

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASIMO CORPORATION,
Petitioner,

v.

APPLE INC.,
Patent Owner.

IPR2023-00635
Patent 10,987,054 B2

Before KEN B. BARRETT, JOSIAH C. COCKS, and
ROBERT L. KINDER, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION

Denying Petitioner's Request on Rehearing of
Decision Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Masimo Corporation (“Petitioner”) filed a Request for Rehearing (Paper 12, “Req. Reh’g” or “Request”) of our Decision denying institution of *inter partes* review (Paper 11, “Decision” or “Dec.”) of U.S. Patent No. 10,987,054 B2 (“the ’054 patent,” Ex. 1001) based on Petitioner’s Petition (Paper 1, “Pet.”). We denied institution of *inter partes* review because we determined that Petitioner had not demonstrated a reasonable likelihood of prevailing on at least one of the challenged claims of the ’054 patent.

In its Petition, Petitioner argued that Rothkopf anticipates, *inter alia*, independent claims 9 and 15. Pet. 19–34 (Ground 1). The Petition also contains nine other grounds challenging certain claims, including independent claim 1, as obvious over Rothkopf in combination with other references. *See* Pet., Grounds Listing (located immediately before page 1 of the Petition). In our Decision, we determined that Petitioner failed to show adequately that Rothkopf discloses electrodes “positioned on the carrier member” as recited in the claims, and therefore Petitioner had not shown a reasonable likelihood of prevailing on its anticipation challenge. Dec. 21–24. For the obviousness grounds, we stated our understanding that the Petition relies on its argument that Rothkopf discloses electrodes positioned on the carrier member, and that the Petition relied on the respective secondary reference for a different limitation, that calling for the electrodes to have the specific configuration, namely partially surrounding regions of the carrier member. *See, e.g.*, Dec. 25–26.

Petitioner argues that the Decision applied the “strict § 102 standard” in the analysis of the obviousness grounds and that, “[i]n doing so, the Decision overlooked the separate obviousness standard, and it

misapprehended Petitioner’s arguments and evidence that multiple secondary references teach electrodes positioned on a carrier member.”

Req. 1. Petitioner argues that the Decision “ignored that Jung, Lapetina, and Paulke are within the ‘scope and content of the prior art,’ in view of Petitioner’s specific citations to those references,” and “also ignored that Jung, Lapetina, and Paulke teach electrodes ‘positioned on a carrier member’ . . . , so this feature is not actually a ‘difference[] between the claimed subject matter and the prior art’ under the second *Graham* factor.” *Id.* at 2 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)).

For the following reasons, we deny Petitioner’s Request for Rehearing.

II. LEGAL STANDARDS

A party requesting rehearing bears the burden of showing that the decision should be modified. 37 C.F.R. § 42.71(d). “The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.” *Id.* When rehearing a decision on a petition, we review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c).

“Inter partes review shall not be instituted unless the Board decides that information presented in the petition demonstrates that there is a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable.” 37 C.F.R. § 42.108(c).

“While the Board should not take an overly mechanistic view of a petition and decline to address an argument because the petitioner did not present it with ideal vigor and clarity, the Board should also not have to

decode a petition to locate additional arguments beyond the ones clearly made.” *Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (Fed. Cir. 2023). “A petitioner may not rely on a vague, generic, and/or meandering petition and later fault the Board for failing to understand what the petition really meant.” *Id.* “Ultimately, it is the petitioner’s burden to present a clear argument.” *Id.* (citing *Intelligent Bio-Systems*, 821 F.3d at 1367; 37 C.F.R. § 42.104(b)(4)–(5) (2012)). Relatedly, it also “is the petitioner’s burden to make clear when alternative arguments are being presented and to sufficiently expound on each one.” *Id.* at 1380.

III. ANALYSIS

A. The Structure of the Challenged Claims and of the Petition

Of the challenged claims of the ’054 patent, claims 1, 9, and 15 are independent claims. Independent claim 9 recites a wearable electronic device, *e.g.*, a watch, having a housing member. *See* Ex. 1001, 57:11–13. The claimed device has electrodes and an optical sensor system. *See id.* at 57:22–32. Pertinent to the issues before us is the claimed specific position of the electrodes relative to the carrier member and the specific configuration—as recited in some, but not all challenged claims—of the electrodes relative to the components of the optical system. Independent claim 9 recites, *inter alia*:

a carrier assembly coupled to the rectangular housing member and comprising:
a carrier member having a circular carrier profile and positioned over the circular rear opening [of the housing member];
a rear electrode positioned on the carrier member and configured to receive a first voltage signal from a wrist of a user;
an optical sensor system comprising:

an optical emitter positioned below a first region of the carrier member; and
an optical receiver positioned below a second region of the carrier member.

Ex. 1001, 57:18–29 (emphases added). Independent claim 15 recites a watch having somewhat similar limitations. *See id.* at 58:6–17. Thus, independent claims 9 and 15 call for an electrode to be positioned *on* the “carrier member,” which is a component of the “carrier assembly,” and the optical components to be positioned below the carrier member. Dependent claims 10 and 17 add to the respective independent claims the requirement of a second rear electrode, which also is positioned *on* the carrier member. *Id.* at 57:36–41, 58:36–39.

Independent claim 1 is narrower. Claim 1 requires two “electrode[s] positioned on the carrier member” and, importantly, recites that those electrodes on the carrier member are configured such that they are “at least *partially surrounding* a first region of the carrier member and a second region of the carrier member.” *Id.* at 56:14–22 (emphasis added). The optical sensor components, the light emitter and receiver, are positioned below those regions. *Id.* at 56:23–27.

Although independent claims 9 and 15 do not contain a requirement of a “partially surrounding” configuration for a rear electrode, such is added, respectively, by dependent claims 11 and 16. *See id.* at 57:42–46 (claim 11 reciting that “the first rear electrode defines a first arc that partially surrounds the optical sensor system; and the second rear electrode defines a second arc that partially surrounds the optical sensor system”), 58:33–35 (“the rear electrode is positioned along a peripheral region of the carrier member and at least partially surrounds the first and second regions of the carrier member”).

The grounds in the Petition are structured based on the independent claims' requirement of a "partially surrounding" configuration, or the lack thereof. Specifically, Ground 1 challenges, as anticipated by Rothkopf, claims lacking that specific "partially surrounding" configuration for the electrode positioned on the carrier member, including independent claims 9 and 15. *See* Pet. 19–34. Grounds 2 and 3¹ build on the foundation of the Rothkopf anticipation ground and challenge, as being obvious, certain claims containing the "partially surrounding" configuration requirement, including independent claim 1. *See id.* at 37–68 (Ground 2, Rothkopf in combination with Jung), 74–87 (Ground 3, Rothkopf in combination with Paulke). Grounds 2 and 3 include arguments as to how the respective secondary reference purportedly teaches electrodes partially surrounding an optical sensor and why it purportedly would have been obvious to configure the electrodes of Rothkopf to meet that configuration requirement. *See id.* at 41–46, 75–78.

B. Discussion

Petitioner argues that we applied a "strict § 102 [anticipation] standard" to Petitioner's contentions, in the obviousness grounds, regarding the requirement that electrode(s) be positioned on the carrier member rather than an obviousness analysis. Req. 1. According to Petitioner, "[b]y re-using its 102-based Rothkopf analysis to deny the Petition's 103-based grounds, the Decision overlooked that, under 35 U.S.C. § 103, secondary references fill any perceived gaps." *Id.* at 6. We did not overlook the obviousness standard of section 103. Institution was denied not because of

¹ We use Petitioner's labels for the grounds. The Petition contains ten grounds, including those labeled as 1A, 2A–2C, and 3A–3C.

the distinction between an anticipation analysis and an obviousness analysis. Rather, institution was denied because, as discussed further below, we understand the Petition, for both the anticipation and the obviousness grounds, to rely on Rothkopf to disclose, i.e., anticipate, the “positioned on the carrier member” limitations, and the Petitioner to then turn to the respective secondary reference for a teaching to configure the electrodes purportedly already positioned on the carrier member such that they are “partially surrounding” the optical components, as required by claims challenged in the obviousness grounds. *See, e.g.*, Dec. 26. Petitioner re-used its anticipation articulation or a similar restatement thereof in articulating the obviousness grounds, and we applied a proper analysis to the challenges as we understood them.

In the anticipation Ground 1—challenging the claims that do *not* require the “partially surrounding” configuration—Petitioner argued that “Rothkopf discloses a rear electrode positioned on the carrier member (rear cover 608).” Pet. 23. We determined that Petitioner had not adequately shown that to be correct. Dec. 24. Petitioner does not argue in the Request that we misapprehended or overlooked anything in that respect. *Cf., e.g.*, Req. 14 (arguing that, on rehearing, “the Board will find that the Petition demonstrates a reasonable likelihood of establishing unpatentability of at least one independent claim of the ’054 patent under at least one of the Petition’s nine 103-based grounds.”).

In the Request, Petitioner asserts that “the Petition’s grounds are all ***independent, alternative*** arguments” and that, “[w]hile [Petitioner’s] alternative [obviousness] grounds (including Ground 2) maintain the factual contention that Rothkopf teaches electrodes on a carrier assembly, they rely

on further evidence showing that secondary references *also* disclose these limitations.” Req. 5. The Request impliedly asserts that the Petition contained arguments that it would have been obvious to modify Rothkopf to have the electrodes positioned on the carrier member. *See, e.g., id.* at 6–7 (arguing that the Petition contained a motivation to combine by asserting that “[a] POSITA seeking to implement the teaching of Rothkopf . . . would look to other mobile electronic device references that teach the use of electrodes on a biosensor carrier assembly similar to that of Rothkopf.” (quoting Pet. 55–56 (emphasis omitted)))²; *id.* at 14 (“the Decision failed to recognize that the Petition *also* presented Rothkopf as modified by *secondary references* for these limitations in the context of 35 U.S.C. § 103.”). In effect, Petitioner now contends that the Petition presented arguments—offered in the alternative if the Board was not persuaded that Rothkopf alone discloses electrodes positioned on the carrier member—that the secondary references teach moving Rothkopf’s electrodes onto a carrier member. We fail to discern in the Petition any language in either Ground 2 or Ground 3 clearly setting forth such an alternative argument. *See Netflix*, 84 F.4th at 1378 (rejecting an allegation that the Board ignored an argument, stating that “nothing in that quoted language itself signals to a reader that an optimized new manifest equates to ‘filtering the list of assets,’ let alone that Netflix was advancing such an argument.”).

Ground 2 challenges, as obvious over Rothkopf and Jung, certain claims that require the electrodes positioned on the carrier member to have

² We note that this purported motivation due to similarity also appears to be based on the flawed assertion from the anticipation ground that Rothkopf discloses electrodes positioned on the carrier member.

the “partially surrounding” configuration. *See, e.g.*, Pet. 37–50 (addressing independent claim 1). Limitation 1f³ recites, “a first electrode positioned on the carrier member.” Ex. 1001, 56:14–15. Under the heading for this limitation, the Petition, in a manner very similar to that of the anticipation contention, argues that “Rothkopf discloses a first electrode positioned on the carrier member (rear cover 608).” Pet. 40; *compare id.*, *with id.* at 23 (the anticipation argument that “Rothkopf discloses a rear electrode positioned on the carrier member (rear cover 608)”). Under this heading, addressing the position of the first electrode on the carrier member, there is no mention of Jung. *Id.* at 40–41.

Limitation 1g recites, in pertinent part, two requirements: 1) “a second electrode positioned on the carrier member,” and 2) “the first and second electrodes at least partially surrounding a first region of the carrier member and a second region of the carrier member.” Ex. 1001, 56:17–22. The Petition begins its analysis of limitation 1g by addressing the first requirement with the assertion that, “[a]s noted above in limitation 1f, Rothkopf discloses a second electrode (‘pair of electrodes’) positioned on the carrier member (rear cover 608).” Pet. 41. As we stated in the Decision:

Petitioner further asserts that “Rothkopf . . . does not illustrate the exact configuration of the electrodes located on the biosensor module,” referring to the second requirement of limitation, which calls for the two electrodes to each partially surround a respective region of the carrier member. Pet. 41. Petitioner contends that Jung discloses that “the electrodes can wrap around the edges of a carrier member that includes an optical PPG [photoplethysmography] sensor in a central location of the carrier member.” *Id.* at 45 (citing Ex. 1003

³ We utilize the claim limitation identifiers, *e.g.*, “1f,” provided in the Petition.

¶ 87). Petitioner’s proposed modification is to arrange the electrodes purportedly already positioned on Rothkopf’s rear cover (carrier member) so as to be at the edges and wrap around regions of that cover. *See id.* at 45–46. Accordingly, Petitioner does not articulate an obviousness ground that cures the underlying defect of the anticipation challenge of Ground 1.

Dec. 25–26 (alterations in original). As we also stated in the Decision, “Petitioner’s contentions regarding independent claims 9 and 15 are similar to that for independent claim 1, and likewise rely on the unpersuasive contention, made in Ground 1, that Rothkopf discloses an electrode positioned on the rear cover (carrier member).”⁴ Dec. 26 (citing Pet. 55–58, 63–65); *see, e.g.*, Pet. 55 (For ground 2, claim 9: “Rothkopf teaches this [rear electrode positioned on the carrier member] limitation as explained above with regard to limitation 9g of Ground 1.”). The Petition’s articulation does not contain an indication that it is offering an argument in the alternative to its clear and explicit arguments that “Rothkopf discloses a first electrode positioned on the carrier member (rear cover 608)” and “Rothkopf discloses a second electrode (‘pair of electrodes’) positioned on the carrier member (rear cover 608).” Pet. 40–41. “[T]he Board should . . . not have to decode a petition to locate additional arguments beyond the ones

⁴ We acknowledge that the Petition includes Jung in the Ground 2 challenge to independent claims 9 and 15 although those claims do not contain a “partially surrounds” limitation. Pet. 55–58. However, dependent claims 11 and 16 do contain such a requirement. We understand, particularly in the absence of an alternative-argument indicator, Petitioner to articulate its challenge to independent claims 9 and 15 in a manner consistent with its challenge to independent claim 1 in the same ground and to preemptively challenge the claims requiring “partially surrounds.” *See, e.g., id.* at 73–74 (for the dependent claim 11, relying simply on its “explain[ation] in limitation 9g of Ground 2”). We understand the similarly structured Ground 3 (Paulke) in the same way.

clearly made.” *Netflix*, 84 F.4th at 1377; *see also id.* (“A petitioner may not rely on a vague, generic, and/or meandering petition and later fault the Board for failing to understand what the petition really meant” and it “is the petitioner’s burden to make clear when alternative arguments are being presented and to sufficiently expound on each one.”). We did not, as asserted by Petitioner, “overlook[] the [cited] passages from the Petition that point to teachings of Jung combined with Rothkopf, Req. 9 (citing Pet. 15, 56–57), or “fail[] to address the different, 35 U.S.C. § 103 standard or Jung, a secondary reference,” *id.* at 6 (footnote omitted).

Ground 3 utilizes Paulke as the secondary reference in combination with Rothkopf, and, like Ground 2, challenges certain claims that require the electrodes on the carrier member to have the “partially surrounding” configuration. *See, e.g.*, Pet. 74–78 (addressing independent claim 1). Similar to Ground 2, Petitioner, for limitation 1f requiring “a first electrode positioned on the carrier member,” argues that “Rothkopf teaches this limitation,” and does not mention Paulke. *Id.* at 74. For the position requirement of limitation 1g, Petitioner argues “Rothkopf discloses a second electrode (“pair of electrodes”) positioned on the carrier member (rear cover 608).” *Id.* at 75. Also, like Ground 2, Petitioner asserts that “Rothkopf does not illustrate the exact configuration of the electrodes located on the biosensor module,” and turns to Paulke for the teaching of a particular “arrangement for three biosensors,” utilizing an annotated figure depicting Petitioner’s implied contention that Paulke teaches two electrodes partially surrounding an optical sensor, i.e., the second requirement of limitation 1g. *See id.* at 75–77. We, after having again reviewed the Petition’s articulation of the challenge, maintain our understanding, as stated in the Decision, that

“Petitioner relies on the secondary reference, here Paulke, for teachings regarding arranging electrodes purportedly already positioned on the rear cover so that they partially surround regions and, thus does not articulate an obviousness ground that cures the underlying defect of the anticipation challenge of Ground 1.” Dec. 27–28. Petitioner’s challenges to independent claims 9 and 15 similarly explicitly rely on Rothkopf for the teaching of the position of an electrode on the carrier member. *See* Pet. 79, 84. There is no clear indication that the Petition presents the alternative argument for the “positioned on the carrier member” limitation that the Request asks us to discern. We did not, as asserted by Petitioner, “fail[] to address the different, 35 U.S.C. § 103 standard,” or “fail[] to consider Paulke.” Req. 6. Rather, we addressed Petitioner’s challenges as it chose to articulate them.

Petitioner argues in the Request that “Lapetina discloses electrodes on a carrier” and refers to the challenge to dependent claim 10. Req. 9–10 (citing Pet. 36–37; Ex. 1003 ¶¶ 75–76). Petitioner also argues, without citation to the Petition, that “Lapetina’s figure shows electrodes 430a and 430d . . . positioned on a central, slightly protruding carrier member.” *Id.* at 10. On the cited pages of the Petition, Lapetina is relied on for the purported teaching of using an electrode for a ground. *See* Pet. 36–37. The cited pages do not contain the argument that Petitioner now makes—that Lapetina discloses electrodes on a “carrier” or positioned on a carrier member. The ground, like the others, relies on Petitioner’s argument that “Rothkopf discloses a first and second electrode positioned on the carrier member (rear cover 608).” *Id.* at 35. We could not have misapprehended or overlooked an argument not made in the Petition.

IV. CONCLUSION

For the foregoing reasons, Petitioner has not demonstrated that we abused our discretion in determining that Petitioner did not demonstrate, in the Petition, a reasonable likelihood of prevailing on its obviousness challenges.

V. ORDER

It is

ORDERED that Petition's Request for Rehearing is *denied*.

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