the combination of Briffod2, Groos, and Tominaga. Pet. 55–73. In each of these arguments, Petitioner argues that a person of ordinary skill in the art would have combined the teachings of the prior-art references in question.

Id. at 55–56 (“There are sound reasons for combining Briffod2 and Groos to find obvious the claimed invention in claim 1.”), 57–58 (“... there are strong reasons to combine Briffod2, Groos, and Briffod1 to arrive at the claimed invention in claims 1 and 10-14 of the ‘789 Patent.”), 72 (“... there are strong reasons to combine Briffod2, Groos, and Tominaga to arrive at the claimed invention in claims 1 and 10-14 of the ‘789 Patent.”).

In no case, however, does Petitioner offer sufficient argument or supporting evidence for the existence of a reason for a person of ordinary skill in the art to have combined the teachings of the references. With respect to the Briffod2/Groos ground, Petitioner asserts that “[t]he technologies in Briffod2, Groos and the ‘789 Patent are very closely related,” going on to demonstrate the existence of several similarities between the three patents. Pet. 55–56. This may be enough to show an analogous-art type relationship between the references, but there is a difference between proving that the references could have been combined and showing that a person of ordinary skill in the art would have had a reason to do so. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010); *see also In re Kahn*, 441 F.3d 977, 987–88 (Fed. Cir. 2006) (noting that the inquiry as to whether a person of ordinary skill in the art would have sought to combine the references “picks up where the analogous art test leaves off”). The same flaw affects Petitioner’s arguments with respect to the Briffod2/Groos/Briffod1 ground and the Briffod2/Groos/Tominaga ground, both of which assert merely that “the technologies in [the references in question] are extremely closely related.” Pet. 57–58, 72. Because Petitioner fails to show why a person of ordinary skill in the art would have combined the teachings of the prior-art references asserted in Petitioner’s

multi-reference obviousness grounds, Petitioner has not shown a reasonable likelihood that it would prevail with respect to any claim on any of those three grounds.

C. Discretionary Denial of Institution

Pursuant to 35 U.S.C. § 314(a), an *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” But even when a petitioner demonstrates a reasonable likelihood of prevailing with respect to one or more claims, institution of review remains discretionary. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). Discretion to deny institution also is available under 35 U.S.C. § 325(d), under which, “[i]n determining whether to institute or order a proceeding . . . , the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.”

Patent Owner argues that we should deny institution of *inter partes* review under 35 U.S.C. § 325(d) because Briffod2, the only prior-art reference at issue in the two asserted single-reference grounds, as well as the primary reference at issue in the combination grounds, previously was presented to the Office during prosecution of the challenged patent. Prelim. Resp. 21–29. We need not consider that argument because we determine

that we should exercise our discretion to deny institution under § 314(a). As discussed above, the present Petition challenges six of the claims of the '789 patent on five asserted grounds, and Petitioner fails to carry its burden with respect to three of those grounds and five of those claims. This leaves two grounds that, between them, challenge a single claim of the '789 patent. Were we to institute trial on either (or both) of the remaining grounds, we would be required to consider at trial not only the challenge that those grounds present to the remaining claim, but also the challenges to the five claims and three grounds on which Petitioner fails to show a reasonable likelihood of prevailing. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. at 1356.

In exercising discretion, we are guided by the philosophy embodied in the statutory requirement to promulgate regulations for *inter partes* review that further “the efficient administration of the Office [and] the ability of the Office to timely complete proceedings.” 35 U.S.C. § 316(b). We also are guided by the requirement to construe our rules to “secure the just, speedy, and inexpensive resolution of every proceeding.” 37 C.F.R. § 42.1(b). Consistent with these policies, Office guidance explains that we may consider the number of claims and grounds that meet the reasonable likelihood standard when deciding whether to institute *inter partes* review under 35 U.S.C. § 314(a). SAS Q&A’s, Part D, Effect of SAS on Future Challenges that Could Be Denied for Statutory Reasons (June 5, 2018), available at https://www.uspto.gov/sites/default/files/documents/sas_qas_20180605.pdf (“[T]he panel will evaluate the challenges and determine whether, in the interests of efficient administration of the Office and integrity of the patent system (see 35 USC § 316(b)), the entire petition should be denied under 35 USC § 314(a).”).

Here, Petitioner fails to demonstrate a reasonable likelihood of prevailing on a majority of its asserted grounds of unpatentability and with respect to nearly all of its challenged claims. This raises at least some question as to whether instituting a trial with respect to all six claims and on all five grounds would be an efficient use of the Board's time and resources. *See, e.g., Chevron Oronite Co. v. Infineum USA L.P.*, IPR2018-00923, Paper 9 at 10–11 (PTAB Nov. 7, 2018). We must, therefore, decide whether the game is worth the candle; specifically, is resolving the question as to the patentability of claim 1 a sufficient reason to proceed to trial on claims 1 and 10–14?

We assume, without deciding, that there may be situations in which resolving the patentability of one claim might justify trial as to six claims. For example, the Patent Owner in some cases may prefer to proceed to trial—and risk the patentability of the single claim—to gain the potential preclusive effect that would attach at the entry of a final written decision (*see* 35 U.S.C. § 315(e)) finding the remaining five claims not unpatentable. In other situations, the arguments against the patentability of that one claim may be so strong that we believe it is in the public interest to resolve them. Or it is possible the scope of the various claims challenged might merit review as to only some of them. For example, if a petition were to challenge a single, broad independent claim and a number of very narrow dependent claims, a reasonable likelihood of prevailing as to the independent claim alone may justify proceeding to trial on all claims, because a potential finding of unpatentability would significantly narrow the overall scope of the patent.

Notably, none of these circumstances is present in the case at hand. Patent Owner has not expressed a preference that we proceed to trial so that it may have the benefit of estoppel under § 315(e). Nor is claim 1, the sole claim still potentially at issue in the case, significantly broader than claims 10–14. All the challenged claims are independent, and, indeed, it appears that claim 10 (directed to a sheath with an outer layer “consisting of a copper/zinc alloy comprising gamma and epsilon phases and predominantly containing a gamma phase”) has a broader scope than claim 1 (directed to a sheath with an outer layer “consisting of a copper/zinc alloy consisting of a gamma phase”). In other words, finding claim 1 unpatentable would not significantly narrow the scope of the ’789 patent. As a result, it is hard to discern how resolving the question as to the patentability of claim 1 would significantly benefit the public interest by narrowing the overall scope of the patent.

Finally, we note that this is not a case where the patentability challenges against the sole remaining challenged claim are sufficiently strong that they justify proceeding to trial on all challenged claims. As noted above, Patent Owner has raised the question of whether we should deny institution under 35 U.S.C. § 325(d) because Briffod2 previously was presented to the Office during prosecution of the challenged patent. Prelim. Resp. 21–29. Indeed, claim 1 was issued by the Office as part of the pre-issuance patent, after the Examiner had entered, and subsequently withdrawn, a rejection based on Briffod2, the identical prior art reference asserted in the grounds at issue here. And Petitioner does not allege any specific error on the part of the Examiner during examination of the originally-issued patent. We need not analyze Patent Owner’s § 325(d) argument in detail to

conclude that it raises significant questions as to whether we should proceed to trial on the grounds challenging claim 1. As such, we do not believe that this is a case where the Petitioner's challenge as to claim 1 is sufficiently strong to warrant institution as to claims 10–14 as well.

CONCLUSION

Upon consideration of the Petition, the Preliminary Response, and the evidence before us, we determine that we should exercise discretion under 35 U.S.C. §§ 314(a) to deny review. Accordingly, we do not institute an *inter partes* review of any challenged claim.

ORDER

It is hereby

ORDERED that, pursuant to 35 U.S.C. § 314, the Petition is denied, and no *inter partes* review is instituted.

IPR2019-01090
Patent RE44,789 E

PETITIONER:

John K. Park
Mark L. Sutton
PARK LAW FIRM
park@parklaw.com
mlsutton@parklaw.com

PATENT OWNER:

Reginald J. Hill
Benjamin J. Bradford
Ren-How H. Harn
JENNER & BLOCK LLP
rhill@jenner.com
bbradford@jenner.com